
INTRODUCTION

Environmental Justice and Appalachia

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Now all of the issues of environmental racism and environmental justice don't just deal with people of color. We are just as much concerned with inequities in Appalachia, for example, where the whites are basically dumped on because of lack of economic and political clout and lack of having a voice to say "no" and that's environmental injustice.

Robert Bullard

ON DECEMBER 22, 2008, AN EARTHEN DAM AT A WASTE retention pond in Roane County, Tennessee, broke, sending more than 1.1 billion gallons of coal fly ash slurry into nearby streams, flooding hundreds of acres, and damaging numerous homes and other structures. The slurry—a by-product of the burning of coal—contained high levels of heavy metals and other harmful contaminants. The spill, which occurred at the Tennessee Valley Authority's Kingston Fossil Plant, was reported to be the largest of its type in U.S. history.¹ Regrettably, for residents of rural Appalachia, it was not an unusual event.

Just eight years earlier, on October 11, 2000, a coal sludge impoundment in Martin County, Kentucky, burst through an underground mine, discharging an estimated 306 million gallons of sludge into two tributaries of the Tug Fork

River. The collapse of this impoundment, owned and operated by a subsidiary of the Massey Energy Company, polluted hundreds of miles of streams and fouled the drinking water of more than twenty-seven thousand residents. According to the U.S. Environmental Protection Agency, the spill was thirty times larger than the eleven-million-gallon oil slick produced by the *Exxon Valdez* accident, in 1989, and one of the worst environmental disasters to take place east of the Mississippi River.²

Then there was Buffalo Creek. Early on a Saturday morning in 1972, just as local residents were getting up to make breakfast, a series of coal slurry impoundment dams belonging to the Pittston Coal Company failed, overwhelming more than a dozen mining communities situated in a narrow valley in Logan County, West Virginia. The torrent of coal wastewater unleashed on these unsuspecting communities killed 125 people, injured hundreds more, and left many thousands homeless. Decades later, survivors still suffer from nightmares and other traumas associated with the tragedy.³

Today, there are hundreds of waste impoundments of various types, both large and small, scattered across the Appalachian region. For every major incident that has taken place over the past four decades, dozens of minor ones have occurred but have not been reported. Some of these are small spills that degrade local streams; others are underground leaks that taint drinking water supplies. For residents of Appalachia's coalfields, it is the price they pay for living in an "energy sacrifice zone."⁴

Unfortunately, waste impoundments are not the only environmental "disamenities" Appalachian residents must tolerate. Other undesirable land uses, including chemical factories, waste treatment facilities, and landfills pose health and safety risks as well. With regard to the latter, author Elizabeth Royte points out that as of 2002, Pennsylvania—the most populous state in the Appalachian region—was importing "10 million tons of waste per year from neighboring states, more than any other state in the union."⁵ Air pollution from dozens of coal-fired power plants and the social and environmental consequences of the mining process itself only add insult to injury.

While giant corporations, utilities, and regulatory agencies deserve much of the blame for the current state of the environment, they are not solely responsible for the crisis. Though we are loathe to admit it, it is our collective "pursuit of quick and easy profit and the insatiable demand for cheap energy" that create the conditions that make another spill—like the ones that occurred in Tennessee, Kentucky, and West Virginia—almost inevitable.⁶ Likewise, our desire for low-cost goods all but assures a future in which more

peaks are lost to mountaintop removal, more children are exposed to harmful chemicals and tainted water supplies, more species are pushed to the brink of extinction, and more communities disappear from the map.

As long as those of us who live far away from these “landscapes of production” are still able to enjoy the benefits of an inexpensive and uninterrupted flow of energy, we will turn a blind eye to the environmental destruction that takes place in the hills and hollows beyond our gaze. Truth be told, most of us do not care where chemical plants, utilities, or landfills are located, so long as it is not near us. Perhaps author Guy Davenport was right: distance negates responsibility.⁷ Or as Jeff Goodell phrases it, “One of the triumphs of modern life is our ability to distance ourselves from the simple facts of our own existence.”⁸ But these facilities have to be placed somewhere. Where they locate, and why, necessarily brings to the fore issues of environmental justice.

