Forum

Environmental Inequality and the Urbanization of West Coast Watersheds

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In the San Francisco Bay Area, Seattle, and Los Angeles, urban development decreased the poor's access to water and marine resources. Modernization in these cities either reduced services to the poor and to ethnic minorities, be they Native Americans, Asian Americans, or Hispanic Americans, or diminished these groups' ability to supplement their incomes by fishing or foraging. Industrial development, shipping channels, and sewers all contributed to a larger pattern of environmental racism and environmental inequity in the United States. This forum contributes to the study of environmental justice by exploring how marginalized peoples adapted to urban growth and the reallocation of resources in the late nineteenth and early twentieth centuries.

As I write this, the evening news is filled with images of Hurricane Katrina's devastating impact on the poor black residents of New Orleans and with discussions of how federal, state, and local emergency preparations could have so completely overlooked 100,000 people. But, of course, urban development has long taken place on the backs of America's poor; this forum of the Pacific Historical Review addresses this very question. These articles got their start long before Hurricane Katrina struck, as a panel on the city and environmental justice at the 2004 meeting of the American Society for Environmental History. They embrace two entwined topics of growing importance in environmental history and address many questions that the recent hurricane raised for the nation: How does urban growth change the natural environment? How do these changes leave poor and minority residents especially vulnerable? And how have these groups adjusted, adapted, and resisted the environmental changes taking place around them?
In this forum, Matthew Booker examines the ways that hydraulic mining and commercial oystering transformed San Francisco Bay from a commons to private property and from a rich source of local foodstuffs to an industrial dump and bird refuge. Coll Thrush explores the fate of the Duwamish, Muckleshoot, and Suquamish Indians who struggled to maintain traditional subsistence lifeways in the face of the massive re-engineering of Seattle’s waterways. David Torres-Rouff recounts the conversion of irrigation canals in Los Angeles into covered sewers that bypassed the city’s Hispanic and Asian neighborhoods. Booker, Thrush, and Torres-Rouff share an interest in the marginalization of people and places as a byproduct of economic progress in the nineteenth and twentieth centuries. Water is a particularly useful medium for examining social inequity because Americans so consistently treat water as a malleable resource, easily manipulated for commercial, social, or political ends. The distribution of water, fisheries, and other water-related resources reveals a great deal about public priorities and about who is considered a member of the public with a legitimate claim to valuable community resources. For environmental historians, water’s malleability also highlights the complexities of human interactions with their environments and the difficulties communities have faced in responding to dramatic, unanticipated environmental changes. In these articles, water links cities to their larger environments. It likewise links one generation of human activity to the next and connects rural activities like subsistence fishing with urban services like public sanitation and harbor development. These authors examine water both as a basis of subsistence and commercial fishing and as a critical urban public service. In each case, communities changed waterways in pursuit of public goals and economic growth, and, in each case, these changes redistributed water resources upward.

The observation that environmental change has cost America’s poor and minority residents more than wealthy or white populations is not new. From Lemuel Shattuck to Jane Addams and Jacob Riis, reformers used the squalor in poor, immigrant neighborhoods as a major justification for constructing the great urban public works of the nineteenth century. They filled their descriptions of urban slums with innocents—children and honest laborers—consigned by bad food, unsanitary housing, and infectious diseases to lives of poverty and deprivation. In recent decades, urban and environmental historians, like the reformers they study, have directed more
attention to the services and political changes built by urban governments than to the consequences of these changes for the poor, whose plight initially inspired new waterworks, sewerage, street cleaning, and school inspection.¹

In the 1980s activists seeking to block a hazardous waste dump in Warren County, North Carolina, coined the term “environmental racism” to describe the concentration of toxic industries and wastes in African American and other minority communities.² One of the first monographs to bring racial analysis to environmental history, Robert Bullard’s 1990 Dumping in Dixie, placed the Warren County conflict in the context of larger problems of pollution and industrial wastes confronting poor, minority communities in the American South.³ Not everyone agreed that hazardous waste disposal companies and public officials deliberately targeted African American or other minority communities for problematic development. While some observers argued that the hazardous waste dump would bring jobs to an impoverished community, others argued either that class influenced hazardous waste-siting decisions more than race or that poor and minority communities moved in around pre-existing in-

