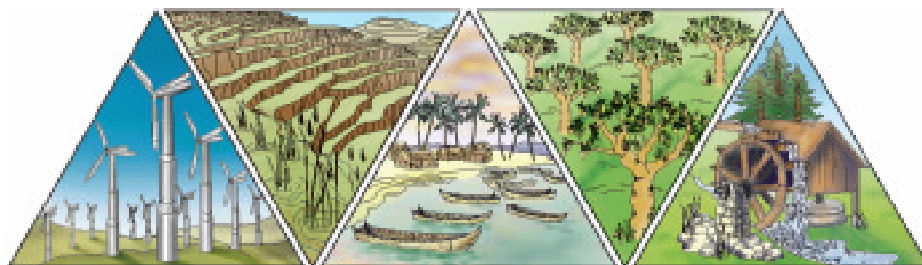


# BERKELEY WORKSHOP ON ENVIRONMENTAL POLITICS



## BIBLIOGRAPHIES

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# ENVIRONMENTAL JUSTICE AND ENVIRONMENTAL RACISM

AN ANNOTATED BIBLIOGRAPHY  
AND GENERAL OVERVIEW,  
FOCUSING ON U.S. LITERATURE, 1996-2002

*Robin Lanette Turner and Diana Pei Wu*

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*August 2002*

**ENVIRONMENTAL JUSTICE AND ENVIRONMENTAL RACISM:  
AN ANNOTATED BIBLIOGRAPHY AND GENERAL OVERVIEW,  
FOCUSING ON U.S. LITERATURE, 1996–2002**

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**GENERAL OVERVIEW OF THE LITERATURE**

*Introduction*

Environmental justice activists argue that all people, regardless of race, ethnicity, or income should enjoy access to a safe and healthy environment (Principles of Environmental Justice 1991). Environmental justice activists and scholars present a broad conception of the environment, or, “where we live, work, learn and play.” The environment, from this perspective, is not the people-free biophysical system idealized by deep ecologists, but rather a geographical system integrally linking to people and society through everyday, ordinary activities and relationships: residence, labor, and recreation. It encompasses the air people breathe walking down a city or country street, the water drawn from their taps or wells, the chemicals a worker is exposed to in an industrial plant or strawberry field, and the forests people visit to hike, extract mushrooms, and engage in spiritual practice. This conception of the environment links labor and public health, recreation to housing, culture and history; it breaks the boundaries between work environments and open space, urban and rural. The environmental justice movement is, by definition, an exciting example of multiethnic coalitions working for change in diverse, linked arenas of struggle, and this is evident in the EJ literature.

This publication provides an overview of recent work on minority and racial politics in the environment. It covers work published on “environmental justice,” “environmental racism,” and/or “environmental equity.” Most EJ scholarship focuses on the contemporary environmental justice movement, that is, efforts by people of color, poor people, and Third World peoples to address issues of access to and control over the environment, broadly defined. (These key terms and concepts are discussed later.) This scholarship is inherently multidisciplinary.

We use the term “contemporary” environmental justice movement to refer to recent activism, while fully recognizing that poor people and people of color have a long history of struggle for environmental justice. The 1980s struggle of Warren County, North Carolina residents against the construction of a PCB landfill in their rural, predominantly African-American community served as the catalyst for the contemporary environmental justice movement. Bullard and Johnson (2002) highlight the Black garbage workers’ strike in Memphis in 1968 and a garbage dump siting conflict in Houston in 1978-9 as predecessors. Anti-toxics gained national attention with Love Canal at the

beginning of the 1980s (CHEJ 2002). Zoltan Grossman contends “the most workable date for the founding of the [North American] Native EJ movement ... is 1492” (personal communication). One can find ample evidence of environmental justice struggles in the United States and elsewhere long before 1982 (e.g., Greenberg 2000).

We hope this publication can serve as an overview of critical issues, debates, and emerging areas in environmental justice scholarship. Much of the literature covered was produced by scholars located within colleges and universities. Thus, the knowledge to which these “experts” have access is highlighted and other areas of expertise are certainly underrepresented. For example, this document does not provide a comprehensive guide to the latest organizing tactics, an area in which activists are far ahead of academic scholars. That said, we hope this publication will be useful to activists, grassroots community organizations, policymakers as well as other researchers. The published literature is valuable as a source of critical engagements with the assumptions, methods, and breadth of environmental justice activism.

The document has three parts: an overview essay, a series of critical summaries of recent publications, and a list of related publications. In the overview essay, we first discuss theoretical issues in environmental justice (EJ)—conceptions of the environment, race and racism, and justice and inequality. We then discuss the social framing of EJ and present key themes and debates in the literature. Contested issues include the production of environmental injustice, EJ research methods, and the relationship between EJ, science, and expertise. We then discuss two extensions of EJ: (1) increasing analysis and activism directed at corporate actors and multinational corporations and (2) the growth and linkage of grassroots, community-based struggles between countries. The final section discusses interventions, that is, grassroots EJ activism and organizing.

Each section provides a list of related publications. We use parenthetical references throughout the essay to indicate ideas and/or quotations drawn from specific publications (using the formats (Author Year: page) or Author (Year)).<sup>1</sup> The annotated bibliography that follows the essay presents a selection of publications from the period from 1996 to 2002.<sup>2</sup> The bibliography draws widely from scholarly work published in peer-reviewed social science, environmental management, and planning journals, monographs, and dissertations.<sup>3</sup> We also have included selected publications from activist organizations. We identified publications through searches of social science databases, tracing citations, and asking EJ scholars and activists for recommendations. This bibliography does not attempt to cover legal scholarship on EJ.<sup>4</sup>

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1. For example, Turner and Wu (2002) for this publication.

2. We provide annotations for a few early publications as well.

3. Peer review is a process through which an article submitted for publication is subject to critical evaluation by other scholars with expertise in the area. If a submission survives this process, then it is assumed to meet scholarly standards. This process is designed to ensure that published articles meet academic standards. Critics argue that it may also produce a conservative bias as the established scholars who review pieces are less likely to say that work that challenges conventional views is of good quality. (See Robert’s discussion at [http://www.firstmonday.dk/issues/issue4\\_4/proberts/#r3](http://www.firstmonday.dk/issues/issue4_4/proberts/#r3)).

4. Much of the scholarship in this area focuses on law-specific issues such as interpreting specific statutes (e.g. the Civil Rights Act of 1964) so as to provide a legal basis for EJ claims. Neither author has sufficient expertise in the law to evaluate these issues.