As Christine Meisner Rosen has shown, questions about fairness and the siting of locally unwanted land uses have been with us a long time.⁹ Starting in the 1980s, however, researchers began to delve more deeply into the matter. Perhaps the best known of these early studies was the United Church of Christ’s *Toxic Wastes and Race in the United States*. Focusing primarily on U.S. cities, these early reports indicated that hazardous waste sites were more likely to be found in communities of color than in white communities.¹⁰ It was suggested that one of the reasons for this disproportionate distribution of potentially hazardous facilities was that minority and low-income communities did not possess the political or economic power to defend their neighborhoods. Social activists decried the injustice of exposing disenfranchised populations to environmental harms and began referring to this practice as environmental racism.

Over the next two decades, social scientists and activists experimented with different scales and units of analysis and employed more sophisticated spatial and statistical techniques to reveal patterns of injustice in urban America. Once preoccupied with the distribution of unwanted land uses and whether or not these “disamenities” were deliberately placed in minority and low-income areas, environmental racism evolved to consider the role that “white privilege” played in creating patterns of injustice. In effect, this new approach allowed researchers to examine more closely how institutionalized racism and “a social system that works to the benefit of whites” permitted predominantly white residents to attract a greater share of amenities to their neighborhoods while deflecting disamenities elsewhere.¹¹

In 2007 the United Church of Christ updated its seminal 1987 report. Researchers found that the inequities noted in 1987 were still prevalent twenty

years later and may, in fact, have become even worse. Although their ability to effectively oppose the introduction of unwanted land uses into their neighborhoods has improved considerably, communities of color and low-income communities still shoulder a greater burden when it comes to the distribution of these facilities and activities. The problem has been exacerbated by years of government cuts to programs that were designed specifically to address such environmental justice issues.¹²

Along with possible exposure to pollution from day-to-day operations at industrial plants and waste facilities, recent scholarship suggests that accidents may place minority and low-income populations at greater risk. Investigating accident frequencies at industrial facilities in the Los Angeles area, Lisa Schweitzer concluded that the past is a good predictor of the future; that is, by examining records of past accidents, it is possible to draw conclusions about the likelihood of future accidents. Since many accidents occur in minority and low-income communities, she argues that community officials should incorporate historical accident data into the land use planning process. Thus, it may be possible to minimize environmental injustice by paying attention to the potential for environmental accidents.¹³

A key question that arises with the siting of any locally unwanted land use is, How will this facility or activity affect the health of the local community? Although a substantial literature exists on the relationship between environmental health and various demographic variables, including socioeconomic status (SES), again, relatively little research has focused on rural areas, although these populations are more likely to suffer from harmful exposures.¹⁴ A 2005 report in the *American Journal of Preventive Medicine* divided the United States into eight regions based on demographic characteristics including education, income, population density, and homicide rates. The area identified as “poor whites living in Appalachia and the Mississippi Valley” was found to have higher mortality rates among young and middle-aged inhabitants than some developing countries.¹⁵ In addition, studies have shown that cancer levels are often higher in Appalachian counties than in non-Appalachian counties, although this may be attributable to higher levels of tobacco use and unhealthy lifestyles.¹⁶



This book contributes to the environmental justice discourse in at least three ways. First, by examining the impacts that industrial activities have had on rural communities it addresses an important shortcoming in the field. As

noted earlier, most environmental justice work to date has had a decidedly urban bias. Second, while Appalachian scholars and activists have made important contributions in the past—especially when it comes to documenting community resistance and the environmental impacts of industrialization—relatively few of these studies have been contextualized as justice issues.¹⁷ And third, in highlighting the connections between rural and urban, both implicitly and explicitly, we endeavor to show that the dualism is an artificial one, and that our landscapes of consumption and landscapes of production are inextricably intertwined.

Mountains of Injustice is divided into three parts. The three chapters in part 1, “Perspectives,” establish the historical and regional context for the rest of the book. In chapter 1, Stephen Scanlan presents us with an introduction to the field of environmental justice. According to Scanlan, persistent poverty and uneven economic development are closely linked to environmental alteration and, as such, must take center stage in any discussion of environmental injustice in Appalachia. In the second chapter, Brian Black explores the “ethic of extraction” that drives our insatiable demand for resources, especially fossil fuels. Against the backdrop of western Pennsylvania’s coal- and oilfields, Black tracks the development of Appalachia’s “energy landscape,” from its colonial origins to its boomtown phase and then, finally, to its demise. In the end, he suggests the possibility of a brighter future, albeit one that does not include a revival of the coal or oil industry. In chapter 3, Nancy Maxwell investigates environmental exposure and health disparities in Appalachia. Her data-rich analysis compares Appalachia to the rest of the country and shows that the counties in the region suffer from environmental burdens at higher levels than counties in other parts of the United States. Ironically, her research reveals that Appalachian counties with higher socioeconomic status also exhibit higher levels of environmental pollution, as indicated by industrial production.