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¹ Joel Tarr and Martin Melosi are often cited as the founders of urban environmental history. Their research not only directed scholars’ attention to urban environmental problems but also to the ways in which technology and past decisions constrain subsequent decision making. These works also identified the importance of public health in prompting cities like New York, Boston, and Chicago to establish public responsibility for water supply and sanitation. See, for example, Joel Tarr, The Search for the Ultimate Sink: Urban Pollution in Historical Perspective (Akron, Ohio, 1996); Joel Tarr and Gabriel Dupuy, eds., Technology and the Rise of the Networked City in Europe and America (Philadelphia, 1988); Martin Melosi, Pollution and Reform in American Cities, 1870–1930 (Austin, Tex., 1980); and Melosi, The Sanitary City: Urban Infrastructure in America from Colonial Times to the Present (Baltimore, 2000). Other important works in this field include Harold L. Platt, Shock Cities: The Environmental Transformation and Reform of Manchester and Chicago (Chicago, 2005); Christine Meisner Rosen, The Limits of Power: Great Fires and the Process of City Growth in America (Cambridge, U.K., 1986); Maureen Flanagan, Seeing with their Hearts: Chicago Women and the Vision of the Good City, 1871–1933 (Princeton, N.J., 2002); Nelson Blake, Water for the Cities: A History of the Urban Water Supply Problem in the United States (Syracuse, N.Y., 1956); Louis P. Cain, “Raising and Watering a City: Ellis Sylvester Chesbrough and Chicago’s First Sanitation System,” in Judith Walzer Leavitt and Ronald L. Numbers, eds., Sickness and Health in America: Readings in the History of Medicine and Public Health (Madison, Wisc., 1985), 439–450; and Sarah S. Elkind, Bay Cities and Water Politics: The Battle for Resources in Boston and Oakland (Lawrence, Kans., 1998).


dustries. This debate quickly found its way into environmental history.

A number of scholars have found evidence that racial discrimination did play a critical role in shaping the unique environmental burdens borne by minority populations. Andrew Hurley, for example, demonstrated that a combination of racial discrimination in housing and employment confined African Americans to the most polluted neighborhoods in Gary, Indiana. By 2000 the study of environmental racism was well enough established for *Environmental History* to devote a special issue to the subject. In that issue, Maureen Flanagan offered environmental justice as an organizing principle for making cities a central feature of a field once dominated by agricultural and economic studies. The articles in that issue explored race and gender in conflicts over coal smoke, public health, and environmental activism in Pittsburgh, Chicago, and New York City. Together, Angela Gugliotta, Harold Platt, and Dolores Greenberg explored the political history of environmental racism; in their works, they treated environmental degradation as an extension of political power and environmental history as a powerful tool for understanding the evolution of urban political institutions.

More recent works have considered racial discrimination in smaller communities. A number of these have looked less to political institutions than did Gugliotta, Platt, and Greenberg. Instead, they have examined the environmental justice consequences of the community development impulse. Connie Y. Chiang, for example, has described the ways that Monterey’s tourism and fishing industries targeted Chinese fishing activities with regulations ostensibly intended to eliminate fishy odors and preserve commercial sardine

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catches. Those who sought to push the Chinese off of Monterey’s
waters willfully ignored both the odors from Monterey’s many
sardine canneries and commercial fishing boats, as well as the fact
that Chinese fishers pursued squid rather than sardines. In the end,
Monterey’s odor and fishing regulations deprived the Chinese com-
"unity of access to and use of Monterey waters without having much
effect on either sardines or odor. Ryan M. Kray has examined the
even more explicitly racist practices used by the city of Palm Springs
to create a wealthy, white resort in the California desert. According
to Kray, white developers and community leaders bulldozed houses
occupied by Native Americans, African Americans, and other
minorities in the name of urban renewal. The federal agencies
charged with protecting minorities, in this case the Bureau of In-
dian Affairs, did nothing to block the racially exclusive redevelop-
ment plans of Palm Springs. Leaders in these smaller communities
tried to present their inequitable policies as good for their entire
communities, just as Gugliotta found that industrialists in Pitts-
burgh argued that smoke affected all residents equally.