The annotated bibliography is organized alphabetically by author. Each annotation summarizes the major points of each article, highlights the distinctive contribution made by each piece, and, on occasion, flags limitations or problems in the work. A list of additional readings follows the annotated bibliography. This list contains five sections: (1) conceptual work on race, ethnicity, and racism; (2) classic EJ publications; (3) recent EJ literature reviews; (4) special journal issues on EJ or related topics; and (5) recent publications not summarized in the essay.

#### Works Cited

Bullard, Robert D., and Glenn S. Johnson. 2000. Environmental justice: Grassroots activism and its impact on public policy decision making. *Journal of Social Issues* 56 (3): 555-578.

Center for Health, Environment and Justice. 2002. "Key Dates and Events at Love Canal." Accessed Aug 9, 2002. <<http://www.chej.org/lovecanal20.html>>

Greenberg, D. 2000. Reconstructing race and protest: Environmental justice in New York City. *Environmental History* 5 (2):223-250.

## THEORIZING ENVIRONMENTAL JUSTICE

### *Conceptualizing the Environment: Where We Live, Work, Learn and Play*

As we described in the Introduction, EJ activists define the environment as the set of linked places “where we live, work, learn and play.” This definition challenges mainstream environmentalist definitions of environment and nature. The mainstream environmental movement and deep ecology have tended to concentrate on so-called “natural” environments, such as national parks and reserves, endangered species, and endangered habitats. Underlying their claims and activism was a view of human activity as intrinsically harmful to nature, and that nature it(her)self is fragile. Following from this, nature was to be found only in areas remote from human activity. Deep ecologists, in particular, seem to believe that human contact with nature can only result in degradation from nature’s original pristine, virgin state. This view has been roundly criticized by feminists of color, EJ grassroots activists and others, who challenge the view of nature as something remote and separate from everyday life. These critics contend that this view of environment and nature reproduces white privilege. That is, it produces impacts that disproportionately benefit white and upper-class people, while placing negative burdens on urban people and people of color. If the “environment” only exists in remote protected areas, then only rural people, or those with money, will have access to it. Urban or suburban residents who cannot or do not go to the places marked off as parks and reserves can have no knowledge of or interest in nature, and are disempowered from being included in those debates or, in some cases, in those very spaces. For example, Romm (2002) discusses how the United States Forest Service (USFS) was portrayed as an agency to serve the interests of “good land managers.” Good land managers were stereotyped as white, partially through the portrayal of poor people and people of color’s activities as environmentally destructive. Today, these stereotypes still have important economic impacts on the livelihoods of all people who work for the USFS and on public lands in general.

The conception of nature as remote may harm rural people—most of whom are people of color—as well. If pristine nature must be enclosed and protected behind the borders of a national park, then rural people will be displaced for its protection. The people whose villages have been located inside those newly drawn lines will be moved out. This was the case with Yellowstone National Park (LaDuke 1999), and that model continues to be reproduced in national parks throughout the world today, as resident people are moved to the borders of parks and reserves, and then are seen by government and conservation organizations as poachers and squatters (Geisler and Letsoalo 2000; Cock and Fig 2002; Neumann 1998). Conventional conceptions of the environment frequently produce policies that reproduce hierarchies and structures of domination within and between places.

Pulido and Peña (1998) argue that positionality, “a person’s location within the larger [society],” is a critical determinant of how people understand the environment (33). Scholars have shown that Land-based Chicanos (Pulido and Peña 1998), Native American (LaDuke 1998) and indigenous peoples (Geisler and Letsoalo 2000), and people of color experience the environment, politics and everyday life *differently* from white, middle- and upper-class environmentalists (Kalof et al 2002; Taylor 1997). These experiences lead to particular engagements on land rights, toxics, and pesticide issues. Thus the broadest view of the environment as where all productive, creative, and reproductive human activity occurs (rather than where it doesn’t) connects “where we live, work and play” with who gets to play, work, or live, and under what conditions.

## Related Publications

- Cock, Jacklyn and David Fig. 2002. From Colonial to Community-Based Conservation: Environmental Justice and the Transformation of National Parks (1994-1998). In McDonald, David A. ed. *Environmental Justice in South Africa*. Athens, Ohio University Press and Cape Town, University of Cape Town Press.
- Geisler, Charles, and Essy Letsoalo. 2000. Rethinking land reform in South Africa: an alternative approach to environmental justice. *Sociological Research Online* 5 (2).
- Kalof, Linda, Thomas Dietz, Gregory Guagnano, and Paul C. Stern. 2002. Race, Gender and Environmentalism: The Atypical Values and Beliefs of White Men. *Race, Gender & Class* 9 (2):1-19.
- LaDuke, Winona. 1999. *All Our Relations: Native Struggles for Land and Life*. Boston: South End Press.
- Neumann, Roderick P. 1998. *Imposing Wilderness: Struggles over Livelihood and Nature Preservation in Africa*. Berkeley: University of California.
- Novotny, Patrick. 2000. *Where We Live, Work and Play: The Environmental Justice Movement and the Struggle for a New Environmentalism*; Praeger Series in Transformational Politics and Political Science. Westport, CT: Praeger.
- Pulido, Laura, and Devon Gerardo Pena. 1998. Environmentalism and Positionality: The Early Pesticide Campaign of the United Farm Workers' Organizing Committee, 1965-1971. *Race, Gender & Class* 6 (1):33-.
- Romm, Jeff. 2002. The Coincidental Order of Environmental Justice. In *Justice and Natural Resources*, edited by K. M. Mutz, G. C. Bryner and D. S. Kenney. Washington, DC: Island Press.
- Taylor, Dorceta E. 1997. American Environmentalism: The Role of Race, Class, and Gender in Shaping Activism 1820-1995. *Race, Gender & Class* 5 (1):16-62.
- Taylor, Dorceta E. 2000. The rise of the environmental justice paradigm: Injustice framing and the social construction of environmental discourses. *American Behavioral Scientist* 43 (4):508-580.

