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The Secondary Effects of Environmental Justice Litigation: The Case of West Dallas Coalition for Environmental Justice v. EPA

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ARTICLE

THE SECONDARY EFFECTS OF ENVIRONMENTAL JUSTICE LITIGATION: THE CASE OF WEST DALLAS COALITION FOR ENVIRONMENTAL JUSTICE v. EPA

Gregg P. Macey and Lawrence E. Susskind***

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ABSTRACT

Environmental justice organizations across the country are pursuing redress for disproportionate exposure to environmental harm. While most of the litigation pursued in the name of environmental justice has not resulted in legal remedies, the secondary effects of these legal efforts have not been given sufficient attention. A cross-sectional approach, which holds the context in which organizations pursue litigation constant while scrutinizing whether legal remedies have been achieved, is quite common in the environmental justice litera-

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ture. Such an approach ignores the unique characteristics of community organizations that influence their ability to adapt to complex decision-making environments. These characteristics, which include membership, problem definition, and resource constraints, shape the long-run strategies pursued by organizations and not their immediate success or failure in court. The case of *West Dallas Coalition for Environmental Justice v. EPA* illustrates an "increasing returns process," whereby the Coalition persisted in relying on a legal strategy that was perceived as sub-optimal from the standpoint of its members and local residents.

I. INTRODUCTION

This case study seeks to explain why environmental justice organizations pursue legal remedies even when pursuit of legal claims continually fails to meet primary organizational objectives. We rely on analytic narrative, the modeling of processes that explain outcomes through the building of complex stories, for our explanation of this phenomenon. Specifically, this research traces the use of a litigation strategy used by the West Dallas Coalition for Environmental Justice, identifying "the actors, the decision points they faced, the choices they made, the paths taken and shunned, and the manner in which their choices generated events and outcomes."¹ Previous accounts of environmental justice litigation, focusing primarily on legal outcomes, have painted a sobering picture. In reference to the predominant legal strategy of the day, one commentator concluded that "[b]y 1998 no one had yet succeeded in bringing, and winning, a substantive Title VI environmental justice case in court."² Yet, litigation remains a strategy of choice for many environmental justice groups.

Legal scholars continue to search for a cause of action that will remedy the disproportionate environmental harm suffered by communities of color. Other legal experts acknowledge that focusing on legal strategies alone can obscure the nexus between litigation and the long-term effectiveness of communities organized in opposition to undesirable land uses.³ We offer an alternative approach

¹ ROBERT H. BATES ET AL., *ANALYTIC NARRATIVES* 13-14 (1998).

² CHRISTOPHER H. FOREMAN, *THE PROMISE AND PERIL OF ENVIRONMENTAL JUSTICE* 58 (1998).

³ See Luke W. Cole, *Empowerment as the Key to Environmental Protection: The Need for Environmental Poverty Law*, 19 *ECOLOGY L.Q.* 619, 667-678 (1992) [hereinafter *Empowerment*] ("While our first instinct as lawyers might be to use legal tactics, they may not achieve the results our clients desire . . . Even if we pursue a legal strategy, we must be

by shifting the unit of analysis from legal causes of action to the internal dynamics of community organizations that seek legal remedies to address distributional inequities or a lack of procedural access to environmental decision-making.⁴ This shift in focus highlights the *secondary effects* of litigation. Sifting through the complexities of the social, legal, scientific, and other secondary effects of litigation requires a deep understanding of the organizations involved and their propensity to adapt to the changes that accompany the choice of a legal strategy. More pointedly, we argue that the secondary effects of environmental justice litigation can only be understood in light of an organization's ability to make sense of the complex decision-making environments in which it functions.

Organizations are "groups of individuals bound by some common purpose to achieve objectives."⁵ They provide stable social relations that can reduce the transaction costs associated with uncertain environments. A distinction can be drawn between "groups, institutions, laws, population characteristics, and sets of social relations that form the environment" and the "internal life" of organizations.⁶ The social structure, or environment in which an organization is formed, conditions the motivations of individuals to organize. The environment also affects the internal choices available to existing organizations. Thus, organizations can be viewed as a series of created and evolving constraints imposed on individual and group choice in return for the establishment of stable structures for human interaction. Given the interactive relationship between organizations and their environments, it is surprising that

aware of its strategic potential for organizing and educating our client communities as well as the general public. And we must be sensitive to a legal strategy's potential to disempower our clients").

⁴ The Principles of Environmental Justice (hereinafter "The Principles"), adopted in 1991, reflect three interpretations of justice, embodying the notions of distributive fairness, procedural access, and ecological sustainability. Much of the environmental justice movement and literature appears focused on the "fair share" allocation of locally undesirable land uses (such as landfills, incinerators, and hazardous waste facilities) among communities composed of predominantly minority and low socio-economic status individuals. The Principles also demand the right to "participate as equal partners at every level of decision-making, including needs assessment, planning, implementation, enforcement, and evaluation," and calls for steps to be taken to address the production processes responsible for the generation of environmental risk. *Principles of Environmental Justice*, in Proc. of the 1991 First Nat'l People of Color Env'tl. Leadership Summit xiii-xiv (United Church of Christ Commission for Racial Justice 1991).

⁵ DOUGLAS C. NORTH, INSTITUTIONS, INSTITUTIONAL CHANGE AND ECONOMIC PERFORMANCE 5 (1990).

⁶ Arthur L. Stinchcombe, *Social Structure and Organizations*, in HANDBOOK OF ORGANIZATIONS 142 (James G. March ed., 1965).

environmental justice litigation research centers on substantive legal claims and not the impact of the legal claims on the organizations and communities that pursue them.

Thus far, environmental justice litigation research has focused on three primary categories of legislation: the Equal Protection Clause of the 14th Amendment to the United States Constitution,⁷ Title VI of the Civil Rights Act of 1964,⁸ and traditional environmental law (environmental statutes that were not enacted to address civil rights concerns *per se*, including the National Environmental Policy Act).⁹ Cases in all three categories are typically scrutinized to

⁷ U.S. Const. amend XIV, §1; In *Washington v. Davis* the Supreme Court stated that the Equal Protection Clause is intended to prevent "official misconduct discriminating on the basis of race." 426 U.S. 229, 239 (1976). Following *Washington*, plaintiffs claiming equal protection violations were forced to establish that race was the motivating factor in a siting decision and that a decision was made because of its adverse effect on a racial minority group (this practice is known as racial *animus*). In *Arlington Heights v. Metropolitan Housing Development Corp.*, the Court held that the denial of rezoning for a racially integrated housing project did not prove an intent to discriminate. 429 U.S. 252, 270-71 (1977). Most cases that assert equal protection claims fail to afford a legal remedy, despite the courts' recognition that local residents face the discriminatory impacts of land use decisions. For instance, in *R.I.S.E., Inc. v. Kay*, plaintiffs challenged a decision by county officials to allow a regional landfill to be located in a predominantly black community. 768 F. Supp. 1144, 1149-50 (E.D. Va. 1991). Three existing landfills in the county were located in ninety to one hundred percent black communities. The court ruled that even though the landfills disproportionately impacted African-Americans, the plaintiffs did not satisfy the remainder of the discriminatory purpose equation set forth in *Arlington Heights*. *Id.* at 1148-49.

⁸ Title VI of the Civil Rights Act of 1964 states that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." 42 U.S.C.S. § 2000d (Law. Co-op. 1989 & Supp. 1995). Environmental justice cases can be filed under the regulations implementing Title VI or under the statute itself. The benefit of filing under the regulations of federal agencies (such as the EPA) lies in the differences in the burden of proof. When suits are brought under federal agency regulations under Section 602 of Title VI, claims are allowed based on proof of unjustified disparate impact. Bradford C. Mank, *Is There a Private Cause of Action Under EPA's Title VI Regulations?: The Need to Empower Environmental Justice Plaintiffs*, 24 COLUM. J. ENVTL. L. 1, 12 (1999). Otherwise, discriminatory intent is required (under Section 601). *Id.* There is a three-factor test for a private right of action under Section 602: whether the agency rule is within the scope of the enabling statute, whether the statute intended a private right of action, and whether a private right of action will further the statute's intentions. *Id.* at 5. Remedies available under Title VI include declaratory, injunctive, and equitable relief (forcing a redistribution of harms), although damages are only provided upon the showing of discriminatory intent. Steven A. Light & Kathryn R.L. Rand, *Is Title VI a Magic Bullet? Environmental Racism in the Context of Political-Economic Processes and Imperatives*, 2 MICH. J. RACE & L. 1, 25-26 (1996).

⁹ See Michael Fisher, *Environmental Racism: Claims Brought Under Title VI of the Civil Rights Act*, 25 ENVTL. L. 285, 307 (1995). Much of the environmental justice movement's momentum gained from litigation has come through efforts to uphold environmental statutes without reference to civil rights violations. At times these efforts have been coupled with personal injury complaints. The first major case to couple environmental and civil

determine whether or not they have achieved legal remedies (i.e., "the means employed to enforce or redress an injury.")¹⁰ An examination of relevant decisions reveals that, with the exception of a negotiated settlement,¹¹ the incorporation of civil rights concerns (i.e., distributive fairness) with claims of environmental harm has failed to provide a legal remedy to address alleged environmental injustices (Tables 2 and 3 in Appendix A).¹² Cases that seek redress for violations of environmental statutes, particularly those concerning procedural violations, have proven more successful at addressing civil rights concerns.¹³ However, the legal remedies

rights, *Keith v. Volpe*, concerned the construction of the Century Freeway in Los Angeles and its displacement of minority and low-income persons. 858 F.2d 467, 470 (9th Cir. 1988). A preliminary injunction was issued on grounds of procedural violations of NEPA, while 14th Amendment claims were not met (parties entered into a consent decree over construction and relocation). *Keith v. Volpe*, 858 F.2d 467, 470, 482-86 (9th Cir. 1988), cert. denied, 493 U.S. 813 (1989).

¹⁰ STEVEN H. GIFIS LAW DICTIONARY 430 (4th ed. 1996).

¹¹ Luke W. Cole, *Environmental Justice Litigation: Another Stone in David's Sling*, 21 *FORDHAM URB. L.J.* 523, 533 (1994) [hereinafter *Environmental Justice Litigation*].

¹² *But see* South Camden Citizens in Action v. N. J. Dep't of Env'tl. Prot., No. 01-702 (N.J. 2001). On 20 April 2001 a federal district court judge granted Plaintiff's application for preliminary injunction of the St. Lawrence Cement Company's operation of a blast furnace slag processing facility. The proposed facility would have emitted particulates, lead, mercury, and other toxics into the air and generated approximately 77,000 additional truck deliveries in an impoverished neighborhood in South Camden (91% people of color). The case has been remanded to the New Jersey Department of Environmental Protection, which is asked to make findings consistent with the Opinion. Unfortunately, the Supreme Court recently limited the kind of private suits that can be brought under the Civil Rights Act of 1964 to enforce a ban on discrimination in programs that receive federal money. In a 5 to 4 decision, the Court ruled that suits can only be brought for intentional discrimination on the basis of race and not over plans or policies that have a discriminatory impact. The law at issue was Title VI. *Alexander v. Sandoval*, 532 U.S. 275 (2001).