In some cases, efforts at community development or even envi-
ronmental regulation have exaggerated class- rather than race-
based inequality. In her study of the Columbia Slough in Portland,
Oregon, for example, Ellen Stroud showed that pollution control
efforts concentrated pollution in poorer neighborhoods. In Port-
land, decisions to confine polluting industries to industrial zones
protected middle-class neighborhoods and landscapes from indus-
trial hazards. Elites benefited from reduced pollution, urban plan-
ning, and other environmental programs, but these same programs

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describes some similar ethnic and resource conflicts in Northwestern fisheries; see
Joseph E. Taylor III, Making Salmon: An Environmental History of the Northwest Fisheries Cri-
sis (Seattle, 1999). See also Sucheng Chan, This Bittersweet Soil: The Chinese in California

7. Ryan M. Kray, “The Path to Paradise: Expropriation, Exodus, and Exclusion in the
Making of Palm Springs,” Pacific Historical Review, 73 (2004), 85–126. The racial and com-
"munity costs of urban renewal have been described by many others. See Arnold Hirsch,
Making the Second Ghetto: Race and Housing in Chicago, 1940–1960 (London, 1983);
Ronald H. Bavor, Race and the Shaping of Twentieth-Century Atlanta (Chapel Hill, N.C.,
1995); John F. Bauman, Public Housing, Race, and Renewal: Urban Planning in Philadelphia,
1920–1974 (Philadelphia, 1987); and Kevin Fox Gotham, Race, Real Estate, and Uneven
left the poor powerless to protect their communities. Ari Kelman found a similar pattern in New Orleans, where commercial development along the Mississippi River reduced the physical spaces available to poorer residents of New Orleans. City officials there defined the public interest in ways that specifically overlooked the needs and desires of poor and minority residents.

Cities were not the only places where environmental regulation cost the poor. As Karl Jacoby has shown, the regulation of hunting, fishing, and grazing that accompanied the creation of Adirondack State Park, Yellowstone National Park, and Grand Canyon National Park made life harder for many nearby residents. The creation of these parks defined the market and subsistence hunting that had sustained local populations as illegal poaching; likewise, the new status of these lands made trespassers out of people who sought to continue grazing livestock and other long-standing practices. The price of elite recreation and sport hunting was, as Jacoby has shown, the impoverishment of working-class communities. Residents most affected by the creation of these parks did not immediately cease hunting or grazing in them. They persisted with these now illegal practices, out of both need and protest, often with the tacit support of their law-abiding neighbors.

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The articles in this *Pacific Historical Review* forum, like the works cited above, grow out of current scholarly interest in examining history from the perspective of the poor, minorities, and the disempowered. Together, the essays by Booker, Thrush, and Torres-Rouff paint a picture of complex environments in which those left behind by late nineteenth- and early twentieth-century progress struggled to adjust to rapidly changing environments.

This forum begins with Matthew Booker’s study of the radical transformation of San Francisco Bay from a rich and varied fishery into a scenic, but comparatively sterile, resource. According to Booker, before the 1910s San Francisco Bay contained enough waterfowl and aquatic species to sustain huge commercial and non-commercial harvests of fish, shellfish, and meat. Healthy wetlands also supplemented livestock forage, even as shallow mudflats and bright sunshine supported salt-makers. Booker is particularly interested in the non-commercial foragers who collected shellfish along the shore, replicating Indian foodways that dated back centuries. These practices ended in the early twentieth century, however, when debris from hydraulic mining choked the shellfish beds and cannery wastes further devastated other species upon which foragers had depended. These conditions nearly killed off native aquatic species, but they suited eastern oysters. Entrepreneurs quickly exploited the new bay ecology, transporting seed oysters from the eastern United States and transplanting them on prime shellfishing beds that they then persuaded California state officials to sell to them. The new business of raising oysters signaled yet another change in the bay. Instead of being a commons, at least some areas of the bay became private, commercial property. Oyster pirates exploited the ambiguities of property rights in the bay to steal oysters from private beds. Eventually, pollution and silt killed the eastern oysters, as it had native varieties, and left the bay a marginal rather than a commercial or subsistence landscape.