In the United States, most people conceive of and talk about race in two ways: (1) as biology, or essence, that is fixed, concrete and objective, or (2) as an ideological construct, having little or no basis in reality. EJ research tends to treat race as pre-given, fixed categories.<sup>5</sup> The research has also focused on racism as an independent cause of environmental injustice (Pulido 1996a). Some scholars have defined racism narrowly, as specific, intentional acts of discrimination. Treating race as a pre-given category hides how meanings of race and racial categories have changed over time, and the interests at work in producing, fixing and shifting racial categories (Omi and Winant 1994). The narrow definition of racism limits the scope of what can be considered racist acts and excludes the workings of structural, historical, institutionalized racism. Other scholars have defined racism more broadly to encompass structural and institutionalized racism but continue to focus on racism as the most important cause of environmental injustice (Pulido 1996a). This approach can serve the projects of people who want to assert the primacy of race and racism in the lives of people of color, but it marginalizes other differences, such as class and gender, that constitute other axes of domination and subordination. These definitions of racism do not promote the goals of broadly democratic, antiracist movements such as environmental justice (Pulido 1996a).

What sorts of scholarship might contribute to a broadly democratic, antiracist EJ movement? Many examples that we found apply a racial formations approach (Omi and Winant 1994) to environmental justice. This approach goes beyond defining racism as specific intentional acts to interrogate the construction of categories such as race. Rather than viewing race as a fixed, pre-given category, race is viewed as a shifting web of social meanings, constantly being transformed by political struggle. Racial categorization “signifies and symbolizes social conflicts and interests by referring to different types of human bodies” (Omi and Winant 1994: 55); ethnic categorizations tend to emphasize culture (language, practices, religions, dress). A racial formations approach asks how racial categories arose historically, under what conditions, and whose interests those categories served.

What is the relevance of a “racial formations” approach for environmental justice? First, it requires us, as activists and scholars, to see that contemporary racializations are part of long historical processes, and are formative of future ones. It asks us to be critical of the categories and the ways we use them in analysis and activism.<sup>6</sup> A racial formations approach asks us to examine how material conditions are influenced by both structural factors and representations over time. Such a historical materialist approach to race shows that race and racism are mutually constitutive (Pulido 2000; Gilmore 2002a). This has been demonstrated in research on how environmental injustices arose (see section, Producing Environmental Injustice), that is, research that asks the question of how certain

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5. For example, many researchers use data from the U.S. Census Bureau regarding racial (White; Black; American Indian, Eskimo, or Aleut; Asian or Pacific Islander; Other) and ethnic categories (Hispanic origin). While fixing race into six categories, the Census also provides example of the ways in which racial/ethnic categories are unstable and subject to change; Census categories have changed repeatedly. To complicate matter further, the 2000 Census permitted respondents to select multiple racial labels for describing themselves for the first time, creating many “new” categories of mixed-race people.

6. Critical race theory, which is not discussed here, may also be helpful, particularly with regard to the law. See edited volume by Crenshaw et al (1995) and Harris (1993).



communities managed to avoid toxic burdens or gained access to the benefits of green space, while other communities and neighborhoods became overburdened with toxics or lacking in parks (see, for instance, Pulido 2000; Szasz and Meuser 2000; LaDuke 1999; Pastor et al 2001; Wolch et al 2001).

Racism can also be embedded in so-called neutral, scientific policies and results, such as anti-grazing laws in the U.S. Southwest. For example, Chicanos in the southwestern United States were stereotyped as landowners who were not economically productive, but environmentally destructive. Certain environmental and industrial interests asserted that sheep grazing increased erosion and destroyed the diversity of “native” rangelands, and that the lands managed by Hispano/a farmers were unregulated areas where selfish individual behaviors would lead to collective overgrazing or water usage. A partial approach to combating these stereotypes would involve establishing that Chicano/as are good environmental stewards and economically important. Pulido (1996) and Peña (1998) describe different struggles in which activists and activist-scholars sought to remake images of Chicano/as and Hispano/as into good environmental stewards, invoking images of Mother Earth in local folklore, as well as describing the complex social relations that govern the use and protection of collective environmental resources. The first narrative marks brown bodies as environmentally rapacious actors, who, if left to their own devices, will overuse natural resources. The second redraws those borders and bodies as farmers who have acquired, through long-term residence, a balanced relationship with the local environment, as well as detailed knowledge of it. Both lines of thought and representation echo particularly powerful and often racialized lines of mainstream environmental reasoning, one of which is commonly known as the “tragedy of the commons” (Hardin 1968), and the other, a romanticized image of a tribal people with a mystical relationship to nature.

The above example also illustrates another important facet of a complex, contextualized understanding of racial formations: racial projects are simultaneously structural and representational. In the cases described by Pulido (1996) and Peña (1998), representations and stereotypes of Chicano/as and Anglos were each dependent on the existence of the other. Stereotypes and representations, including “scientific” representations, became embedded in the political structure, such as in the form of anti-grazing laws, which would disproportionately affect land-based Chicano/as. A racial formations approach also interrogates the political and economic interests behind ecological research that showed Chicano/as as poor environmental stewards. Successful and less successful attempts by Chicano/as to counteract state-sanctioned violence relied on tactics that sought to change structural factors, such as laws, as well as representations, including the stereotypes of Chicano/as, as farmworkers, as water users, or as environmental stewards.

Who benefits from environmental injustice and racism, and who is harmed? As Romm (2002), Pulido (2000) and Gilmore (2002a) and others argue, because of specific historical precedents, elite white men disproportionately enjoy the benefits to be wielded by government and state. For instance, “the relatively early universal extension of suffrage to white Euro-American males to vote established government as their milieu and state power as their instrument (Katznelson 1985)” (Gilmore 2002a: 21). Thus,

the “dictatorship of white men” (Winant 1994) both depended on and fostered a connection between and among masculinity, state power and national belongingness, with everyone else thus characterized as to some degree alien. (Gilmore 2002a: 21)

Romm's history of the U.S. Forest Service shows how racism is embedded in many federal and state agencies' natural resource policies and management. Pulido shows how racism is embedded in the spatial distribution of poor people and people of color in Los Angeles, and how structural racism maintains white privilege. These authors help us to better understand the deep connection between racism, sexism, and power. Often, they show us what many people already know: producing and renewing racism was, and is, hard work, and it helps to shape the dynamics and distribution of environmental benefits and harms.