¹³ Environmental justice victories through use of traditional environmental law include *Environmental Defense Fund v. Hardin* 428 F.2d 1093, 1100 (D.C. Cir. 1970) (brought on behalf of six women attempting to ban DDT); *El Pueblo Para El Aire y Agua Limpio v. County of Kings*, 22 *Env'tl. L. Rep. (Env'tl. L. Inst.)* 20357, 20358 (Super. Ct. 1991) (challenging the siting of a toxic waste incinerator on grounds that Spanish-speaking residents of a 95% Latino city were excluded from the Environmental Impact Report ("EIR") process, although ultimately the court found that inadequacies in the analysis not the readability of the text constituted the significant deficiency of the Final Subsequent EIR); *Blue Legs v. EPA*, 668 F.Supp. 1329, 1342 (D. S.D. 1987) (challenging, on behalf of Native American residents, the disposal of waste through the Resource Conservation and Recovery Act); and *Horn v. City of Birmingham*, 718 So.2d 694, 706-7 (1998) (discussing a predecessor case halting issuance of construction permits for a sanitary waste transfer station until council approval obtained through proper notice and hearing). Numerous cases, however, have been dismissed or their claims have been denied on procedural grounds or questions of standing. *New River Valley Greens v. USDOT*, No. 95-1203-R (W.D. Va. 1996), *aff'd*, No. 97-1978 (4th Cir. 1998) (FEIS was not arbitrary and capricious); *West Dallas Coalition for Env'tl. Justice v. United States*, 29 *Env'tl. L. Rep. (Env'tl. L. Inst.)* 20420, (N.D. Tex. 1998), (dismissing without prejudice plaintiff's suit for failure to meet the 60-day notice requirement of RCRA's citizen suite provision); *Morongo Band of Mis-*

often only require the simple reissuance of environmental impact assessments with appropriate notice and comment periods.

Title VI claims remain limited in terms of their reach, inclusiveness, and practicality. As to reach, Title VI only establishes non-discrimination requirements for federally-funded programs.¹⁴ Inclusiveness is limited due to standing requirements. In making standing decisions, courts have applied three different standards: (1) whether the plaintiffs are intended beneficiaries of the federally-funded program, (2) whether plaintiffs can prove harm, and (3) whether the discrimination will injure the intended beneficiaries.¹⁵ Practicality is diminished because Title VI lawsuits are expensive, and plaintiffs often lack sufficient resources to conduct a thorough investigation.¹⁶ In addition, the Title VI cases outlined in Table 3 (Appendix A) consumed as much as a decade's worth of court time and resources. Equal Protection cases have been all but abandoned due to the unreasonably high standard of proof of racial *animus*.

The cross-sectional approach to evaluating environmental justice litigation, which ignores the political and organizational environment in which these cases proceed, begs the question, why do community organizations continue to rely on litigation even when this strategy appears, at least from the outside, to be ineffective? This approach¹⁷ lies in marked contrast to attempts by historical institu-

sion Indians v. FAA, 161 F.3d. 569, 583 (9th Cir. 1998) (holding that decision to allow airport extension was not arbitrary and capricious under NEPA); Ecological Rights Found. v. Pacific Lumber Co., 61 F. Supp. 2d 1042, 1058 (N.D. Cal. 1999) (finding that members of environmental organizations did not have standing to assert violation of Clean Water Act); and Mt. Lookout-Mt. Nebo Prop. Prot. Ass'n v. Fed. Energy Regulatory Comm'n, 143 F.3d 165, 170-71 (4th Cir. 1998) (finding that the Federal Energy Regulatory Commission considered and addressed all of the Association's points in regard to the construction of a hydroelectric power generation plant).

¹⁴ James H. Colopy, *The Road Less Traveled: Pursuing Environmental Justice Through Title VI of the Civil Rights Act of 1964*, 13 STAN. ENVTL. L.J. 125, 156 (1994).

¹⁵ *Id.* at 166.

¹⁶ *Id.* at 127.

¹⁷ Richard J. Lazarus, *Pursuing "Environmental Justice": The Distributional Effects of Environmental Protection*, 87 Nw. U. L. REV. 787, 829 (1993). While it is noted that "[t]he mere filing of a formal complaint provides a very powerful and visible statement by minorities regarding their belief that distributional inequities exist" and that "[t]he publicity that frequently surrounds the complaint's filing enhances public awareness of these concerns," the conclusion that "virtually none of those suits has been successful" conforms to the notion that "success" can be measured in terms of whether particular legal doctrines such as equal protection are hospitable to environmental justice claims. *Id.* Such a definition privileges the legal structure (framework) in which environmental justice suits are assessed, and relegates the agents of environmental justice organizations to the status of interested bystanders. See also Daniel Kevin, "Environmental Racism" and *Locally Undesirable*

tionalists to make sense of the origins of institutions (such as community organizations) and their interactions with their socio-political settings. Rather than determining which factors produce political or legal outcomes *at a given moment*,¹⁸ historical institutionalism seeks to reinsert these factors in their temporal context. Only through an understanding of historical context can we draw conclusions about the organizational characteristics and constraints that mediate legal and policy outcomes.¹⁹ Pursuant to this approach, a more suitable question regarding environmental justice litigation would concern the characteristics of organizations and their decision-making environments that encourage continued reliance on a potentially sub-optimal course of action.

Shifting the attention of environmental justice litigants to the context in which legal claims are made has important consequences. First, the *direct* impact of a legal claim (i.e., a legal remedy such as injunctive relief) may be less important than the *indirect* or secondary effects that litigation can have on a community organization.²⁰ Lawsuits can be opportunities for the victims of environmental injustice to “join together, outside of the formal boundaries of the litigation. . .to engage among themselves in reflective conversation and strategic action.”²¹ Lawsuits are also complex undertakings, capable of shedding new light on the root causes of environmental injustice through collaborations between

Land Uses: A Critique of Environmental Justice Theories and Remedies, 8 VILL. ENVTL. L.J. 121, 145-58 (1997).

¹⁸ This methodological approach and way of thinking about social processes has been referred to as “general linear reality,” (GLR) which assumes that fixed entities have attributes that interact to create outcomes, which cannot depend on an entity’s contextual location. Andrew A. Abbott, *Transcending General Linear Reality*, 6 SOCIOLOGICAL THEORY 169, 170 (1988). GLR is contrasted with major theoretical traditions in sociology in terms of how they approach causality. *Id.* at 171. Whereas GLR focuses on the changing attributes of fixed entities, sociology often starts with an historical narrative organized around a central subject, which “includes or endures a number of events, which may be large or small, directly relevant or tangential, specific or vague.” *Id.* Sociologists such as Max Weber present complex stories in order to approach social causality, rather than through the use of variable attributes. *Id.*

¹⁹ G. John Ikenberry, *History’s Heavy Hand: Institutions and the Politics of the State* (1994) (unpublished manuscript, on file with the Virginia Environmental Law Journal).

²⁰ ROBERT JERVIS, *SYSTEM EFFECTS: COMPLEXITY IN POLITICAL AND SOCIAL LIFE* 29 (1997). Three broad categories of secondary effects of litigation are offered by Cole: the education of clients, policymakers, and the public; the drawing of members of a given community into social networks; and the addressing of root causes (economic and political) rather than symptoms (such as discrete environmental harm). *Empowerment*, *supra* note 3 at 668.

²¹ Lucie E. White, *Mobilization on the Margins of the Lawsuit: Making Space for Clients to Speak*, 16 N.Y.U. REV. L. & SOC. CHANGE 535, 545-6 (1987).

legal plaintiffs and local residents. The setting in which environmental justice groups exist can either facilitate the articulation of an organization's mission or heighten the isolation and dependency of poor people through adversarial decision-making.²² The range of potential secondary impacts of environmental litigation is significantly broader than the primary legal outcomes on which much of the literature is focused.

A. *Litigation and Increasing Returns*

The context in which a legal strategy is adopted unfolds over time. Community organizations may be at different stages of development, an undesirable land use may be at the start or nearing the end of an environmental permitting process, or an important election may have shifted the focus of a city council vis-à-vis a group's claims of environmental harm. One must make sense of these and a multitude of other factors when litigation is analyzed. Recent work in political science and sociology suggests a means of carrying out such an analysis. A number of historical sociologists in particular have argued that many social phenomena can be explained in terms of increasing returns.²³ Based in part on the literature on economics and technology,²⁴ arguments about increasing returns were developed in response to the assumption of negative feedback in conventional economic theory. In neoclassical theory, economic actions result in negative feedback, such as when high oil prices encourage energy conservation, which in turn precipitates a drop in oil prices. Negative feedback is viewed as a stabilizing force in the economy, as such reactions offset major economic changes. In many parts of the economy, however, the stabi-

²² See GERALD P. LOPEZ, *REBELLIOUS LAWYERING: ONE CHICANO'S VISION OF PROGRESSIVE LAW PRACTICE* 23-28 (1992).

²³ James Mahoney, *Uses of Path Dependence in Historical Sociology*, Annual Meeting of the American Political Science Association at 3 (Sept. 2, 1999) (unpublished manuscript, on file with the Virginia Environmental Law Journal). See also Kathleen Thelen, *Historical Institutionalism in Comparative Politics*, 2 *ANN. REV. OF POL. SCI.* 369, 387-388 (1999) (Political development is constrained by crucial moments of institutional formation, and responses to changing environmental conditions are limited by past trajectories. A weakness of the literature is also discussed: the mechanisms through which critical junctures are translated into lasting trajectories have not been clearly specified).

²⁴ For example, Arthur suggests that certain technologies can achieve an initial advantage over alternative technologies even if the latter would, in the long run, prove to be more efficient. W. Brian Arthur, *Competing Technologies, Increasing Returns, and Lock-in by Historical Events*, 99 *ECON. J.* 116, 126 (1989). The most oft-cited example concerns the "QWERTY" keyboard, and its dominance over the Dvorak Simplified Keyboard (DSK) even though DSK allowed for faster typing. Paul A. David, *Clio and the Economics of QWERTY*, 75 *AM. ECON. REV.* 332 (1985).

lizing forces of negative feedback do not operate. Particularly in knowledge-based sectors, *positive* feedback magnifies the effects of small shifts, allowing for many possible equilibrium points. For products such as computers, software, and fiber optics, large initial investments in knowledge production are required, compared with relatively cheap incremental production costs, which decrease with increasing familiarity with related processes. In addition to falling production costs, rising consumer benefits in the form of networking and compatibility requirements further lock-in the effects of small economic shifts, such as an initially small gain in market share. Through such mechanisms, “[i]nitial moves in a particular direction encourage further movement along the same path,” and alternatives not chosen become increasingly unreachable.²⁵

Many social processes, including the choice of a litigation strategy by a community organization, may also be prone to increasing-returns due to institutional characteristics and the “imperfect market conditions” in which they unfold.²⁶ The choices facing a community organization that has to decide how best to proceed with an environmental justice claim are unstable and complex. It is impossible at first for such organizations to determine which strategies, such as litigation, protest, or political mobilization (or a combination) will be most effective in meeting its objectives. Advocates educate themselves by observing the successes and failures of previous strategies in a form of trial-and-error learning.²⁷ Information is incomplete at best, or purposefully withheld or presented in an inappropriate format to community representatives by government officials.²⁸ In the context of these and other constraints, positive feedback is likely to occur following organizational choice among

²⁵ Paul Pierson, *Not Just What, But When: Issues of Timing and Sequence in Comparative Politics*, 14 *STUD. IN AM. POL. DEV.* 72, 74 (2000).

