



Institute of Public Policy
 Truman Policy Research
 Harry S Truman School of Public Affairs

February 2009

Environmental Justice and Government Behavior: A Summary of New Findings *

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Introduction

For nearly two decades, environmental justice advocates have charged that low-income and minority groups suffer a disproportionate burden from environmental risks associated with exposure to air, water, and land pollution as well as proximity to hazardous waste and other pollution generating facilities. Claims of these inequities have been amplified by a growing social movement that began with widely publicized protests in Warren County, North Carolina, where a predominantly black community mobilized in large numbers to fight the siting of a PCB landfill. Since that time, grassroots organizations have sustained and brought national attention to the environmental justice movement, which is often characterized as a new kind of social campaign embodied by the convergence of civil rights and environmental activism. Government at all levels have taken notice of environmental justice concerns, and responded with a variety of initiatives to these inequities (real and perceived).

This policy report briefly summarizes new

research that examines an understudied dimension of the environmental justice argument: that government behavior contributes to the alleged inequities.¹

Environmental Justice in Government Behavior?

Environmental justice advocates have long-maintained that government implementation and enforcement of pollution control laws and regulations is biased against minorities and low-income populations. Robert Bullard, one of the foremost voices of the movement, has suggested that “environmental racism” extends to the implementation and enforcement of environmental laws and regulations² and criticized these governmental practices for being “unfair, unjust, and illegal.”³ This is an important claim. While there is now a solid body of evidence suggesting that minority and low-income groups face disproportionate environmental burdens, additional evidence of race- or class-based disparities in government performance would mean that environmental inequities are no longer only a matter of private sector

* This policy report is based on analysis described in more detail in Konisky, 2009.

¹ At the federal level, the Clinton Administration made environmental justice issues a top environmental policy priority, creating an Office of Environmental Justice within the U.S. Environmental Protection Agency (EPA) and signing Executive Order 12898 which required all federal agencies to address any environmental inequities resulting from their policies, programs, and activities. State and local governments also responded to environmental justice concerns, advancing many initiatives aimed at remedying racial and class inequities in the distribution of environmental hazards.

² Bullard, 1993.

decision-making, but also of government behavior.

Despite claims of unequal protection and discriminatory practices, only a handful of studies have directly examined environmental justice in the context of government behavior. Most of this work has sought to answer the question of whether civil judicial penalties (i.e. fines) issued as part of federal district court decisions for noncompliance with environmental laws differ depending on the racial and socioeconomic composition of communities in which offending facilities are located. Results from these studies are mixed, with some finding that penalties are lower in minority and low income communities,⁴ and others finding no meaningful differences across communities.⁵

Although federal district court outcomes are an important piece of environmental enforcement, these decisions are not the only type of government behavior with possible environmental justice implications. Specifically, there may still be disparities at other stages of the environmental regulatory enforcement process, including fewer compliance monitoring inspections and fewer punitive actions to bring violating facilities back into compliance. In the discussion that follows, we summarize the findings from new research that explicitly tests for race- and/or class-based inequities in these types of regulatory enforcement actions.

Testing for Inequities in Enforcement

Konisky (2009) examines state environmental regulatory enforcement from 1985-2000 to determine whether state governments systematically perform fewer enforcement actions in areas with comparatively high minority and low-income populations. The study analyzes state enforcement of three federal pollution control pro-

grams: the Clean Air Act (CAA), the Clean Water Act (CWA), and the Resource Conservation and Recovery Act (RCRA).⁶

In the study, Konisky estimates a series of event count models to analyze the relationship between the number of enforcement actions performed by state governments and the demographic composition of counties. The dependent variables in the analysis are the unweighted sums of enforcement actions (i.e., inspections, notices of violation, punitive measures) taken by state governments under the three federal environmental laws. The independent variables are measures of race and income compiled from the U.S. Census Bureau. To isolate the effects of the racial and socioeconomic composition of counties, the study controls for various social, political, and economic demographics typically used in environmental justice studies.⁷ The county-year is the unit of analysis.⁸

TABLE 1: ESTIMATED EFFECTS OF CLASS ON STATE ENVIRONMENTAL ENFORCEMENT

Program	Percent Change	Percent Change for Standard Deviation Change
<i>Percent Poverty</i>		
CAA	-2.3	-16.0
CWA	-1.4	-8.8
RCRA	-5.4	-34.0
<i>Median Household Income</i>		
CAA	3.3	31.9
CWA	-0.7	-5.9
RCRA	3.3	33.1

Results from the study are largely consistent across the three pollution control programs analyzed.⁹ With respect to class-based disparities, there is strong evidence that state governments performed fewer enforcement actions in communities with higher levels of poverty

³Bullard and Johnson, 2000.