Who is harmed by environmental injustice, or the creation of marginalized landscapes? Greenberg and Schneider (1994) describe the proliferation of marginal urban landscapes in New Jersey. Since the 1980s, the concentration of locally unwanted land uses (LULUs) and Temporarily Obsolete Abandoned Derelict Sites (TOADS) has increased, especially in mid-sized urban areas such as Camden, Newark and Trenton. These landscapes, largely devoid of public services, become nuclei of violence. For Camden, Newark and Trenton, rates of violent death from 1985 to 1990 among young males are not significantly different for Blacks, Whites and Hispanics. Environmental injustice is related to premature death for all residents.

To summarize, the processes that have produced environmental injustice have also simultaneously produced uneven development, marginalized landscapes, increased criminalization of poor people and people of color, and the social movements that work to transform them. A racial formations approach to environmental injustice seeks to interrogate not only racial categories, but also to investigate the long roots of racism that are embedded and masked within natural resource and environmental policies. At the same time, racism's effects are harmful for society at large. In fact, the dynamics that produce racism are related to those that produce environmental harms. While not all EJ research and activism directly addresses the following goals, many people are already imagining and building broadly democratic, antiracist movements.

### Related Publications

Checker, Melissa. 2001. "Like Nixon Coming to China": Finding Common Ground in a Multi-Ethnic Coalition for Environmental Justice. *Anthropological Quarterly* 74 (3):135-146.

Crenshaw, Kimberlé, Neil Gotanda, Gary Peller, and Kendall Thomas, eds. 1995. *Critical Race Theory: The Key Writings that Formed the Movement*. New York: New Press.

Gilmore, Ruth Wilson. 2002a. Fatal Couplings of Power and Difference: Notes on Racism and Geography. *The Professional Geographer* 54 (1):15-24.

Gilmore, Ruth Wilson. 2002b. Race and Globalization. In P.J. Taylor, R.L. Johnstone, M.J. Watts, eds. *Geographies of Global Change*, 2nd Edition. Oxford: Basil Blackwell, Ch. 17.

Greenberg, Mark and Dona Schneider. 1994. Violence in American Cities: Young Black Males Is the Answer, but What Was the Question? *Social Science & Medicine* 39 (2): 179-187.

Omi, Michael, and Howard Winant. 1994. *Racial Formation in the United States*. New York, London: Routledge.

- Pastor, M., J. Sadd, and J. Hipp. 2001. Which came first? Toxic facilities, minority move-in, and environmental justice. *Journal of Urban Affairs* 23 (1):1-21.
- Pulido, Laura. 1996a. A Critical Review of the Methodology of Environmental Racism Research. *Antipode* 28 (2):142-159.
- Pulido, Laura. 1996b. *Environmentalism and economic justice: two Chicano struggles in the Southwest, Society, environment, and place*. Tucson: University of Arizona Press.
- Pulido, Laura. 2000. Rethinking Environmental Racism: White Privilege and Urban Development in Southern California. *Annals of the Association of American Geographers* 90 (1):12-40.
- Szasz, Andrew, and Michael Meuser. 2000. Unintended, Inexorable: The Production of Environmental Inequalities in Santa Clara County, California. *American Behavioral Scientist* 43 (4):602-632.
- Wolch, Jennifer, John P. Wilson and Jed Fehrenbach. 2002. *Parks And Park Funding In Los Angeles: An Equity Mapping Analysis*. Los Angeles, University of Southern California Sustainable Cities Program and GIS Research Laboratory.

Environmental justice activists and academics have drawn from three broad categories of **justice**: distributinal justice, procedural justice and entitlements (e.g. Cutter 1995, Heiman 1996, Low & Gleeson 1998).<sup>7</sup> **Distributinal justice** refers to the distribution of harms (and benefits) over a population. For this standard to be met, then the distribution of harms should not be more prevalent for any identifiable subgroup than another. If egalitarian (*equality*-based) standards were used to assess distributinal justice, then each group should have the same level of harms and benefits. Each 500-person neighborhood might have one recycling plant, two parks, and three plastics factories. If *equity*-based standards were applied, each group might not have exactly the same level. If children and the elderly are more vulnerable to pollution from plastics, then neighborhoods with a greater share of these populations might have more parks and fewer factories; neighborhoods of childless adults could justly host more factories. Similarly, if people of color are generally in poorer health, and therefore are more susceptible to environmental hazards, then equity standards would suggest these groups should bear a proportionately smaller share of environmental harms.

Distributinal justice principles can be applied across groups within society and across time (intergenerational equity). Much early EJ scholarship focused on showing the disproportionate location of and exposure to toxic substances (via landfills, Superfund sites, incinerators) near minority and poor communities, or refuting these claims. Application of this distributinal justice standard to policy would have the following policy implications. Most importantly, environmental hazards, including the waste itself, should be equitably (or equally) distributed across the population. It follows that the siting of new facilities should not be placed on already overburdened communities—hazard-free areas should be targeted—and remedial actions should be taken to clean up contaminated sites until contamination is evenly distributed. Since hazard-free communities are likely to resist efforts to make them host hazards, this is likely to create pressure for hazard reduction. As many activists argue, hazards do not belong in anybody's backyard (NIABY<sup>8</sup>).

**Procedural justice** focuses on the process through which environmental decisions are made. If decisions are made through a fair and open process, they may be considered just regardless of their distributinal impact. Concern with procedural justice therefore centers on two issues: procedural fairness and the effective ability of groups to participate in ostensibly fair processes. Issues of community empowerment and “access to the resources necessary for an active role in decisions affecting people's lives” are crucial (Heiman 1996). This includes attention to the role of knowledge and expertise in a class-stratified society (Heiman 1996) and the right of communities to be involved in all stages of the planning process, especially when political representatives do not reflect the concerns, needs, knowledge and/or experience of their constituents (for example, see Clarke and Gerlak 1998). Some procedural justice struggles were as basic as getting translators so that public hearings could be held in multiple languages, or publishing environmental impact assessments in languages other than

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7. Justice is an issue on which philosophers have dedicated books and entire lifetimes (c.f., Rawls 1971); our discussion addresses the ways in which EJ scholars and activists seem to be thinking about these issues.

8. Although anti-toxics and environmental justice activists have often been described as rallying under the slogan, “Not In My Back Yard” (NIMBY), many articulate a broader vision that broadens the goal: “Not In Anybody's Back Yard” (NIABY).

English. Foster (2002) contends that devolving decision-making and adopting collaborative approaches will not produce procedural justice without explicit attention to distributional equity issues, including the ability to participate.