²⁶ Douglass C. North, *Institutions and Credible Commitment*, 149 *J. INST. AND THEORETICAL ECON.* 11, 17 (1993).

²⁷ Diane Schwartz, *Environmental Racism: Using Legal and Social Means to Achieve Environmental Justice*, 12 *J. ENVTL. L. & LITIG.* 409, 432 (1997).

²⁸ In one case, the siting of a toxic waste incinerator was challenged when a county published an environmental impact report in English, despite the 95% Latino, 40% monolingual demographics of the city in which it was to be sited. *Environmental Justice Litigation*, *supra* note 11 at 529 (citing *El Pueblo Para El Aire y Agua Limpio v. County of Kings*, 22 *Envtl. L. Rep. (Envtl. L. Inst.)* 20,357 (Super. Ct. 1991)). The judge overturned county approval of the incinerator, ruling that lack of a Spanish translation violated the California Environmental Quality Act. *Id.* at 530.

competing strategies, due to the following characteristics of organizations and their choice environments.²⁹:

Large fixed costs: When the costs associated with a decision are high (in terms of resources such as time or opportunity costs invested or foregone), there is a strong incentive to stick with an option once it has been chosen.

Learning effects: Within a complex environment, knowledge gained through adherence to a particular strategy will lead to higher returns from continued use. Repetitive use of a strategy will enable organizational members to follow the strategy more effectively. Actors operating within complex environments will form "mental maps," through which they filter information. Information that confirms an actor's mental map will likely be incorporated. Disconfirming information is filtered.³⁰

Coordination effects: As a greater proportion of an organization's membership adapts to the same strategy, the benefits that an individual receives from conforming to similar activities increases. For community organizations, the choice of a strategy must be linked to an infrastructure of individual and group behavior that is compatible with the objectives of a chosen strategy. Once the daily routines of individuals are patterned around the strategy, it becomes difficult for others to initiate activities that cannot be supported by the existing infrastructure.

Adaptive expectations: Members of a community organization will place certain expectations on each possible strategy adopted by the group. Individuals will choose and adapt to a particular strategy in order to realize projected future benefits associated with that decision.

These and other potential sources of positive feedback condition the trajectories followed by organizations once they act. Increasing returns that result from the above conditions can take the form of real, perceived, or expected benefits, such as the procurement of collective goods (i.e., group legitimacy, the removal of negative

²⁹ These characteristics are described in W. BRIAN ARTHUR, INCREASING RETURNS AND PATH DEPENDENCE IN THE ECONOMY 112 (1994); Paul Pierson, Path Dependence, Increasing Returns, and the Study of Politics 9-10 (October 15, 1999) (unpublished manuscript, on file with the Virginia Environmental Law Journal).

³⁰ Arthur T. Denzau & Douglass C. North, *Shared Mental Models: Ideologies and Institutions*, 47 KYKLOS 3, 15-16 (1994).

externalities, or group coherence) or private goods (i.e., individual economic gain or improvements to personal property or health).

By analyzing environmental justice litigation as it unfolds within its socio-political context, the potential for the strategic choice of litigation to encourage increasing returns within community organizations can be used to make sense of the broad range of secondary effects stemming from a legal claim. Informal community organizations are subject to positive feedback in their decision-making, which would suggest that comparatively broad choice sets at the outset would become more constrained as reinforcement occurs. More importantly, the mechanisms of self-reinforcement that condition the movement of an organization along a chosen trajectory can be used to predict the effects of an environmental justice strategy across a range of seemingly disparate cases. This is due to the similarities in organizational structure and similar means of reproducing a functional alternative once a legal strategy is adopted by various community organizations. While it is impossible under conditions of increasing returns to know in advance which of multiple equilibria will emerge following organizational choice, it is possible to study the probability that certain outcomes will emerge given a set of initial conditions within an organization and its decision-making environment.

II. METHODOLOGY

The present research builds a narrative around the decision to adopt a legal strategy by the West Dallas Coalition for Environmental Justice, an informal organization started in 1989. The Coalition was selected for analysis with the following criteria in mind: organizational focus on environmental and civil rights concerns from its inception, organizational activity before, during, and following the filing and adjudication of legal claims, and sufficient access to organizational decision makers and documentation of legal case history, public documents, media accounts, and organizational records. This information allowed us to assess the effects of strategic choices on organizational form, function, and performance. As we will learn, each of these criteria were met by the Coalition and generalizability of the Coalition's situation to other environmental justice organizations makes it an appropriate subject for study as well.

Narrative construction followed standard case study protocol developed by Yin.³¹

Semi-structured interviews of organizational and community members, city and state government officials, Environmental Protection Agency (EPA) officials, and legal representatives (twenty interviews were conducted each lasting between one and one and a half hours) were conducted between January and May, 2000. Interviewees were questioned about their involvement, interests, and perceptions of the Coalition (its structure and objectives) and the environment in which it functioned. Archival data included media accounts (1989-2000), *West Dallas Coalition for Environmental Justice v. EPA* case files (1991-1999), EPA documents pertaining to the West Dallas Superfund site (1993-1999), Coalition files (1989-1999), and city council and planning agency records for specific decisions. Data reduction in the form of transcription and analytic coding was used to extract evidence of organizational structure, strategies, behavior, and internal dynamics, in addition to the secondary effects of its litigation strategy. Analytic coding involves the assignment of labels to segments of text that represent similar phenomena, such as acts, meanings, relationships, and settings.³² Triangulation (between primary organizational/governmental and secondary sources containing similar data) was used where possible to ensure the accuracy of the data. The resulting analytic narrative is presented below. Excerpts from interviews are included to exemplify common themes.

III. FINDINGS

A. *Historical conditions.*

The West Dallas Coalition for Environmental Justice (WDCEJ) arose in a complex community characterized by haphazard zoning controls³³ and multiple sources of potential exposure to toxicants. Reports issued in the early 1990s documented 93 existing or closed facilities responsible for the release of lead, arsenic, cadmium, and

³¹ ROBERT K. YIN, *CASE STUDY RESEARCH: DESIGN AND METHODS* (2d ed. 1994).

³² MATTHEW B. MILES & A. MICHAEL HUBERMAN, *QUALITATIVE DATA ANALYSIS* 56-61 (2d ed. 1994).

³³ The most recent comprehensive land use study of West Dallas describes the area as "primarily zoned single family with community serving retail and industrial zoned parcels scattered throughout." CITY OF DALLAS, *WEST DALLAS COMPREHENSIVE LAND USE STUDY* 3-1 (May 26, 1999).

a host of other chemicals into the surrounding environment.³⁴ Many of these facilities, all of which were located within an 11 square mile area known as West Dallas, had been cited for numerous wastewater, emissions, and permit violations spanning decades.³⁵ Reports of chemical spills, deposits in unlined ditches, and leakages from storage vessels were also common.³⁶

One facility, a lead smelter owned by the RSR Corporation, began operations in the early 1930's before West Dallas was annexed by the city.³⁷ Throughout the ensuing four decades, the plant emitted as much as 260 tons of lead particles per year into the West Dallas air.³⁸ In anticipation of the annexation of West Dallas, which was a predominantly African-American settlement, the Dallas Housing Authority constructed a 3,500 unit public housing project mere feet from the smelting plant, on contaminated land, and within the direction of prevailing winds.³⁹ Despite passage of a lead emissions ordinance in 1968 and the publication of federally commissioned studies indicating a 36% increase in blood lead levels and soil levels up to 99 times higher than those considered dangerous for residents living close to the plant, little action was taken by the city of Dallas to enforce existing environmental laws until the mid-1980's.⁴⁰ In 1983, the State of Texas and the City sued RSR Corporation seeking a reduction in airborne emissions and clean-up of the surrounding areas.⁴¹ The settlement included soil remediation in West Dallas, a blood-testing program for children and pregnant women, and the installation of antipollution equipment (which was never installed).⁴² Between 1984 and 1985, the

³⁴ Joyce S. Tsuji, U.S. Dep't of Justice, PRELIMINARY DRAFT OF EVALUATION OF HEALTH ISSUES FOR THE WEST DALLAS AREA DALLAS, TEXAS (Sept. 2, 1993); Ellen K. Silbergeld, U.S. District Court for the Northern District of Texas, Report to the Court in re: Walker et al. v. HUD et al. (June 23, 1993) by Ellen K. Silbergeld, PhD.

³⁵ Plaintiff's Exhibit Number 52, Walker v. HUD, 734 F. Supp. 1289 (N.D. Tex. 1989) (No. 3:85-CV-1210-R).

³⁶ *Id.*

³⁷ UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, RSR CORPORATION SUPERFUND SITE PROPOSED PLAN: OPERABLE UNIT 1 3 (Nov. 18, 1994) [hereinafter PROPOSED PLAN: OPERABLE UNIT 1].

³⁸ Ronald Robinson, *West Dallas Versus the Lead Smelter*, in *Unequal Protection: Environmental Justice and Communities of Color 93-94* (1994).

³⁹ *Id.* at 99-100.

⁴⁰ In the mid-1980's, the standard above which soil lead levels were considered unsafe was 1,000 parts per million. Proposed Plan: Operable Unit 1, *supra* note 37 at 3. The highest level detected in a residential area of West Dallas was for soil collected at the driveway of Alicia Hracheta, tested at 99,000 parts per million. Robinson, *supra* note 39 at 98.

⁴¹ ROBERT BULLARD, *DUMPING IN DIXIE* 50 (2d ed. 1994).

⁴² *Id.*

Environmental Protection Agency (EPA) conducted a soil remediation program within a one-half mile area north of the smelter.⁴³ Soon thereafter, RSR/Murph Metals was sold to Murrum Corporation, the City did not renew the operating permit and the smelter ceased its primary operations.⁴⁴

The RSR facility did not lead directly to the formation of the WDCEJ. A community organizer who assisted with the group's operations describes the incentives for organization as follows:

[I]t was to bring attention to what they thought was the density of environmentally undesirable facilities being congregated right next to them and throughout their community and to bring awareness to that and maybe some change to that situation. To get people out of there, to address the environmental health issue, and that has never been done. To address the kind of incomplete cleanup of RSR, *although that wasn't immediately a priority*. It was so after a while obviously.⁴⁵

WDCEJ members describe similar sets of objectives that developed during the group's inception, although these preferences were ordered differently by residents who joined the Coalition.

It's more than lead. They had two or three different toxics out here, maybe four. Had a cement plant, they had the fertilizer plant, and then this roofing plant up here. Well, they had three or four different things out here that really don't need to be out here.⁴⁶

Well, what was mainly the reason was that we were trying for them to move us out of here, buy us out. Because we knew that the land was contaminated. [WDCEJ] was also trying to get that smelter knocked down, the projects knocked down.⁴⁷

What [WDCEJ] was trying for the city or the EPA to just get us out of here, you know. Move us somewhere else where it's good and healthy. That was part of the deal. If they could not relocate us, we wanted damages because of the contamination. . .to take care of the sick people, you

⁴³ PROPOSED PLAN: OPERABLE UNIT 1, *supra* note 38 at 3.