⁴Lavelle and Coyle, 1992 and Lynch et al., 2004.

⁵Ringquist, 1998 and Atlas, 2001.

⁶State enforcement of these programs is the appropriate level of analysis. Each of the programs studied is designed within a model of regulatory federalism and partial preemption, under which the EPA delegate states the authority to implement and enforce the federal programs.

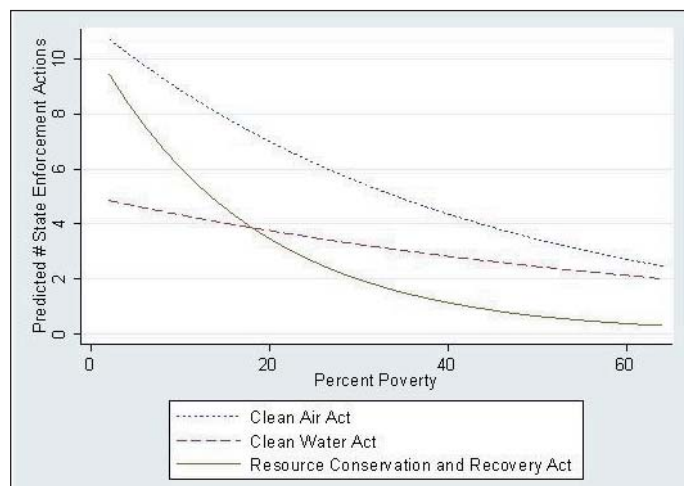
⁷Control variables include: % Voter turnout, % College educated, % Owner occupied housing, number of regulated establishments, manufacturing employment, population, land area, population density, county nonattainment status (for the CAA only), whether the county borders another political jurisdiction, and EPA monitoring inspections.

⁸A county-level analysis is adopted because the geographical data needed to precisely locate the hundreds of thousands of facilities historically regulated under the CAA, the CWA, and the RCRA is unavailable.

and lower median household incomes. Table 1 reports the estimated effects of poverty and median household income on state enforcement, both in terms of a percent change and percent change for a standard deviation change.¹⁰ With respect to poverty, the effects range from about a 2 percent to 5 percent reduction in the amount of enforcement for each percentage increase in poverty. The results are similar for median household income in counties in the case of the CAA and the RCRA.

Figure 1 further illustrates the effects of poverty on state enforcement, by considering the relationship across the full distribution of county-level poverty (holding the rest of the variables at their means). The graph clearly shows the sharp decline in the predicted number of state enforcements as the percentage of county population living in poverty increases.

FIGURE 1. RELATIONSHIP BETWEEN POVERTY AND STATE ENFORCEMENT ACTIONS CONDUCTED IN COUNTIES



Once controlling for income, there is not a statistically significant relationship between race and state enforcement of pollution control laws.¹¹ This finding differs from much of the environmental justice research that examines the attributes of communities living near noxious facilities which has found race-based inequities

to be even more prevalent than those based on class. These results, however, should be interpreted with care. It is possible that the high correlation between race and poverty makes it difficult to tease out their independent effects. Additionally, the county-level analysis assumes that the racial composition of counties is evenly distributed, which may not be the case in some counties.

Conclusion

The study summarized here represents the first large-scale assessment of whether class- or race based disparities in environmental protection extend to regulatory enforcement behavior. Although there is little evidence of race-based disparities in state enforcement of environmental laws, there is strong evidence supporting claims made by environmental justice advocates that governments disproportionately enforce environmental laws in low-income communities. While the magnitude of the effects are sizable, the findings suggest that changes in government behavior may help remedy or at least reduce observed disparities, since regulatory enforcement is a policy tool that government has the authority and capacity to modify to redress environmental inequities.

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⁹Please refer to the full study for the complete statistical results.

¹⁰The values in Table 1 are derived from coefficients estimated in event count models. All coefficients were statistically significant at least at the .05 level, except for median household income in the case of the CWA.

¹¹There is one exception. The analysis of state enforcement of the CWA indicates a small and marginally statistically significant negative relationship for the percent of the county population that is Hispanic.

¹²Ringquist (2005) summarizes the environmental justice literature, and finds that the most consistent evidence of environmental inequities is based on race, not socioeconomic status.

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Suggested Citation

Schario, T. & Konisky, D. (2009). "Environmental Justice and Government Behavior: A Summary of New Findings." Report 24-2008. Retrieved [Month Day, Year], from University of Missouri Columbia, Institute of Public Policy Web site: <http://www.truman.missouri.edu/ipp/>

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