**Entitlements approaches** seek to ensure that individuals (and communities) have effective access to and control over environmental goods and services necessary to their well-being (Leach 1999; Sen 1981). This conception of justice leads to minimum standards for just outcomes. For instance, one may say that there is a universal right to a clean and healthy environment (including Romm 2002, Porter 2001; Wolch et al 2002). Realizing these entitlements may require changes in procedures and distribution of benefits and hazards; it is also likely to require a reduction in the production of environmental hazards and significant clean-up of existing contamination.

The entitlements approach is compatible with the **precautionary principle**, that is, the idea that policymakers should prioritize preventing adverse impacts rather than redressing or remediating them after they have occurred (Montague 1998). “When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically” (Wingspread Consensus Statement on the Precautionary Principle 1998<sup>9</sup>). When this principle is applied, policymakers err on the side of caution in interpreting uncertain data (see Risk Assessment section). This approach is more likely to produce intergenerational distributive justice.

Critiques of EJ frequently draw upon **utilitarian principles** (e.g., Simon 2000). Utilitarianism defines the most just policy as that which produces the greatest good for the greatest number. Because it is focused on aggregate outcomes rather than individual or group outcomes, a just utilitarian policy could be inequitable. For instance, a leaked World Bank memo argued that a policy of exporting pollution to Third World countries was economically beneficial and rational, because the cost of human health and environmental problems in the Third World was less than that in industrially developed countries (Summers 1991). Utility-based calculations frequently rely on economic indicators to measure benefits, which are highly problematic. For example, a researcher might compare the price different individuals are willing to pay for clean air. As one might expect, willingness to pay is linked to ability to pay; poor people are willing to pay less for the same goods even if they place equal value upon them. Many utilitarians see capitalism as the most efficient means of producing utilitarian justice, but most radical scholars see capitalism (and market-based remedies) as a major source of injustice (e.g., Ruiters 2001; Bandy 1997; Gedicks 1997; LaDuke 1999; Martinez-Alier 2001).

Environmental justice scholars, activists, and policymakers have drawn from each sort of justice claim. The seventeen **Principles of Environmental Justice**, developed at the People of Color Environmental Leadership Summit in 1991, encompass distributive and procedural justice along with entitlements and the precautionary principles. The EJ Principles also highlight the right to self-determination—the right of people to shape their own destiny. Although self-determination has relevance to many groups, it has particular salience in the contexts of Native American struggles and

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9. The Wingspread Consensus Statement on the Precautionary Principle was signed in 1998 by 32 activists, academics and doctors. They argue that “the release and use of toxic substances, resource exploitation, and physical alterations of the environment have had substantial unintended consequences on human health and the environment.” For the full statement see this website: <<http://www.gdrc.org/u-gov/precaution-3.html>>.

those of contemporary colonies such as Puerto Rico and the Marshall Islands. In these places, struggles over environment continue to center around expropriation, especially of land and other resources, and are intimately tied with identity and livelihood (e.g. LaDuke 1999; Berman Santana 1996; Ruiters 2001; Neumann 1998) (See section on International Environmental Justice). In trying to provide a relevant framework for international as well as US-based research and activism, Low and Gleeson (1998) define environmental justice as the social distribution of environmental well-being both within and among nations.

Scholars of environmental justice have articulated several different conceptions of environmental justice, but most draw from the 1991 Principles. For example, Cutter (1995) writes that the principle of EJ guarantees (1) protection from environmental degradation, (2) prevention of adverse health impacts from deteriorating environmental conditions before the harm occurs not after, (3) mechanisms for assigning culpability and shifting the burden of proof of contamination to polluters not residents and (4) redressing the impacts with targeted remedial action and resources. Cutter's goals highlight the precautionary principles and the polluter pays principle, both of which have been extremely influential in social justice struggles of the late 1990s.

Over time, environmental justice activism has penetrated the state to varying degrees, and some forms of EJ have become institutionalized. Executive Order 12898 (1994) mandated the incorporation of EJ principles into federal agency activities. As of 1999, according to Lester et al (2001), North Carolina, Georgia, Alabama, Louisiana, Michigan, New York and Arkansas had passed legislation to achieve environmental justice. SB 115 in California mandates that the Office of Planning and Research develop an environmental justice program for the state (Pastor 2001). However, the principles articulated at the 1991 Summit have *not* been generally adopted; government agencies have emphasized some principles and omitted or revised others. For example, in 1992, US Environmental Protection Agency (EPA) Administrator William Reilly wrote, "At its core, environmental equity means fairness. It speaks to the impartiality that should guide the application of laws ...." This view emphasizes procedural justice but neglects distributive justice and entitlements. More recently, the EPA provided this definition on its website:

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies. (USEPA [2002])

This definition of EJ incorporates the concepts of distributional and procedural justice.

Environmental justice connects many struggles against racism. Yet, to some extent, it relies on environmental laws for legislative traction. Environmental laws provide certain openings—to rights—that have been largely cut out of civil rights (e.g. Cole 2001; Cole and Foster 2001). At the same time, these laws are subject to change and interpretation, and so their promise too is unstable.

## Related Publications

- Bandy, Joe H. 1998. Border crossings: Transnational movements for alternative development and radical democracy in the United States-Mexico border region. PhD, University of California, Santa Barbara.
- Berman Santana, Déborah. 1996. Geographers, colonialism, and development strategies: the case of Puerto Rico. *Urban Geography* 17 (5):456-474.
- Clarke, J. N., and A. K. Gerlak. 1998. Environmental racism in the sunbelt? A cross-cultural analysis. *Environmental Management* 22 (6):857-867.
- Cole, Luke. 2001. Expanding Civil Rights Protections in Contested Terrain: Using Title VI of the Civil Rights Act of 1964. In Mutz, Kathryn M., Gary C. Bryner and Douglas S. Kenney. *Justice and Natural Resources: Concepts, Strategies and Applications*. Washington, Covelo and London, Island Press. 187-208.
- Cole, Luke W. and Sheila R. Foster. 2001. *From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement*. New York: New York University Press.
- Cutter, S. L. 1995. Race, class and environmental justice. *Progress in Human Geography* 19 (1):111-122.
- Foster, Sheila. 2002. Environmental Justice in an Era of Devolved Collaboration. In *Justice and Natural Resources*, edited by K. M. Mutz, G. C. Bryner and D. S. Kenney. Washington, DC: Island Press.
- Gedicks, Al. 1997. Corporate Strategies for Overcoming Local Resistance to New Mining Projects. *Race, Gender & Class* 5 (1):109-
- Heiman, M. K. 1996. Race, Waste, and Class: New Perspectives on Environmental Justice. *Antipode* 28 (2):111-121.
- LaDuke, Winona. 1999. *All Our Relations*. Boston, South End Press.
- Leach, Melissa, Robin Mearns, and Ian Scoones. 1999. Environmental entitlements: Dynamics and institutions in community-based natural resource management. *World Development* 27 (2).
- Low, N., and B. Gleeson. 1998. Situating justice in the environment: The case of BHP at the Ok Tedi Copper Mine. *Antipode* 30 (3):201+.
- Martinez-Alier, J. 2001. Mining conflicts, environmental justice, and valuation. *Journal of Hazardous Materials* 86 (1-3 SI):153-170.
- Montague, Peter. 1998. The Precautionary Principle. *Rachel's Environment and Health News* 586 (Feb. 19).