⁴⁴ *Id.*

⁴⁵ Telephone Interview with Community Organizer, West Dallas Coalition for Environmental Justice (Jan. 20, 2000) (emphasis added).

⁴⁶ Interview with Deacon Moore, Member, West Dallas Coalition for Environmental Justice, in Dallas, Tex. (Jan. 7, 2000).

⁴⁷ Interview with Mary Nunez, Member, West Dallas Coalition for Environmental Justice, in Dallas, Tex. (Jan. 6, 2000).

know. For the EPA to take care of the medical part, also to clean up everything, like houses that are contaminated.⁴⁸

In addition to preferences that were differently ordered and were often vaguely defined, WDCEJ experienced fluid participation and severe resource constraints from its inception in 1989. President Luis Sepulveda describes some of the Coalition's problems of governance:

We don't [keep track of our members]. That's the bad thing about it, because we have no budget. Since we don't have any budget. We put out one newsletter, I think everybody in the Coalition was thrilled that we had a newsletter but that was funded by the church. We were able to use a xerox machine to get a lot of those copies done. We were able to use a lot of the money, they gave us \$2,500, we were able to buy a lot of paper so we could get copies to the community for free. So we were able to do it as just a one-time deal.

We started taking minutes for a while but we were having a lot of problems with writing abilities. And I didn't want to be a president and writing and I didn't want to have the vice president and her writing. But I think everybody that's been a member can pretty well remember just about everything that we've done.⁴⁹

The West Dallas Toxic Times, issued in April, 1992, marked the only formal communication between Coalition leaders and resident-members.⁵⁰ Before and following its publication, residents relied on informal social networks, handwritten fliers, and the local media to maintain ties to the organization. Membership fluctuated drastically, from estimates of between thirty and several thousand from 1989 to 1999.⁵¹

West Dallas residents joined the Coalition seeking, as President Sepulveda explained, "to find out what the problem was," a process that by his estimation "almost took seven years."⁵² The problem, as characterized by group leaders, concerned the cumulative impacts of industrial and commercial land uses within West Dallas

⁴⁸ Interview with Alex Hernandez, Member, West Dallas Coalition for Environmental Justice, in Dallas, Tex. (Jan. 6, 2000).

⁴⁹ Interview with Luis Sepulveda, President, West Dallas Coalition for Environmental Justice, in Dallas, Tex. (Jan. 5, 2000).

⁵⁰ W. DALLAS TOXIC TIMES Apr. 1992.

⁵¹ WDCEJ members provide contrasting estimates of membership numbers. President Sepulveda estimates that the membership peaked at approximately 10,300. Interview with Luis Sepulveda, *supra* note 49.

⁵² *Id.*

on resident health. As the Coalition was being organized, it was impossible for its members to understand the full extent of the environmental impacts of industrial land uses that dotted the landscape. Therefore, the organization targeted sites that had been monitored by residents who were able to observe stack emissions or site activities. Early community organizing centered around WDCEJ members and parents seeking support from the Dallas Independent School District in complaining about night emissions from an asphalt plant on Chalk Road and a fertilizer plant near Edison.⁵³ Documents found in Coalition files also indicate a focus on W.R. Grace and Company and its efforts to continue a permit for a vermiculite exfoliation facility on Manila Road.⁵⁴ Knowledge of facility operations was gathered on an *ad hoc* basis by Coalition members, as exemplified by this account from a resident of neighboring Arcadia Park:

Well, [w]e started seeing a lot of our trees dying. That was the first. And all of a sudden we'd get up, and it would be very, very cloudy. And we started, I told Luis [Sepulveda] something is terribly wrong. Our trees, out of I think when we moved here we might have had 27, 28 trees, and we had to cut them because they died. So this is what we did: I told Luis something, and it wasn't until he says, "Rachel, I have a feeling there is something besides just fumes from the cars. I have a feeling because I live in the area, I think that it's something contaminating the air." So we began to look. And then, one neighbor called me. And he said, "have you passed through Chalk Hill?" He says, "have you passed about, oh, about two-o'clock in the morning?" "No." "Well," he says, "I did, and there was some kind of a furnace or something is burning in the back of y'all's, right before you get to Davis, there's an empty space there" . . . Well, we were at the park one afternoon, and we stayed until 9 o'clock with a city councilperson, and we looked out and we saw a big fire . . . and so everybody says it's coming from Chalk Hill, it's a big incinerator . . . And we went to the city

⁵³ Joseph Garcia, *Tests Show Metal Levels Likely Safe*, DALLAS MORNING NEWS, Oct. 4, 1990 at 38A.

⁵⁴ Air Pollution Control Section, City of Dallas, Inspection of W.R. Grace & Co. Site, (June 26, 1984) (on file with the Virginia Environmental Law Journal); *Notice of Application by W.R. Grace and Company: Permit Application Number R-1916-A*, DALLAS MORNING NEWS, Nov. 14, 1989 at 10A; Letter from Allen Eli Bell, Executive Director, Texas Air Control Board, to J.D. Howell, Plant Manager, W.R. Grace & Co. (Dec. 22, 1989) (on file with the Virginia Environmental Law Journal); *Position Paper Against W.R. Grace & Co.*, (Citizens Against Toxic Chemicals and Hazards, Fort Worth, Tex.), March 1990, at 1.

council, and they said that they weren't aware of it, so, Luis said, "well, something's got to be done."⁵⁵

The first of a decade's worth of newspaper articles to cover the Coalition described a march of over seventy-five people to protest pollution in their neighborhoods, celebrate the closing of an asphalt plant, and demonstrate their opposition to requests for a special city zoning permit for a small oil tank facility.⁵⁶ Much of the following year witnessed weekly marches and protests of a variety of facilities, as well as West Dallas schools where soil was later found contaminated with lead and arsenic.⁵⁷ These and other strategies were developed in part through the group's affiliation with Texans United, a regional advocacy group that provided information on "how to work with the media, who to contact in the media, what to ask for in terms of demands from the bureaucracy, what kind of testing," and other strategies.⁵⁸ These actions met with some success. For example, the Dallas Environmental Health Advisory Commission was formed, which drafted new guidelines to regulate waste incinerators strictly, requiring buffer areas and minimum lot sizes, and more extensive notification of neighbors to planned facilities.⁵⁹

The Coalition also began raising awareness that previous court-ordered cleanups had neglected to remove much of the lead and other toxicants from single-family residential areas in West Dallas. This task of raising awareness proceeded along *two trajectories*: (1) protests during which residents, mostly senior citizens, recounted a

⁵⁵ Telephone Interview with Rachel Alanzo, Member, West Dallas Coalition for Environmental Justice (Jan. 6, 2000).

⁵⁶ Steve Scott, *W. Dallas Residents Target Two Plants in Pollution Protest*, DALLAS MORNING NEWS, Dec. 2, 1990, at 41A. The following articles document additional activities of the Coalition and its specific objectives during its first year of operations: David Jackson, *City Panel to Probe Pollution Complaints*, DALLAS MORNING NEWS, Apr. 17, 1991, at 28A (describing the WDCEJ's desire to "ban toxic emissions in the area"); James Ragland, *Environmental Racism Alleged: Residents Say City Allows Too Many Industrial Sites in West Dallas*, DALLAS MORNING NEWS, Mar. 28, 1991, at 34A (describes the WDCEJ as making several demands of city officials, including "a ban on new toxic emissions in the area, a serious reduction in the amount of toxic emissions allowed, community involvement with government and business representatives in reducing environmental hazards, and recruitment of safe industries with less-hazardous jobs in West Dallas").

⁵⁷ See, e.g., Joseph Garcia & Dan Shine, *EPA Targets 2 Schools for Cleanup: Lead, Arsenic Found at W. Dallas Sites*, DALLAS MORNING NEWS, Sept. 17, 1991, at 11; Dan R. Barber, *Swifter Cleanup Urged: Residents Criticize EPA in Protest at W. Dallas School*, DALLAS MORNING NEWS, Oct. 11, 1991, at 22A.

⁵⁸ Interview with Community Organizer, *supra* note 45.

⁵⁹ See Joseph Palmore, *Council OKs Regulations Affecting Waste Incinerators*, DALLAS MORNING NEWS, June 27, 1991, at 37A.

history of living with contamination, and (2) efforts to gather scientific evidence of environmental harm. City and state officials agree that awareness raising was the most effective activity in which the Coalition engaged.

The WD [West Dallas] site was kind of rediscovered by citizens reporting to our regional people in Dallas which was then the TWC [Texas Water Commission], and they brought it to the EPA's attention and TWC's attention and I wasn't involved at that point but our removal people started doing a removal in some of the neighborhood houses that were highest in lead concentration . . . The state kind of took the lead at first because the citizens brought, they brought our attention to it.⁶⁰

I remember where people actually brought in [lead] slag chips into the city council meetings and I think really just the people, especially the Housing Authority people, also some of the environmental people from West Dallas, the West Dallas Coalition for Environmental Justice is what they're called. Making sure that they attended all the meetings to show that there was interest in the neighborhood to clean it up . . . I think that the awareness is probably the biggest thing because if you don't advertise the issues, if you think that they only affected one area when it is more widespread, I think that bringing just the awareness publicly has been the most positive thing that they have done. They have done petitions and stuff, they have put up signs to say "Superfund Site" or whatever, but the biggest impact has been to make the public aware of the issue regarding lead contamination, any other kind of contamination, so people can ask.⁶¹

As evidenced in the process through that the WDCEJ gained its early members, the origins of the Coalition involved the concomitant development of the above trajectories. President Luis Sepulveda describes the social networking which fueled the organization:

I went to Mr. Hernandez, I saw Hernandez cut from here to here, and I said, "What happened to you, sir?" He said, "Man, the industries." I said, "Can I test your home?" Sure. So we opened up one of the walls, and by golly if it wasn't dust all over. So we went in. I can show you the little

⁶⁰ Telephone Interview with Official, Texas Natural Resource Conservation Commission (Jan. 21, 2000).

⁶¹ Telephone Interview with Member, Dallas City Council (Jan. 18, 2000).

boxes of different things, the slag, I kept everything in little boxes. Then I went to Teresa Martinez. And then I saw Teresa's hand, just curled up, deformed. Because she was born in the time, in the 30's when this lead smelter was going 150 miles per hour and nobody was saying anything about it . . . And then I saw Indio. Indio died of a heart attack. Then I saw Mrs. Maldonado's husband had died of a heart attack. And I'm saying, hello? I'm seeing a pattern of what's going on. Then I talked to Ms. Lee who hears about what I'm doing over there. Ms. Lee comes in and joins. Ms. Lee's got hundreds of followers. Then we get a gentleman R.T. Conley, he's got hundreds of followers, too. That's how we started forming.⁶²

This account shows a juxtaposition of resident accounts of long-term exposure to toxic chemicals and efforts by Coalition leaders to gather scientific evidence in the form of soil and dust concentrations and (later) blood lead levels. Awareness of the cumulative health effects of local industries as a function of time was prevalent among the residents who joined the Coalition. They describe the pervasiveness of "awful odors," "haze," "rain like acid," and other phenomena that persisted "day and night."⁶³ These descriptions are coupled with equally vivid accounts of human suffering brought about through decades of exposure:

I tell you way back in those years it was so strong at night that we could hardly sleep. 'Cause that odor would come into the house. It was very strong. That plant was working day and night. It was just an awful odor that we got. And then the roofing company next, on Fish Trap [Road], that's another one. We used to walk out there to the corner of Fish Trap and Singleton to take the bus into town, and we had to cover our noses while we were standing there waiting for the bus. Because that roofing company was working day and night, day and night. . .