While history and data help frame the environmental justice dialogue, it is the narratives of those who live in Appalachia that personalize the issue. Relying primarily on archival data, contributors to part 2, “Citizen Action,” shine the spotlight on local residents, both past and present, who have fought diligently over the years to protect their families, homes, and communities from environmental ruin. In chapter 4, Chad Montrie reminds us that opposition to strip mining in Appalachia has deep roots. Along the way, he recounts the stories of Widow Combs and Uncle Dan Gibson, traces the emergence of organizations like the Appalachian Group to Save the Land and People, and reconstructs the path that ultimately led to passage of the Surface Mining

Control and Reclamation Act of 1977. Reading Montrie's chapter, one gains a better appreciation for the role that politics and compromise play in shaping environmental decisions. One also understands why the present regulatory system has failed to achieve its goals and why citizens groups continue to agitate for "mountain justice."

In the next chapter, Kathryn Newfont dispels the notion that Appalachian residents are anti-environment. Rather, she shows that a different brand of conservation holds sway in the eastern mountains, in this case, western North Carolina. In tracking the development of the Western North Carolina Alliance's campaign against clearcutting in the Pisgah and Nantahala national forests, she shows how residents responded to a strategy that appealed to their sense of fairness regarding access to the area's timber resources. Newfont also puts to rest the myth that open-space issues are primarily urban in nature. In chapter 6, John Nolt tells the story of a community that epitomizes the hazards of facility siting. He begins by recounting the death of a woman who succumbed to cancer after working for years, unprotected, at a radioactive-waste management facility. Her death ignited a two-decade struggle to clean up the hazardous site. His firsthand account is compelling because it reminds us that similar struggles are playing out in small communities across Appalachia.

The chapters in part 3, "In Their Own Words," are constructed largely around interviews conducted with citizen activists over the course of several weeks in the fall of 2008. In chapter 7, Michele Morrone and Wren Kruse profile six environmental activists who have dedicated significant portions of their lives to defending their homes from the by-products, hazards, and wastes generated by large industrial operations. Of primary concern are the "siting decisions" that follow "a path of least resistance," placing vulnerable and exploited populations at risk.¹⁸ They are motivated by a deep sense of injustice that their communities are subject to such end-point pollution because they are poor, disenfranchised, and, perhaps, just because they are Appalachian. In chapter 8, Geoff Buckley and Laura Allen focus on the practice of mountaintop removal—a textbook example of "start point" environmental injustice. While the struggles of these five activists described in this chapter differ from those featured in the preceding chapter, their reasons for battling big business—in this case, companies engaged in a particularly destructive form of surface mining—are no less compelling. Nor are they less moving. And, as Rebecca R. Scott notes in her recent book, *Removing Mountains*, the stakes are high: "In no time at all thousands more acres of the Appalachian Mountains

will be dismantled and reclaimed as flattops with rolling grasslands and scrubby shrublands, a brand-new ecosystem to replace the mixed hardwood forest.”¹⁹ Finally, this volume concludes with an afterword by Jedediah Purdy in which he examines our relationship with nature and explores our creation of “sacrifice zones.”

Appalachia is an area of great natural beauty. While some have viewed the area’s natural assets—mountains and valleys, forests and streams, abundance of plant and animal life—as amenities worthy of protection and conservation, others have surveyed the area with an eye toward resource extraction and energy production. Historically, it is the latter perspective that has guided our approach to resource management in the region for more than 150 years.²⁰ While the extraction of mineral resources, in particular, fueled America’s industrial revolution, most of the wealth it generated flowed outside the region.²¹ Today, mining continues, albeit using very different methods. One thing has not changed, however. Residents still must contend with the environmental damage that goes hand in hand with such activities. Likewise, they must deal with the risks associated with living in close proximity to other locally unwanted land uses, such as manufacturing that uses large amounts of toxic chemicals. It is high time that those of us who benefit from the extraction of raw materials and the production of manufactured goods acknowledge the true cost of our consumption.