- Neumann, Roderick P. 1998. *Imposing Wilderness: Struggles over Livelihood and Nature Preservation in Africa*. Berkeley: University of California.
- Pastor, Manuel. 2001. Racial/Ethnic Inequality in Environmental-Hazard Exposure in metropolitan Los Angeles. *California Policy Research Center Brief* 13 (2).
- Porter, Tobert Preston, Jr. 2001. Environmental justice and north Georgia wilderness areas: A GIS-based analysis. PhD, University of Georgia.
- First National People of Color Environmental Summit. 1991. Principles of Environmental Justice. Washington, DC: First National People of Color Environmental Summit.  
<http://www.ejrc.cau.edu/princej.html>
- Reilly, William K. 1992. Environmental Equity: EPA's Position. *EPA Journal* 18 (1):18-22.
- Ruiters, Greg. 2001. Environmental Racism and Justice in South Africa's Transition. *Politikon* 28 (1):95-103.
- Romm, Jeff. 2002. The Coincidental Order of Environmental Justice. In *Justice and Natural Resources*, edited by K. M. Mutz, G. C. Bryner and D. S. Kenney. Washington, DC: Island Press.
- Ruiters, Greg. 2002. Race, Place, and Environmental Rights: A Radical Critique of Environmental Justice Discourse. In McDonald, David A. ed. *Environmental Justice in South Africa*. Athens: Ohio University Press and Cape Town: University of Cape Town Press.
- Sen, Amartya. 1981. *Poverty and famines: an essay on entitlement and deprivation*. New York: Oxford University Press.
- Simon, T. W. 2000. In defense of risk assessment: A reply to the environmental justice movement's critique. *Human and Ecological Risk Assessment* 6 (4):555-560.
- Summers, Lawrence. 1991. <http://www.whirledbank.org/ourwords/summers.html> (accessed July 8, 2002)
- USEPA. <<http://es.epa.gov/oeca/main/ej/>> accessed June 6, 2002
- Wolch, Jennifer, John P. Wilson, and Jed Fehrenbach. 2002. *Parks and Park Funding in Los Angeles: An Equity Mapping Analysis*. Los Angeles: University of Southern California Sustainable Cities Program and GIS Research Laboratory.



## *The Just Environment*

Jeff Romm (2002) argues that a “just environment” requires social and ecological relations in which all groups of people have equal opportunity for benefit and influence. Romm’s intervention highlights the distribution of access to environmental benefits, and the historical roots of present inequities in the U.S. West. He contends that environmental injustice is caused by the interaction of (1) environmental policies based on the territorial protection of resources and (2) race-based limitations on social opportunities. In a similar vein, Porter (2001) and Wolch, Wilson, and Fehrenbach (2002) consider the disproportionately lower access to parks and open space of urban communities of color in Georgia and Los Angeles as instances of environmental injustice. More available open space and parks are highly correlated with higher land values and less people of color, and are the results of long histories of racial exclusion (e.g. Pulido 2000 and Romm 2002). Likewise, the formation of conservation parks and reserves in the global South is often linked to state expropriation of indigenous and native lands (e.g. Low and Gleeson 1998; Geisler and Letsoalo 2000) and excludes those often dislocated and relocated peoples from the recreational and livelihood benefits of parks and reserves.

Finally, the use of and access to recreational and public spaces may be more restricted and less safe for young women, lesbian women, Latina/os, Chinese, Japanese, African Americans and a host of others (e.g. Filemyr 1997). This can occur through racialized and gendered stereotypes of who belongs where, and at what times, and is informed by state and other governmental structures—such as a local law enforcement officer’s questioning of a group of African-American students’ entitlement to be taking a walk on a country road (Filemyr 1997).

### **Related Publications**

Filemyr, Ann. 1997. Going outdoors and other dangerous expeditions. *Frontiers* 18 (2):160-177.

Geisler, Charles, and Essy Letsoalo. 2000. Rethinking land reform in South Africa: an alternative approach to environmental justice. *Sociological Research Online* 5 (2).

Low, N., and B. Gleeson. 1998. Situating justice in the environment: The case of BHP at the Ok Tedi Copper Mine. *Antipode* 30 (3):201+.

Porter, Torbert Preston, Jr. 2001. Environmental justice and north Georgia wilderness areas: A GIS-based analysis. PhD, University of Georgia.

Pulido, Laura. 2000. Rethinking Environmental Racism: White Privilege and Urban Development in Southern California. *Annals of the Association of American Geographers* 90 (1):12-40.

Romm, Jeff. 2002. The Coincidental Order of Environmental Justice. In *Justice and Natural Resources*, edited by K. M. Mutz, G. C. Bryner and D. S. Kenney. Washington, DC: Island Press.