Q: How long have you lived here?

Since 1940.

Q: And when did these problems begin?

They were always there.⁶⁴

It's impossible that they cleaned it up. As long as the dirt in the earth has been here, how is they going to come in here and clean up something that people have inhaled, dranked,

⁶² Interview with Luis Sepulveda, *supra* note 49.

⁶³ See Interview with Mary Nunez, *supra* note 47; Interview with Deacon Moore, *supra* note 46.

⁶⁴ Interview with Mary Nunez, *supra* note 47.

do you understand what I'm saying? We were straining it and everything, but that lead is poison, it's strong poison . . . Because even, you take my yard. They did [remediated] it. But the point was, I was already damaged. Understand what I'm saying? I was already damaged!⁶⁵

At the same time, soil, dust, and water sampling and testing, through the National Toxics Campaign in Boston, were used to discover areas of environmental hazard, as exemplified by Sepulveda's description of early door-to-door social networking.⁶⁶ This strategy was used to assess the extent of contamination resulting from industrial activities within the area and served as a means of criticizing previous EPA cleanup efforts as well as the lack of land use controls in West Dallas.

The historical development of the Coalition highlights fluctuations in the organization's membership, dilemmas concerning resource allocation, and different strategies used to identify and define the problems facing the community. A high rate of turnover was evident, as was the variance in level of involvement (time and effort) in decision-making processes among members. Constraints imposed by the lack of formal inclusion of the organization in environmental permitting and cleanup processes meant that often the group had to make decisions without adequate time or resources to prepare. Under these circumstances, the manner in which the Coalition tapped resident involvement and put member skills to work was not always clear to its members.

⁶⁵ Interview with Lee Hopkins, Member, West Dallas Coalition for Environmental Justice, in Dallas, Tex. (Jan. 5, 2000).

⁶⁶ See West Dallas Coalition for Environmental Justice, Test Results of Second Round of Sampling (1991) (on file with the Virginia Environmental Law Journal). Presents laboratory results of soil, dust and water samples from a variety of locations throughout West Dallas (for lead and cadmium). Concentrations above 500 parts per million of lead were considered hazardous at the time. Action Memorandum: Request for Removal Action at the West Dallas (RSR) Lead Site, United States Environmental Protection Agency from Warren Zehner, Senior On-Site Coordinator to Robert E. Layton, Regional Administrator (October 24, 1991) at 7 (describing 500 ppm as an "acceptable public health risk for this type of setting."). Sites tested included the Sepulveda residence (696 ppm of lead), the Martinez residence (644 ppm of lead), a residence within the Dallas Housing Authority (3520 ppm of lead), and lead slag from a local dump site (108,500 ppm of lead). See also Memorandum from B. Johnson, to H. Greenwald, Sample Analysis Results, West Dallas (Aug. 19, 1991) (on file with the Virginia Environmental Law Journal). Topsoil samples from residential yards ranged from 70-6,170 ppm of lead. The results also describe: "[I]lead slag from next to abandoned battery factory. Between the building and the railroad tracks this material very visible and I was told it is 8 to 10 feet in depth. It can be found all over the West Dallas area mixed into native soil. Old time residents report that this material was used as fill extensively in the area and is found in most of the residential and commercial areas in West Dallas."

B. Crisis.

In response to Coalition protests, the Texas Natural Resources Conservation Commission (TNRCC, which in 1991 was called the Texas Water Commission) conducted a visual survey of 6,800 homes in West Dallas residential areas "to identify the ones that had battery fill materials, and [they] collected samples from them."⁶⁷ When the TNRCC found visual evidence of lead battery chips in residential yards, it took samples for a variety of toxicants, including lead, arsenic, and cadmium.⁶⁸ Shortly thereafter, the state agency began a soil removal action at the most highly contaminated homes, and the EPA began to review its mid-1980's removal.⁶⁹

A crisis emerged for the Coalition when it discovered that the EPA (which had assumed control over renewed soil excavation efforts) was planning to excavate contaminated soil from residential and other areas in West Dallas and store it at the RSR lead smelter. The site, at the intersection of Westmoreland and Singleton, was immediately adjacent to elementary schools, homes, and children's recreational facilities.⁷⁰ In the southeastern corner of the smelter stood a building known as the "batch house," which had been selected by the EPA for the temporary storage.⁷¹ Warren Zehner, who conducted emergency removals involving residential areas for the EPA Emergency Response Branch, described how the site was chosen:

I thought I had a place originally for some interim storage at the Dallas Housing Authority . . . [o]ver in the DHA on Delhi between Denison and Baker, that area is abandoned, and was also fenced at the time. So what I was going to do is I had repaired the fence, and there's a concrete street, Delhi

⁶⁷ Interview with Carlos Sanchez, Manager, Environmental Protection Agency Region VI Superfund Project, in Dallas, Tex. (Jan. 4, 2000).

⁶⁸ Interview with Official, Texas Natural Resource Conservation Commission, *supra* note 60.

⁶⁹ *Id.*; Thaa Walker, *Lead Woes Found Across W. Dallas, Not Just at Slag Sites, Residents Say*, DALLAS MORNING NEWS, Aug. 6, 1991, at 17A.

⁷⁰ Plaintiff's First Amended Complaint for Injunctive Relief at 3, *W. Dallas Coalition for Env'tl. Justice v. United States*, (N.D. Tex. 1991) (No. 3-91-2615-R).

⁷¹ "Inside [the batch house] is the center of the West Dallas lead problem: tons of contaminated soil dug up from the neighborhood's homes and placed there for temporary storage. The building has a doorway wider and taller than a truck. It is never closed or locked. The building has no door. It does have plastic strips that hang down to block the wind from blowing the soil out, [EPA Spokesman] Mr. Bary said." Randy Lee Loftis, *More Than 10 Years of Pollution Reports Unheeded: Records Reveal Buck-Passing among Agencies*, DALLAS MORNING NEWS, May 9, 1993, at 29A.

right there in the middle, that has some big parking bay type areas. And what I was going to do was put the material in there and cover it up and use that as interim storage more really than anything else . . . But that, you know, fell through. So then I became aware of the Murmur Tract 1 facility. And after discussion, after a meeting with the owner of that facility and touring the facility, the—what's called the batch house is a building that was designed, you know, when this facility was constructed to hold lead-contaminated materials, you know, predominantly the lead plates of batteries. But it's—it was a totally ideal place because, you know, very rarely in a near residential setting you find an industrial facility that's abandoned, it's contaminated already, and it's designed for storage.⁷²

Knowing that under the Consent Order filed with Murmur Metals, Inc. there was no limit to the amount of material or time that contaminated soil could be stored at the RSR lead smelter, the Coalition sought legal assistance.⁷³ The case, which became *West Dallas Coalition for Environmental Justice v. United States and William K. Reilly, U.S. EPA*⁷⁴ (hereinafter *WDCEJ v. EPA*), was initially filed by Gilbert Medina and amended by Legal Services of North Texas. The case was amended in order to seek a preliminary injunction enjoining the EPA from opening the storage facility, which would result in the creation of an illegal hazardous waste storage facility in a residential neighborhood.⁷⁵ Such actions would occur just as the Department of Housing and Urban Development was attempting to add 1,000 families to the Dallas Housing Authority housing projects across the street.⁷⁶

⁷² Transcript of Hearing Before the Hon. Judge Buckmeyer Regarding Plaintiff's Request for Temporary Injunction at 29-30, *W. Dallas Coalition for Env'tl. Justice v. United States*, (N.D. Tex. Dec. 23, 1991). (No. 3-91-2615-R).

⁷³ *Id.* at 44.

⁷⁴ Plaintiff's Motion for TRO and Preliminary Injunction and Memorandum in Support of the Motion, *W. Dallas Coalition for Env'tl. Justice v. United States*, (N.D. Tex. 1991) (No. 3-91-2615-R).

⁷⁵ Plaintiff's First Amended Complaint for Injunctive Relief, *supra* note 70 at 3.

⁷⁶ Under the Resource Conservation and Recovery Act of 1976 and relevant regulations, operation of a hazardous waste storage facility requires groundwater monitoring, record keeping, preparedness prevention procedures, contingency and emergency procedures, a written waste analysis plan, inspection schedule, and logs, an operating record, a closure plan and cost estimate, and equipment and facilities to prevent the release of contaminated runoff from a site. 42 U.S.C. § 6924 (1995). None of the above provisions were in place for the RSR site according to plaintiffs. In addition, the Texas Water Commission had requested that the site "be addressed as a High Priority Violator due to numerous remaining unresolved noncompliances" on March 1, 1991. Plaintiff's Second Amended

Plaintiff's First Amended Complaint for Injunctive Relief states that "[f]or over ten years, defendants have been aware of the existence of hazardous waste sites, including contaminated soil, dust, and slag, in residential and other areas" and "failed to conduct a proper cleanup."⁷⁷ Such acts are described as contributing to irreparable harm to West Dallas residents that would continue unless defendants were enjoined from the siting of contaminated soil at the RSR smelter.⁷⁸ The Coalition's Motion for Temporary Restraining Order enjoining defendants from illegally treating, storing, or disposing of hazardous waste at the RSR site also asked the court for a preliminary and permanent injunction that would (a) enjoin defendants from opening the facility; (b) order the EPA to implement a plan developed in 1985 by the Centers for Disease Control to determine the sources and pathways for lead and other contamination; (c) order defendants to secure by fencing any sites at local schools or public locations from which defendants did not immediately remove contaminated soil; (d) order defendants to process previous referrals by the Texas Water Commission of RSR/Murmur Corporation violations of hazardous waste storage regulations at the RSR site; and (e) appoint experts for the monitoring and assessment of contamination and to plan for a non-discriminatory level of environmental conditions.⁷⁹ While *WDCEJ v. EPA* included a number of claims of civil rights violations such as race discrimination through adverse local land use patterns and violations of federal hazardous substance and waste control regulations, the seven years which followed its filing centered around the Coalition's hazardous waste storage concerns.

IV. SECONDARY EFFECTS OF *WDCEJ V. EPA*.

A. *Organizational*.

Following the adoption of a litigation strategy, it became clear that the filing of *WDCEJ v. EPA* marked an implicit adoption of scientific rationality over the focus on cumulative exposure stories which had prompted many residents to join the Coalition. Coalition leaders and their attorneys filed motions for court-appointed experts to develop and recommend plans for monitoring "any

Complaint and Complaint in Intervention at 24, *W. Dallas Coalition for Env'tl. Justice v. United States*, (N.D. Tex. filed Mar. 23, 1992) (No. 3-91-2615-R).