Notes

1. “Coal Ash Spill Revives Issue of Its Hazards,” *New York Times*, December 25, 2008, A1, A17; “Ash Flood in Tennessee Is Found to Be Larger Than Initial Estimates,” *New York Times*, December 27, 2008, A8.

2. Shaunna Scott, Stephanie McSpirit, Sharon Hardesty, and Robert Welch, “Post Disaster Interviews with Martin County Citizens: ‘Gray Clouds’ of Blame and Distrust,” *Journal of Appalachian Studies* 11, nos. 1–2 (2005): 7–29; David Kohn, “The 300-Million-Gallon Warning,” *Mother Jones* 27, no. 2 (March–April 2002): 22–25.

3. Lynda Ann Ewen and Julia A. Lewis, “Buffalo Creek Revisited: Deconstructing Kai Erikson’s Stereotypes,” *Appalachian Journal* 27, no. 1 (1999): 22–45.

4. Jedediah S. Purdy, “Rape of the Appalachians,” in *Appalachia: Social Context Past and Present*, ed. Phillip J. Obermiller and Michael E. Maloney, 4th ed. (Dubuque: Kendall/Hunt, 2002), 208–14.

5. Elizabeth Royte, *Garbage Land: On the Secret Trail of Trash* (New York: Back Bay Books, 2005), 63.

6. Ronald D. Eller, *Uneven Ground: Appalachia since 1945* (Lexington: University Press of Kentucky, 2008), 248.

7. Quoted in Erik Reece, *Lost Mountain: A Year in the Vanishing Wilderness: Radical Strip Mining and the Devastation of Appalachia* (New York: Riverhead Books, 2006), 58.
8. Jeff Goodell, *Big Coal: The Dirty Secret Behind America's Energy Future* (Boston: Houghton Mifflin, 2006).
9. Christine Meisner Rosen, "Noisome, Noxious, and Offensive Vapors, Fumes, and Stenches in American Towns and Cities, 1840–1865," *Historical Geography* 25 (1997): 49–82.
10. General Accounting Office, *Siting of Hazardous Waste Landfills and Their Correlation with Racial and Economic Status of Surrounding Communities* (Washington, DC: GAO, 1983); United Church of Christ, Commission for Racial Justice, *Toxic Wastes and Race in the United States* (New York: Public Data Access, 1987); Robert D. Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* (Boulder: Westview, 1990).
11. Laura Pulido, "Rethinking Environmental Racism: White Privilege and Urban Development in Southern California," *Annals of the Association of American Geographers* 90, no. 1 (2000): 12–40.
12. Robert D. Bullard, Paul Mohai, Robin Saha, and Beverly Wright, *Toxic Wastes and Race at Twenty, 1987–2007: Grassroots Struggles to Dismantle Environmental Racism in the United States*, Report Prepared for the United Church of Christ Justice and Witness Ministries (Cleveland: United Church of Christ, 2007).
13. Lisa Schweitzer, "Accident Frequencies in Environmental Justice Assessment and Land Use Studies," *Journal of Hazardous Materials* 156, nos. 1–3 (2008): 44–50.
14. Steven G. Prus, "Age, SES, and Health: A Population Level Analysis of Health Inequalities over the Lifecourse," *Sociology of Health and Illness* 29, no. 2 (March 2007): 275–96; Anthony J. McMichael, "The Urban Environment and Health in a World of Increasing Globalization: Issues for Developing Countries," *Bulletin of the World Health Organization* 78, no. 9 (2000): 1117–26.
15. C. J. L. Murray, S. Kulkarni, and M. Ezzati, "Eight Americas: New Perspectives on U.S. Health Disparities," *American Journal of Preventive Medicine* 29, suppl. 1 (2005): 4–10.
16. Mary Ellen Wewers, M. Katz, Darla Fickle, and E. D. Paskett, "Risky Behaviors among Ohio Appalachian Adults," *Preventing Chronic Disease* 3, no. 4 (October 2006), http://www.cdc.gov/pcd/issues/2006/oct/06_0032.htm.
17. For more than forty years, Appalachia has proved fertile ground for environmental research. With respect to environmental history, several excellent volumes exist. See, for example, Donald Edward Davis, *Where There Are Mountains: An Environmental History of the Southern Appalachians* (Athens: University of Georgia Press, 2000); Ronald D. Eller, *Miners, Millhands, and Mountaineers: Industrialization of the Appalachian South, 1880–1930* (Knoxville: University of Tennessee Press, 1982); Ronald L. Lewis, *Transforming the Appalachian Countryside: Railroads, Deforestation, and Social Change in West Virginia, 1880–1920* (Chapel Hill: University of North Carolina Press, 1998); Timothy Silver, *Mount Mitchell and the Black Mountains: An Environmental History of the Highest Peaks in Eastern America* (Chapel Hill: University of North Carolina Press, 2003). Meanwhile, an impressive body of work has been assembled by anthropologists, historians, political scientists, and sociologists who seek to explain poverty, uneven economic development, and environmental alteration in the region while at the same time accounting for the power and control of outside forces. See, for example, Allen W. Batteau, *The Invention of Appalachia* (Tucson:

University of Arizona Press, 1990); Wilma A. Dunaway, *The First American Frontier: Transition to Capitalism in Southern Appalachia, 1700–1860* (Chapel Hill: University of North Carolina Press, 1996); Eller, *Uneven Ground*; Helen Lewis, Linda Johnson, and Donald Askins, eds., *Colonialism in America: The Appalachian Case* (Boone, NC: Appalachian Consortium Press, 1978); Barbara Rasmussen, *Absentee Landowning and Exploitation in West Virginia, 1760–1920* (Lexington: University Press of Kentucky, 1994); Paul Salstrom, *Appalachia's Path to Dependency: Rethinking a Region's Economic History, 1730–1940* (Lexington: University Press of Kentucky, 1994); David S. Walls and Dwight B. Billings, "The Sociology of Appalachia," *Appalachian Journal* 5, no. 1 (1977): 131–44; John Alexander Williams, *West Virginia and the Captains of Industry* (Morgantown: West Virginia University Library, 1976). Others, including Eller, Reece, Robert Armstead, and John Gaventa, have trained their sights more narrowly, concentrating on the social and environmental impacts of extractive industries, such as mining. Eller, *Miners, Millhands*; Reece, *Lost Mountain*; Armstead, *Black Days, Black Dust: The Memories of an African American Coal Miner* (Knoxville: University of Tennessee Press, 2002); Gaventa, *Power and Powerlessness: Quiescence and Rebellion in an Appalachian Valley* (Urbana: University of Illinois Press, 1980). Still others have explored the many and varied ways that Appalachian residents have stood their ground and resisted the destruction of their homes and communities, shattering the stereotype of the weak and fatalistic mountaineer. Especially notable are Dwight B. Billings, Gurney Norman, and Katherine Ledford, eds., *Confronting Appalachian Stereotypes: Back Talk from an American Region* (Lexington: University Press of Kentucky, 1999); Stephen L. Fisher, *Fighting Back in Appalachia: Traditions of Resistance and Change* (Philadelphia: Temple University Press, 1993); Chad Montrie, *To Save the Land and People: A History of Opposition to Surface Coal Mining in Appalachia* (Chapel Hill: University of North Carolina Press, 2003).

18. Robert J. Brulle and David N. Pellow, "Environmental Justice: Human Health and Environmental Inequalities," *Annual Review of Public Health* 27, no. 1 (2006): 103–24; David N. Pellow, "The Politics of Illegal Dumping: An Environmental Justice Framework," *Qualitative Sociology* 27, no. 4 (2004): 511–25; David N. Pellow, *Resisting Global Toxics: Transnational Movements for Environmental Justice* (Cambridge, MA: MIT Press, 2007).

19. Rebecca R. Scott, *Removing Mountains: Extracting Nature and Identity in the Appalachian Coalfields* (Minneapolis: University of Minnesota Press, 2010), 1.

20. Eller, *Miners, Millhands*; Williams, *Appalachia*.

21. John Gaventa, "The Political Economy of Land Tenure: Appalachia and the Southeast," in *Who Owns America? Social Conflict over Property Rights*, ed. Harvey M. Jacobs (Madison: University of Wisconsin Press, 1998), 227–44.