Wolch, Jennifer, John P. Wilson and Jed Fehrenbach. 2002. Parks And Park Funding In Los Angeles: An Equity Mapping Analysis. Los Angeles, University of Southern California Sustainable Cities Program and GIS Research Laboratory. <<http://www.usc.edu/dept/geography/ESPE/parkspress.htm>>

## CONTEXT

### *The Social Framing of Environmental Justice*

In their analyses of the environmental justice movement, Novotny (2000) and Taylor (2000) use social movement theory to contrast the EJ framing of the environment with the narrower focus of traditional American environmentalism. Traditional, or mainstream, environmentalism has focused on protection of valued ecological places, usually through minimizing human presence, sustainable use of natural resources and reduction of pollution. Environmental justice activists have emphasized human-environment interactions in residential, workplace, and recreational settings. From this perspective, just environmentalism requires equity among people and places as well as environmental protection. These authors tie the different conceptions of the environment to the different historical antecedents of the environmental justice and new environmental movements. Environmental histories tend to trace contemporary mainstream environmentalism to the nineteenth century conservationist and preservationist activism of Ralph Waldo Emerson, John Muir, Gifford Pinchot and other white male outdoorsmen. However, Taylor (1997) has shown that American environmental activism has a much more complex history.<sup>10</sup>

Most scholars locate the roots of the contemporary EJ activism in the civil rights, labor (especially farmworkers), and housing struggles of the 1960s and 1970s (see, for example, Bullard and Johnson 2000). These struggles have deep resonance in people of color communities throughout the U.S. and elsewhere. Past struggles also provide a cadre of individuals with experience mobilizing communities, a set of local organizations that can provide a base for organizing, and a language with which residents are familiar. In many cases, local environmental activism begins when an existing community organization expands its agenda or sponsors a new organization (Taylor 2000). Novotny (2000) observes that the Gulf Coast Tenants Association of Louisiana uses references to “chemical barons” and “environmental carpetbaggers” to link anti-petrochemical company protests to slavery, Reconstruction and Jim Crow. Platt’s (1997) analysis of the Mothers of East Los Angeles (MELA) highlights how MELA draws on religious and cultural symbols in using an image of a rebozo-wrapped Madonna holding a child in swaddling cloth as their primary logo. MELA activists draw on the resonance of family and motherhood while contesting stereotypical depictions of their communities. Devon Peña (1998), Laura Pulido (1998), and Joseph Gallegos (1998) all describe how Hispano/a activists contested dominant views of Mexicans as poor land stewards in a struggle over land and water rights in the Southwestern United States, using storytelling, academic writing and poetry as different ways to express Hispano/a farmers’ relationships to land and nature, embedded within centuries of local ecological knowledge.

The EJ conception of the environment as where we live, work, and play broadens environmentalism’s potential constituency and issue focus (Taylor 2000; Novotny 2000). It also has broadened the arenas to which existing environmental legislation has been applied, extending implementation of these laws to communities, places of work, and playgrounds. Multi-issue agendas typify

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10. Taylor (1997, 2000) identifies four pathways to environmentalism: wilderness and recreation (the dominant sector), open spaces and urban environmentalism, worker’s health, and social justice (environmental justice). She links environmental activism to positionality; individuals’ race, class, and gender shape their interactions to the environment.

environmental justice organizations, for instance, MELA is active on issues of language, civil rights, and labor as well as the anti-toxics work most closely associated with EJ (Taylor 2000). On the one hand, broad-based struggles may make it easier for activists to determine intervention strategies (Taylor 2000). At the same time it may also make it difficult for policy makers to determine bureaucratic priorities (Foreman 1998).

### Related Publications

- Bullard, Robert D., and Glenn S. Johnson. 2000. Environmental justice: Grassroots activism and its impact on public policy decision making. *Journal of Social Issues* 56 (3):555-578.
- Foreman, Christopher H. 1998. *The Promise and Peril of Environmental Justice*. Washington, DC: Brookings Institution Press.
- Gallegos, Joseph C. 1998. Acequia Tales: Stores from a Chicano Centennial Farm. In *Chicano culture, ecology, politics: subversive kin*, edited by D. G. Peña. Tucson: University of Arizona Press.
- Novotny, Patrick. 2000. *Where We Live, Work and Play: The Environmental Justice Movement and the Struggle for a New Environmentalism*; Praeger Series in Transformational Politics and Political Science. Praeger: Westport, CT.
- Pardo, Mary. 1998. *Mexican American Women Activists: Identity and Resistance in two Los Angeles Communities*. Philadelphia: Temple University Press.
- Peña, Devon Gerardo. 1998. A Gold Mine, an Orchard, and an Eleventh Commandment. In *Chicano culture, ecology, politics: subversive kin*, edited by D. G. Peña. Tucson: University of Arizona Press.
- Platt, Kamala. 1997. Chicana strategies for success and survival: cultural poetics of environmental justice from the Mothers of East Los Angeles. *Frontiers* 18 (48-72):iii.
- Pulido, Laura. 1998. Ecological Legitimacy and Cultural Essentialism: Hispano Grazing in Northern New Mexico. In *Chicano culture, ecology, politics: subversive kin*, edited by D. G. Peña. Tucson: University of Arizona Press.
- Taylor, Dorceta E. 1997. American Environmentalism: The Role of Race, Class, and Gender in Shaping Activism 1820-1995. *Race, Gender & Class* 5 (1):16-62.
- Taylor, Dorceta E. 2000. The rise of the environmental justice paradigm: Injustice framing and the social construction of environmental discourses. *American Behavioral Scientist* 43 (4):508-580.

## CONTESTED ISSUES

### *Producing Environmental Injustice*

How do situations of environmental injustice and environmental racism arise? A growing body of work locates the sources of environmental injustice in a complex process through which structural factors—such as capitalism, policies and regulations, and social stratification based on race, ethnicity, class—interact with the contingent, strategic actions of multiple actors—managers, activists, communities and regulators. Environmental injustice is *produced* through complex sociohistorical processes that Pellow (2000) terms environmental inequality formation. The dynamics creating environmental inequality include uneven development and racism wedded with processes of capital accumulation, or “fatal couplings of power and difference” (quotation from Stuart Hall, cited in Gilmore 2002b; see also Pulido 1996; Bandy 1997). A few examples of this approach are discussed below.

In his case study of a Chicago recycling plant managed by Waste Management, Inc, Pellow (2000) observes that community leaders, environmentalists, and elected officials saw the plant as a means to reduce waste and create jobs in an area where few were available; the plant was in part a response to successful efforts to close existing incinerators. But the plant then exposed its predominantly Black workforce to environmental health hazards at low pay, creating an environmental injustice to which environmentalists were inattentive.

Pulido’s (2000) work on Southern California illustrates how racism sediments in particular spatial arrangements. Pulido details how explicitly racialized housing and zoning laws and practices in the early 1900s changed and intersected with other forces to produce situations where disproportionately more toxic facilities are located near communities of color (especially Black and Hispano/a) today. Pulido develops the concept of white privilege in terms of sociospatial relations: “landscapes are artifacts of past and present racisms, they embody generations of sociospatial relations.... White privilege is expressed, and indeed partially contingent on a particular set of spatial arrangements.” (Pulido 2000: 20).