⁷⁷ Plaintiff's First Amended Complaint for Injunctive Relief, *supra* note 70 at 2.

⁷⁸ *Id.* at 3.

⁷⁹ Plaintiff's Motion for TRO and Preliminary Injunction, *supra* note 74.

adverse personal and environmental effects of soil removal.”⁸⁰ They also filed emergency motions in a related case to initiate child blood lead level testing⁸¹ and argued that increased negative health effects during and after the 1984-85 cleanup would be repeated through storage of soil at the RSR smelter.⁸² As Coalition reliance on the scientific proof of discriminatory harm through litigation grew, the perceived need for protests, meeting attendance, testimony at hearings, and picketing around industrial land uses (as well as the use of stories of long-term exposure) diminished.⁸³

Scientific evidence was not only sought in support of the requested permanent injunction of RSR storage. Court-appointed experts also assessed the risk of environmental hazards in the area in order to bolster claims of racial discrimination against the City of Dallas, the State, and the EPA.⁸⁴ Such evidence was important from the standpoint of mitigating harm caused by hazardous waste removal and storage, although its relevance for Coalition members was questionable (for example, blood level screening does not account for long-term exposure).⁸⁵ Despite its questionable utility from the standpoint of Coalition members, a number of organizational characteristics served to lock-in the primacy of both scientific evidence over resident accounts of sickness as a function of time and of litigation over other possible strategies.

Coalition members learned from the experiences of others by studying previous legal actions in West Dallas. Residents commonly expressed their dissatisfaction with the fact that settlements in the mid-1980's and 1995 (regarding contamination from the RSR

⁸⁰ Plaintiff's Motion for a Court-Appointed Expert and Memorandum in Support of Motion at 1, *W. Dallas Coalition for Environl. Justice v. United States*, (N.D. Tex. 1992) (No. 3-91-2615-R) (filed March 23, 1992).

⁸¹ Interview with Attorney A, West Dallas Coalition for Environmental Justice, in Dallas, Tex. (Jan. 5, 2000).

⁸² Plaintiffs' Second Amended Complaint and Complaint in Intervention, *supra* note 76, at 6.

⁸³ Accounts of alternative strategies decreased markedly following the adoption of a legal strategy. Roughly 40% of all accounts in the Dallas Morning News of protest, picketing, and attendance at council and other meetings occurred in 1991 (based on an assessment of all articles published in the Dallas Morning News regarding Coalition activities from 1989-1999). Following the critical juncture, the proportion of media accounts of alternative strategies fell as follows: 16.7% (1992), 7.1% (1993), 16.7% (1994), 9.5% (1995), 2.4% (1996), 2.4% (1997), 0.0% (1998), 4.7% (1999).

⁸⁴ Pursuant to the Administrative Procedure Act, Fifth Amendment of the United States Constitution, and 42 U.S.C. § 1982. Plaintiff's First Amended Complaint for Injunctive Relief *supra* note 70 at 1.

⁸⁵ AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY, U.S. DEP'T OF HEALTH AND HUMAN SERV., CASE STUDIES IN ENVIRONMENTAL MEDICINE: LEAD TOXICITY 14 (1992).

smelter) focused solely on children living near the facility⁸⁶ or favored residents of the Dallas Housing Authority projects over single family residential neighborhoods to the northwest. Regardless of resident knowledge about previous class action lawsuits, there was a common belief that, as with cases centered around pediatric health, Coalition member illnesses and sufferings over the course of decades could be encapsulated in a single test of blood plasma. Thus, as more residents became aware of court-ordered testing, the perceived benefits of participating in such programs increased for individual residents. Members began to adapt to the notion that their suffering could be proven once and for all, a belief that was encouraged by Coalition attorneys:

Like any lawyer would say, you have to have evidence, you have to have proof before they can do anything about it. But as far as that's concerned, we have gone as far as we can. There's no more to add into it or nothing. There's nothing left to prove.⁸⁷

Right now, I ask him, in our case, what do you need? He says, "I don't need anything. Everything is factual. Everything is proven. You've done everything. You don't have to do anything anymore." Even though I haven't protested in about two years. . . [the Coalition's] job was to prove, beyond a shadow of a doubt that our community was contaminated. His job as an attorney is to come in and defend us.⁸⁸

The main thing is what does the science say about what's on the ground or in the groundwater. . . We usually rely on whatever you can get from the other side [defendants]. Like

⁸⁶ A member of the organization described the progression of cases as follows: We had the John Phillip Weisner one. We won that one. That was '84, '85. New Start had one, with Mark, Crowley, and Douglas, they won that one, which I thought it was 15 million. And that was about the smelter and the damage to the kids, the health . . . And they told us all the way from the beginning that they were going to accept adults and kids. But they just took all the kids . . . And what they did was they did a smart thing. They didn't have to prove nothing. That first lawsuit was already settled. So all they did was have us go and gather up all the kids that were overlooked and didn't know about the first lawsuit, and were born during this time, and were living in this area during this time. And that brought them under this other lawsuit. So what they had done was get the kids who were overlooked. So that's when, after they found out that they had dropped the adults, the Coalition got [the attorneys for WDCEJ v. EPA]. Telephone Interview with Member, West Dallas Coalition for Environmental Justice (Jan. 23, 2000).

See generally, Randy Lee Loftis & Craig Flournoy, *Lead Firm OK's Suit Settlement: 587 W. Dallas Kids May Get \$16 Million*, DALLAS MORNING NEWS, Aug. 23, 1995, at 1A.

⁸⁷ Interview with Alex Hernandez, *supra* note 48.

⁸⁸ Interview with Luis Sepulveda, *supra* note 49.

the blood lead test. Make them do the blood lead test. Apply their own science on the soil contamination.⁸⁹

Group learning about the effectiveness of previous legal actions, coupled with interpretations of their relevance to Coalition objectives, increased the perceived utility of litigation structured around scientific testing. Once adopted, limited resources encouraged other mechanisms that perpetuated the primacy of scientific rationality. The juxtaposition of professional legal services with an informal organization lacking a budget encouraged the Coalition to substitute elements of the former in its efforts to keep track of its internal operations. Legal documentation began to substitute for membership records. Social networks, which accounted for the Coalition's initial growth in membership, started to erode. Residents began to rely on occasional meetings with attorneys at local schools or the West Dallas Multipurpose Center, during which they were provided "progress" updates (recall that the only formal communication between the Coalition and its members was a newsletter issued in April, 1992):

So, what happened was, when we started having meetings for this last lawsuit, they would get a sheet, and they would pass and have the people sign a sheet to get in on the lawsuit. And [the Coalition] would bring them in by signing the sheet, and made them a part of the Coalition. And people didn't even realize what they were signing and coming a part of.⁹⁰

It seems like everything fell apart. From what I can see about it it seemed like we wasn't making no progress . . . Progress that we would have success in our operation that they would work on it and let us know what process was going on. We had two or three different people, lawyers.⁹¹

Limited interaction among Coalition members and leadership restricted the members' ability to assess true progress vis-à-vis other strategies, which were employed less frequently. As litigation became accepted as the organization's primary strategy, other activities were evaluated in terms of whether they could be used in support of legal action. As communication with the attorneys less-

⁸⁹ Interview with Attorney B, West Dallas Coalition for Environmental Justice, in Dallas, Tex. (Jan. 5, 2000).

⁹⁰ Telephone Interview with Member, West Dallas Coalition for Environmental Justice, *supra* note 45.

⁹¹ Interview with Deacon Moore, *supra* note 46.

ened, the Coalition lacked the information necessary to determine how other activities could further the dominant strategy:

[We don't have meetings] very often. Because [President Sepulveda] told me that this case was already in Judge Buckmeyer's [court]. And he's holding the case. We don't know when he's going to bring it into court. It's been years, but it's still there. We thought for a while that everything was dead, gone, and forgotten, but Sepulveda kept saying no, it ain't, it ain't dead. It's in [the judge's] hands, and he's the only one that's been holding it for the last two years, or three, and they were supposed to knock down the smelter since last year, and nothing has been done.⁹²

[A]fter we seen that the lawyers wasn't coming up to they standards, they wasn't giving us no kind of report, the protests went down. After we seen the protests wasn't doing much good, we slacked off . . . Only thing that's changed is we just said that we wasn't going to go out and protest like we'd been when it wasn't getting no response.⁹³

And it's another thing that I'm saying to the members. You're winning, you've won everything you asked for. Declared a 16 mile radius [Superfund site]. We didn't get it cleaned up the way we wanted to, but the courts will take care of that. Let the courts start taking care of some of that. We don't have to be out in that freezing, raining cold anymore . . . We're doing things a little bit different now, and we're using the court system to do some of these battles.⁹⁴

B. *Legal.*

The use of scientific testing to bolster legal claims yielded three important secondary effects. Coalition attorneys had previously represented Debra Walker, a resident of Dallas Housing Authority (DHA) public housing across the street from the RSR smelter, in a housing segregation suit.⁹⁵ After the DHA was created by the Dallas City Council in 1938, the first site for DHA public housing, or "Negro slum area" was selected by the City Manager.⁹⁶ The purpose of this and subsequent developments, particularly the West

⁹² Interview with Mary Nunez, *supra* note 47.

⁹³ Interview with Deacon Moore, *supra* note 46.

⁹⁴ Interview with Luis Sepulveda, *supra* note 49.

⁹⁵ Walker v. United States Dep't of Hous. and Urban Dev., 734 F. Supp. 1289 (N.D. Tex. 1989).

⁹⁶ *Id.* at 1293; See also CITY OF DALLAS, A MASTER PLAN FOR DALLAS, TEXAS, REPORT NO. 10 HOUSING, PLATE 16 (1944) (on file with the Virginia Environmental Law Journal) (outlining several "Negro districts," one of which encompasses the entire area known as

Dallas Project (1950-55) in which Debra Walker resided, was to prevent blacks from moving into white areas of the city. The West Dallas housing project, the largest low-rise public housing project in the nation with 3,500 units, addressed the "Negro housing problem," which was defined as a "shortage of housing for Negroes in Dallas" that would result in "overcrowding, dissatisfaction, disease, and tension resulting from Negroes buying into white neighborhoods."⁹⁷ The project was completely segregated, including separate parks and commercial areas for black, Hispanic, and white residents. Within two years, however, substantial vacancies were reported in George Loving Place, the section reserved for white residents. The DHA attributed this in part to "environmental disadvantages, such as odors, smoke, and dust from neighboring industrial plants."⁹⁸ Due to the lack of housing alternatives for blacks in the greater Dallas area, the concentration of blacks in West Dallas public housing increased.⁹⁹

While a consent decree issued in 1987 was designed to remedy violations by the DHA in the form of purposeful segregation, it did not specifically address the impacts on human health that resulted from residing in the project. Attorneys for the Coalition described the impact of the Coalition's pursuit of legal action on the *Walker v. HUD* case:

Once the Coalition brought it to our attention we also, on our public housing lawsuit raised the issue of the people living in the public housing at the time being contaminated from the soil. We filed emergency motions asking for the children to be tested, blood lead testing. We asked the court to appoint environmental experts.¹⁰⁰

In the public housing case the city agreed to a systematic assessment of the blood lead levels of people in public housing in West Dallas.¹⁰¹

West Dallas); LEUW, CATHER, & CO., WEST DALLAS URBAN AREA SURVEY 13 (1959) (on file with the Virginia Environmental Law Journal).