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In Booker’s article, environmental changes cut along class lines. In Coll Thrush’s and David Torres-Rouff’s articles, race determined access to resources and how individuals understood how those resources ought to be used. Thrush describes Indians in the 1920s living an indigenous life surrounded by all the trappings of early twentieth-century industrial Seattle. A surprising number of individuals gathered shellfish along mudflats, rendered dogfish oil, and fished from floathouses and squatters villages, even as Seattle grew around them. As Thrush notes, their small numbers reflected their dispossession; during the first decades of the twentieth century, urban expansion, industrial development, and the re-engineering of Seattle’s waterways further constrained Native Americans’ access to resources they needed for their material and cultural well-being. Ultimately, industrial and commercial development changed Seattle too much for these holdouts; Thrush’s essay includes poignant descriptions of some who starved to death when fisheries and family networks finally collapsed. Even so, the waterfront is a particularly good place to consider the relationship between urban development and that dispossession, for these are marginal spaces in which indigenous subsistence continued, largely ignored, for decades. The individuals whom Thrush describes, and the ways they saw and used the lands and waters around Seattle, provide an alternative vision of their environment. By presenting this alternative vision, Thrush directs attention to the politics of progress and to the assumptions underlying public works that institutional and political studies cannot access.

David Torres-Rouff describes the long-term racial implications of efforts to replace its open zanjas in Los Angeles with enclosed, “modern” sewers and water pipes. Los Angeles began building sanitary sewers in the 1870s. To do so, the city enclosed and re-routed

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11. Coll Thrush’s and David Torres-Rouff’s focus on urban infrastructure has a long tradition in environmental history. A number of authors have documented the ways that urban technological systems changed cities’ relationships with nature and reflected urban elites’ fear of the diseases and political and social disorder that they associated with the urban poor. The most recent of these pay even greater attention to the conditions of the poor and the ways that urban projects, promoted as crucial to improving living conditions among the poor and minorities, often bypassed these most needy neighborhoods. See Bill Luckin, Pollution and Control: A Social History of the Thames in the Nineteenth Century (Bristol, U.K., 1986); Craig Colten, An Unnatural Metropolis: Wresting New Orleans from Nature (Baton Rouge, La., 2005); and Matthew Gandy, Concrete and Clay: Reworking Nature in New York City (Cambridge, Mass., 2002).
Spanish-era multiple-purpose irrigation ditches, depriving its Mexican and Chinese residents of access to the old zanjas. Sewer construction changed the nature of water in Los Angeles; single-use replaced multiple use, and an emphasis on capital development replaced communal access. In this, Torres-Rouff describes events that closely resembled the commodification at work along Seattle’s waterfront and San Francisco Bay. But Torres-Rouff also seeks an explanation for the environmental origins of discrimination. Public health advocates promoted the Los Angeles sewer projects as a way to improve sanitation throughout the city, and yet the new sewers bypassed the Mexican and Chinese neighborhoods. Thus, the sewer construction projects deprived Mexican and Chinese Angelenos of services available to their Anglo neighbors, as well as of water rights they had formerly held. Moreover, reduced access to water supplies and poor sanitation, Torres-Rouff argues, may have reinforced stereotypes of these minorities as “dirty.”

These articles offer a complicated picture of urban growth in the nineteenth and twentieth centuries. Here are cities contending with the environmental consequences of distant economic activities as well as their own growth. Here, too, are cities in which development and progress bypass whole populations, even as marginalized groups resist change and struggle to maintain their own cultural practices and water uses. This heightens the sense of conflict and the cost of urban development. It also directs attention to the relationship of the state to the public and to nature, to questions about what the state considers a public resource, what is in the public interest, and who constitutes the public. In short, these articles analyze the reallocation of resources from one public to another. Along the way, they explore the subtle and interesting things that flowed from that reallocation.