Other work has explored the production of scale and space and how it contributes to the production of injustice as well as the effectiveness of activist, community, and policy interventions (Smith 1993; Gedicks 1997; Williams 1999; Simon D 2000; Pellow 2001; Towers 2000). Scholars have taken a similar approach to examining environmental injustice in the global south, highlighting the intimately coupled dynamics of racism, colonialism and post World War II development policies and international financial institutions (See discussion in International Environmental Justice). In the US Southwest, there are vast areas of land colonized by military and nuclear interests. Through state-sanctioned violence disguised as academic and political work, these peopled landscapes have been made to seem invisible and empty, becoming “sacrificial landscapes” as outdoors weapons laboratories (Kuletz 2001: 249).

The work described above departs from a larger body of research on the causes of environmental injustice that has tended to assume racism is a specific conscious act of discrimination singular cause or to rely solely on quantitative methods in seeking to explain the existence of environmental injustice. For example, Vicky Been suggested in 1993 that existing inequity in the distribution of environmental hazards might result from minority move-in after hazards were created. If so, these

inequities could not be attributed to racism, that is, intentional discrimination, but might be seen as a rational response to market forces that made these areas less expensive, and therefore more attractive to people of color who, in generally, have low incomes and less wealth than whites. Those who view the market (capitalism) as just might then say inequitable distributions of environmental hazards and benefits are *not* unjust<sup>11</sup>; this conclusion rests on a conception of justice adopted by few EJ activists (see section on Justice, Equality and Equity). Subsequent studies by Been and others have found no evidence for this minority move-in hypothesis (Been and Gupta 1997; Pastor, Sadd, and Hipp 2001).

Laura Pulido (1996, 2000) takes issue with the conception of racism embedded in this approach (also see Ruiters 2002). Focusing on racism as “a specific, conscious act of discrimination” or seeking to determine whether it is race *or* class that produces injustice misses the point. Rather, she develops an analysis that historicizes environmental racism through an analysis of white privilege.

[M]any would argue that [the act of a polluter locating near a black community] is economically rational [and not a malicious, discriminatory act]. Yet it is racist in that it is made possible by the existence of a racial hierarchy, reproduces racial inequality and undermines the well-being of that community. Moreover, the value of black land cannot be understood outside of the relative value of white land. (16)

Racism and racial formation are complex processes; race and class are deeply intertwined and inseparable in the experiences of communities suffering from injustice. (See Pulido 1996 annotation for further discussion).

However, not all quantitative research projects adopt a narrow view of racism or the causes of environmental injustice. Quantitative analysis of data on the distribution of hazards, benefits, and groups of people over time can help to identify important patterns and possible explanatory factors that may be common across many, otherwise dissimilar contexts. For instance, Geographic Information Systems-based analyses were an important part of the Szasz and Meuser study (2000) that historicizes the production of environmental inequalities.

#### Related Publications

Bandy, Joe. 1997. Reterritorializing Borders: Transnational Environmental Justice Movements on the U.S./México Border. *Race, Gender & Class* 5(1): 80-

Been, V. 1993. What's Fairness Got to Do with It: Environmental Justice and the Siting of Locally Undesirable Land Uses. *Cornell Law Review* 78 (6):1001-1085.

Been, V., and F. Gupta. 1997. Coming to the nuisance or going to the barrios? A longitudinal analysis of environmental justice claims. *Ecology Law Quarterly* 24 (1):1-56.

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11. This view of the market as inherently just, as presented in an extremely clear example by Larry Summers (1991), is still alive and well. As we put the final edits on this essay and bibliography, Ruthie found an editorial in the New York Times (June 25, 2002) that portrayed sweatshops as positive economic development for places with a surplus of unskilled labor.

- Gedicks, Al. 1997. Corporate Strategies for Overcoming Local Resistance to New Mining Projects. *Race, Gender & Class* 5(1): 109+
- Gilmore, Ruth Wilson. 2002a. Fatal Couplings of Power and Difference: Notes on Racism and Geography. *The Professional Geographer* 54(1), 15-24.
- Gilmore, Ruth Wilson. 2002b. Race and Globalization. In P.J. Taylor, R.L. Johnstone, M.J. Watts, eds. *Geographies of Global Change*, 2nd Edition. Oxford: Basil Blackwell, Ch. 17
- Kuletz, Valerie. 2001. Invisible Spaces, Violent Places. In Peluso, Nancy and Michael Watts (eds.). *Violent Environments*. Ithaca and London: Cornell University Press.
- Pastor, M., J. Sadd, and J. Hipp. 2001. Which came first? Toxic facilities, minority move-in, and environmental justice. *Journal of Urban Affairs* 23 (1):1-21.
- Pellow, David N. 2001. Environmental justice and the political process: movements, corporations, and the state. *Sociological Quarterly* 42 (1):47-67.
- Pellow, David N. 2000. Environmental Inequality Formation: Toward a Theory of Environmental Justice. *American Behavioral Scientist* 43 (4):581-601.
- Pulido, Laura. 1996. A Critical Review of the Methodology of Environmental Racism Research. *Antipode* 28 (2):142-159.
- Pulido, Laura. 2000. Rethinking Environmental Racism: White Privilege and Urban Development in Southern California. *Annals of the Association of American Geographers* 90 (1):12-40.
- Ruiters, Greg. 2002. Race, Place, and Environmental Rights: A Radical Critique of Environmental Justice Discourse. In McDonald, David A. ed. *Environmental Justice in South Africa*. Athens, Ohio University Press and Cape Town, University of Cape Town Press.
- Simon, D. R. 2000. Corporate environmental crimes and social inequality: New directions for environmental justice research. *American Behavioral Scientist* 43 (4):633-645.
- Smith, Neil. 1993. Contours of a Spatialized Politics: Homeless Vehicles and the Production of Geographical Scale. *Social Text* 33:55-81.
- Szasz, Andrew, and Michael Meuser. 2000. Unintended, Inexorable: The Production of Environmental Inequalities in Santa Clara County, California. *American Behavioral Scientist* 43 (4):602-632.
- Towers, G. 2000. Applying the political geography of scale: Grassroots strategies and environmental justice. *Professional Geographer* 52 (1):23-36.
- Williams, Robert W. 1999. Environmental injustice in America and its politics of scale. *Political Geography* 18:49-73.