⁹⁷ CITY OF DALLAS, REPORT OF JOINT COMMITTEE ON NEGRO HOUSING: DALLAS CHAMBER OF COMMERCE, DALLAS CITIZENS COUNCIL, AND DALLAS INTER-RACIAL COMMITTEE 20 (May 24, 1950).

⁹⁸ *Id.*

⁹⁹ The proportion of blacks living in the George Loving Place area increased to 35% by 1967, and it was 72% by 1969, 90% black by 1971, and 95% black by 1974. Walker v. United States Dep't of Hous. and Urban Dev., *supra* note 95 at 1297.

¹⁰⁰ Interview with Attorney A, *supra* note 81.

¹⁰¹ Interview with Attorney A, *supra* note 81.

This investigation resulted in the addition of Tracey Smith as a named plaintiff-class representative to the *Walker v. HUD* civil action.¹⁰² The original complaint filed as a result of this order describes Smith as a member of a class residing within DHA housing that had become *increasingly* segregated following the issuance of the *Walker* decree, and to which:

the DHA had “failed to disclose the risks of childhood lead poisoning to the class members as part of an order to perpetuate the racial segregation in DHA’s low-income housing programs”¹⁰³ and “expos[ed] the family members of the class to the risks of childhood lead poisoning.”¹⁰⁴

Tracey Smith’s two older children had elevated blood lead levels.¹⁰⁵ The interior soil and dust in her housing unit also contained elevated lead levels.¹⁰⁶ The risks of childhood lead poisoning had never been disclosed to her family. In 1995, the court entered a remedial order (due to the lack of city’s compliance with previous consent decrees) limiting the number of units in the DHA area of West Dallas to 900.¹⁰⁷ Since then, the DHA has demolished hundreds of units, replacing them elsewhere with other forms of housing.¹⁰⁸

Reliance on scientific testing throughout DHA public housing and areas surrounding the RSR facility unearthed clusters of children under the age of six with elevated blood lead levels, including the children of Tracey Smith.¹⁰⁹ One cluster was located in an area surrounding an iron foundry known as Refinery Casting Company.¹¹⁰ Coalition attorneys filed suit on behalf of Carlos Jackson,

¹⁰² Order Granting Motion to Add Ms. Tracey Smith as a Named Plaintiff-Class Representative, *Walker v. United States Dep’t of Hous. and Urban Dev.*, (N.D. Tex. 1994) (No. 3:85-CV-1210-R); Plaintiff-Intervenor Smith’s Original Complaint at 16, *Walker v. United States Dep’t of Hous. and Urban Dev.*, (N.D. Tex. 1993) (No. 3-85—1210-R).

¹⁰³ Plaintiff-Intervenor Smith’s Original Complaint, *supra* note 102 at 11.

¹⁰⁴ *Id.* at 11.

¹⁰⁵ *Id.* at 12.

¹⁰⁶ *Id.* at 12.

¹⁰⁷ Interview with Attorney B, *supra* note 89.

¹⁰⁸ *Id.*

¹⁰⁹ Plaintiff-Intervenor Smith’s Original Complaint, *supra* note 102 at 12.

¹¹⁰ Interview with Attorney A, *supra* note 61 (describing a land use map of West Dallas):

And you see the industrial zoning all throughout the community. These dots are from 1992 and are the result of our blood lead level work. The city went out and set up blood lead testing, and we made them do it for all of the residents of the public housing project. Whoever showed up. In the housing authority, everybody showed up. One of these clusters was for this foundry, Refinery Castings.

who resided one-half mile from the site, against the refinery and its property owner, which had consistently violated city environmental and zoning ordinances.¹¹¹ The case was settled out of court and resulted in the closure and encirclement of the facility.¹¹² An additional case, *Thompson v. Raiford*,¹¹³ was filed after a resident of DHA housing discovered through court-ordered testing that her grandchildren had elevated levels of lead in their blood. Previous doctor visits under Medicaid's Early and Periodic Screening, Diagnosis, and Treatment ("EPHDT") program had not produced results to indicate elevated levels.¹¹⁴ The Coalition's attorney's discovered that the program was using a nutrition indicator used to detect anemia and malnutrition rather than a blood lead testing program.¹¹⁵ Blood lead level testing is now required as part of the EPSDT screening test.¹¹⁶

C. Scientific/Political.

Other secondary effects of *WDCEJ v. EPA* involve the actions of the Environmental Protection Agency, the Dallas City Council, and neighboring residential organizations. Under the Comprehensive Environmental Response, Compensation, and Liability Act¹¹⁷ the EPA announced that a sixteen mile radius surrounding the RSR smelter would be proposed to the National Priorities List¹¹⁸

¹¹¹ Complaint, *Jackson v. Lott and Refinery Casting Co.* (N.D. Tex. Jan. 18, 1996) (No. 396CV0173-P); See, e.g., ENVIRONMENTAL HEALTH DIVISION, CITY OF DALLAS, NOTICE OF VIOLATION TO REFINERY CASTINGS COMPANY (Jan. 7, 1972). Reports of "very heavy (100% opacity) black emissions" from the cupola stack and public health violations were issued almost annually from 1972 to 1992.

¹¹² Interview with Attorney B, *supra* note 89.

¹¹³ Plaintiffs' Amended Motion for TRO and Preliminary Injunction and Plaintiffs' Memorandum in Support of TRO and Preliminary Injunction, *Thompson v. Raiford* (N.D. Tex. 1992) (No. 3:92-CV-1539-R).

¹¹⁴ *Id.* at 3-4.

¹¹⁵ *Id.* at 4.

¹¹⁶ Interview with Attorney B, *supra* note 89; See also, Settlement Agreement at 3, *Thompson v. Raiford* (N.D. Tex. 1993) (No. 3:92-CV-1539-R).

¹¹⁷ CERCLA, 42 U.S.C.A. §9601 et seq. (1980). Established authority to remediate contamination from past waste disposal practices that endanger or threaten public health or the environment. This amendment and reauthorization to the Resource Conservation and Recovery Act (42 U.S.C. §6901-6992(k) (1976)) imposes strict liability on responsible parties, establishes a "Superfund" to finance cleanup actions, and imposes costs on those who generated or handled hazardous substances.

¹¹⁸ Section 105 of CERCLA requires the Environmental Protection Agency to maintain a National Priorities List (NPL) of hazardous sites that have known or threatened releases. Through a highly technical process designed to assess potential exposure through a number of media as well as potential target populations, abandoned or uncontrolled hazardous waste sites are identified. Placement on the NPL makes a site eligible for remedial action financed under the Superfund. U.S. E.P.A., PROCEDURES FOR COMPLETION AND DELE-

for cleanup on May 10, 1993.¹¹⁹ The EPA's procedures for addressing the Superfund site suggest how the trajectory chosen by the Coalition was compatible with the EPA's policies toward risk assessment. The site was divided into five Operable Units ("OUs"): the TWC study area (single family residential), the DHA property, slag/battery chip burial areas, the smelter facility grounds, and other RSR/Murmur facilities.¹²⁰ The EPA's stated task was to ensure that in properties targeted for soil removal, the risk of excess blood lead levels would be reduced, and the risk of cancer cases from other toxicants would be no greater than one in one million.¹²¹ EPA and TNRCC officials describe the process of risk assessment for the West Dallas Superfund site:

Currently we have a pharmacological model called the Uptake Biokinetic Model which evaluates various uptake pathways into the human body. And then it compares those against 10 mg/dL blood lead level. So what you do is put in – you put in all the parameters, you put in all the numbers you have for the parameters. And if you don't have numbers for parameters you can default, or if you can't use the numbers, they can't translate into the model, then you use a default. And the – basically what you're looking for is 95% of the population to have a blood lead level less than 10 mg/dL and basically that's 500 parts per million [soil concentration].¹²²

[W]e want the risk to be one excess cancer case, meaning above normal cancer rates, one excess cancer case per million people. So the target is typically one in a million. The calculations include such things as body weight, how long the person lives on the site, they make assumptions like they live on the site, they do certain things, they're exposed to dust, and they inadvertently eat a little of the dirt over a thirty year period, being there eight hours a day and this kind of thing . . . It uses a 30 year timeline, called the averaging time.¹²³

TION OF NATIONAL PRIORITIES LIST SITES (1989); U.S. E.P.A., "DALLAS LEAD" DOCUMENTATION RECORDS FOR HAZARD RANKING SYSTEM (1982).

¹¹⁹ United States Env'tl. Prot. Agency, RSR Corporation Factsheet (May 27, 1993).

¹²⁰ Interview with Carlos Sanchez, *supra* note 67.

¹²¹ U.S. E.P.A., RSR CORPORATION SUPERFUND SITE PROPOSED PLAN: OPERABLE UNIT 1 (Nov. 18, 1994).

¹²² Transcript of Hearing Before the Hon. Judge Buckmeyer, *supra* note 72 at 27.

¹²³ Interview with Texas Natural Resource Conservation Commission Official, *supra* note 60.

With these assumptions in mind, the EPA began sampling and remediating homes in Operable Unit 1 (single family residential).¹²⁴ Notice that the above assumptions are incompatible with the initial concerns of Coalition members, namely:

- The average member had already been exposed to more than 30 years of soil, dust, and water concentrations exceeding the calculations used for elevated population risk across the “averaging time”;
- The focus on “current site risk” ignores cumulative exposure across decades;
- Models for risk assessment do not account for the cumulative effects of a variety of toxins;
- Risk assessment only accounts for primary exposure pathways. The EPA ignored contaminated dust, lead washed under homes, and other sources of long-term exposure;¹²⁵

The focus on blood lead levels in children encourages a reduction in soil concentrations to an amount suitable for acceptable health risks *assuming* that higher risks were not prevalent before the soil remediation. Again, it should be noted that more than 95% of the total lead in the body of an adult is stored in the bone marrow. Tests of blood lead do not account for these concentrations, which are released into the blood stream under periods of stress.¹²⁶

A number of Coalition members resisted the EPA's attempts to clean up their yards, based on the belief that such actions would not address their exposure over time and would discourage any attempts at relocation.¹²⁷ Indeed, CERCLA does not authorize the EPA to purchase properties that have been “successfully” cleaned up.¹²⁸ However, Coalition calls for more effective soil remediation and blood lead level screening were more compatible with the EPA's approach to risk assessment than to the objectives of their own membership. Remedial actions ended in November

¹²⁴ EPA *Successfully Completes Home Sampling Study*, SUPERFUND NEWSLINE (U.S. E.P.A. Region 6), Winter 1993-94, at 1-3.

¹²⁵ U.S. E.P.A., RSR CORP. SUPERFUND SITE FACT SHEET, RECORDS OF DECISION: OPERABLE UNIT NO. 1, OPERABLE UNIT NO. 2 at 6-19 (May 10, 1995).

¹²⁶ Lead Toxicity, *supra* note 85.

¹²⁷ RSR CORPORATION SUPERFUND SITE PROPOSED PLAN OPERABLE UNIT 1, *supra* note 121. A number of interviewees also described their refusal to allow EPA officials on their property for the above reasons.

¹²⁸ RSR CORPORATION FACTSHEET, *supra* note 119.

1994 after cross-sectional comparisons of OU1 and a control area yielded “no significant differences” in blood lead levels.¹²⁹

The focus on scientific testing (particularly blood lead) also influenced City Council and surrounding community actions. In fact, the only substantive action committed by the Council in response to *WDCEJ v. EPA* was to endorse a broader cleanup (including neighboring Cadillac Heights) with more stringent target levels for soil concentrations (250 parts per million), policies which were never implemented.¹³⁰ No efforts have been made to rezone parts of West Dallas or encourage stricter enforcement of public and environmental health ordinances.

In August, 1995, residents in Cadillac Heights began to press for similar pollution cleanup provisions.¹³¹ TNRCC tests linked lead from National Lead and Dixie lead smelters to elevated lead levels in the soil of neighboring residences.¹³² Shirley Garcia, head of the Cadillac Heights Neighborhood Association, suggests that it was Coalition President Sepulveda who galvanized the neighborhood in response to environmental concerns.¹³³ The residents of Cadillac Heights have continued to fight a turn of events similar to those experienced in West Dallas, including failure by Texas and federal officials to address hazardous materials dumped throughout the community or accumulations of lead dust in homes.¹³⁴ Residents are now calling for a relocation plan in light of controversial removal actions funded by National Lead and Dixie Metals owner Exide Technologies.¹³⁵

Table 1 summarizes the secondary effects of *WDCEJ v. EPA*.

Coalition behavior following the choice of a legal strategy illustrates the mechanisms through which a chosen functional alternative can be reinforced over time. The emergence of a mental

¹²⁹ U.S. E.P.A., EPA Proposes Deletion of Residential Areas from NPL: RSR Corporation Superfund Site Operable Unit Nos 1 & 2 (Apr. 9, 1996) (flyer released on April 9, 1996 by the EPA).

¹³⁰ Randy Lee Loftis, *Rain Forces Delay in Lead Cleanup in West Dallas*, DALLAS MORNING NEWS, Dec. 27, 1991, at 23A.

¹³¹ Audrey Steinbergen Lundy, *Residents Unite Over Lead Cleanup: W. Dallas Activist Joins Cadillac Heights Effort*, DALLAS MORNING NEWS, Aug. 8, 1995, at 16A; Audrey Steinbergen Lundy, *Shouting Disrupts Meeting About Lead Contamination: Cadillac Heights Residents, Lawmaker Tangle*, DALLAS MORNING NEWS, Aug. 10, 1995, at 27A.

¹³² Lundy, *Residents Unite*, *supra* note 131 at 16A; Lundy, *Shouting Disrupts Meeting*, *supra* note 131 at 27A.

¹³³ Lundy, *Residents Unite*, *Supra* note 131.

¹³⁴ Randy Lee Loftis, *Neighbors: Lead Not Cleaned Up – State Maintains That Smelter Site is No Longer a Threat*, DALLAS MORNING NEWS, Sept. 12, 2001 at 33A.

¹³⁵ *Id.*

TABLE 1. THE SECONDARY EFFECTS OF *WDCEJ v. EPA ET AL.*

Secondary Effect	Description	Impact on the Organization
Organizational	Dominance of mental model favoring scientific evidence over cumulative exposure stories.	Coalition focused on soil and blood lead level testing.
	Breakdown in social networks; decreased activity (i.e., protests, petitions, lobbying officials).	Increased reliance on communication with legal staff; membership eventually accounted for through legal documents; belief that "all is proven" scientifically.
Legal/Scientific	Blood lead level testing	Primacy of scientific testing over narrative accounts of cumulative exposure leads to discovery of clusters of children with elevated BLL around Refinery Casting Co. and within Dallas Housing Authority.
	<i>Walker v. HUD</i>	
	<i>Jackson v. Lott and Refinery Casting Co.</i>	
	<i>Thompson v. Raiford</i>	
Political	Influence over emergency cleanup. Weekly reports to court. Removal of contaminated soil from RSR batch house. RSR site designation changes.	Focus on temporary storage at batch house and the categorization of soil as hazardous through testing encourages city council to call for more stringent soil lead concentration standards, test and cleanup facilities in East Dallas. No actions taken to address cumulative exposure or haphazard zoning in West Dallas.
	City council action. Cleanup of city playgrounds in East Dallas. Request that soil concentration standards be lowered to 250 parts per million.	
Community	Community organizing in neighboring Cadillac Heights: <i>Miller v. City of Dallas</i>	Community leaders adopt similar blood lead screening programs in order to gather evidence for suits against the owners of two lead smelters in Cadillac Heights and the City.

model favoring scientific evidence over cumulative exposure stories was encouraged by changes within the organization as well as by the legal strategy that was adopted. Increased reliance on communication with legal staff and a corresponding belief that "all is proven" precipitated a breakdown in the social networks that had constituted much of the Coalition's membership. Trial-and-error learning, including knowledge of previous legal settlements, encouraged local residents to coordinate their activities with those of the legal staff in order to access expected benefits from litigation. However, a disconnect between Coalition leadership, mem-

bers, and residents was fueled in part through greater acceptance of scientific rationality by the former group. Coalition members allocated decreasing amounts of attention to potential sources of cumulative exposure to toxic chemicals or to strategies other than litigation (some of which were commonly employed prior to the use of litigation), even as their assessment of the use of litigation grew increasingly negative. As members learned how to participate in legal action through the filing of court documents and participation in court-ordered testing, the perceived benefits of conformance with this strategy increased, and local residents adapted accordingly.

Arguably, the predominance of scientific testing and evidence following a crisis period is a mere extension of the Coalition's historical development. Indeed, soil, dust, and water samples were taken on several occasions during the initial stages of the Coalition's development, and they were used quite effectively to garner media attention and locate potential exposure pathways. Still, the organization's use of such techniques intensified to the detriment of previously viable and successful organizing strategies, following the decision to litigate. This shift can be traced directly to changes in the Coalition's capacity to adapt to and manipulate its environment. More important, the reliance of the Coalition on scientific evidence did not continue year after year. Rather, it subsided and all but disappeared following the partial deletion of residential areas of West Dallas from the National Priorities List and the dismissal of the CERCLA claims in *WDCEJ v. EPA*. As the influence of legal and scientific agencies in the Coalition's decision-making environment subsided, the group renewed efforts to meet their initial objectives of addressing the cumulative risks posed by haphazard zoning and lack of environmental controls in West Dallas.

On April 9, 1996, the EPA announced that it would remove residential areas from the National Priorities List, claiming that "response actions are complete and no further cleanup is necessary."¹³⁶ *WDCEJ v. EPA* lingered in the courts until 1998, when the United States District Court for the Northern District of Texas dismissed the case's CERCLA claims.¹³⁷ Coalition attorneys credit

¹³⁶ EPA PROPOSES DELETION OF RESIDENTIAL AREAS FROM NPL: RSR CORPORATION SUPERFUND SITE OPERABLE UNIT NOS 1 & 2, *supra* note 121, at 1.

¹³⁷ *West Dallas Coalition for Envtl. Justice v. United States*, No. 3:91-CV-2615-R, 1998 WL 892122, at *2 (N.D. Tex. Dec. 14, 1998) (dismissing CERCLA claims for failure to give proper notice in accordance with 42 U.S.C.A. § 9659(d)(1) (1995)).

the case with encouraging the EPA to remove hazardous soil from the RSR site.¹³⁸ Indeed, Judge Buckmeyer asked for the EPA to submit weekly progress reports and “made it very clear to the EPA that he wanted the soil out of RSR on no uncertain terms.”¹³⁹ Thus, by 1998, the soil had been removed and transferred to a hazardous waste storage facility offsite.¹⁴⁰ The Coalition was allowed to amend its complaint to clarify that its claims were not site-specific, and the Plaintiff’s Second Amended Complaint, including the original claims of environmental racism, is undergoing its fifth motion to dismiss.¹⁴¹

In 1996, a group of Coalition members protested the issuance of a permit renewal for an industrial waste storage and processing facility in West Dallas, owned by Heat Energy Advanced Technology, Inc (H.E.A.T.).¹⁴² The TNRCC denied the Coalition’s request for a hearing.¹⁴³ The Coalition appealed to the District Court and was granted the right to a hearing.¹⁴⁴ H.E.A.T. and the Coalition settled out of court, whereby the company agreed to decrease the number of gallons of hazardous waste that it would process, incorporate clean-up and disposal services, and hire a certain proportion of workers from the surrounding neighborhood.¹⁴⁵ Following the H.E.A.T. case, the Coalition renewed its efforts to target a variety of industrial land uses (such as Texas Industries and the Grand Prairie Urban Sewer Plant), basing its evidence on stories of cumulative exposure.

The main thing the residents complained of was the odors coming from the [H.E.A.T.] plant were fairly severe, make your eyes water, make you cough. Their kids, they were concerned about them and their health. They just found it to be a clear threat. Those odors were not just, you know they were fumes, they were just concerned about that. They

¹³⁸ Interview with Attorney B, *supra* note 89.

¹³⁹ Interview with Attorney A, *supra* note 61. See also Transcript of Hearing Before the Hon. Judge Buckmeyer, *supra* note 72 at 107.

¹⁴⁰ *West Dallas Coalition for Env'tl. Justice v. United States*, *supra* note 137.

¹⁴¹ Plaintiffs’ Second Amended Complaint and Complaint in Intervention, *W. Dallas Coalition for Env'tl. Justice v. United States* (N.D. Tex. Mar. 25, 1999) (No. 3-91-2615-R).

¹⁴² *Heat Energy Advanced Tech., Inc. v. W. Dallas Coalition for Env'tl. Justice*, 962 S.W.2d 288, 290 (Tex. App. 1998); Telephone Interview with Attorney C, West Dallas Coalition for Environmental Justice (Mar. 22, 2000).

¹⁴³ *Heat Energy Advanced Tech., Inc.*, 962 S.W.2d at 290; Telephone Interview with Attorney C, (March 22, 2000).

¹⁴⁴ *Heat Energy Advanced Tech., Inc.*, 962 S.W.2d at 290; Telephone Interview with Attorney C, *supra* note 143.

¹⁴⁵ Telephone Interview with Attorney C, *supra* note 142.

felt like they were being poisoned by this company . . . And they were concerned because they get the hazardous waste in barrels, big 55 gallon drums, and they throw them on the ground, and that's the reason they smell so bad, and they look over and they see all this stuff laying around, they obviously have concerns about it seeping into the groundwater. But concern is one thing. When you can't even walk outside, that's another.¹⁴⁶

There's a cement plant south of Dallas that a lot of the group was involved with as well, just to bring awareness that we don't need another cement burning kiln close to the city, especially affecting the air quality. This was back before we started hearing the EPA and all of these other people talking about tagging cities with penalties for having bad air. It was Texas Industries. They basically turned their cement kiln into burning garbage. The environmental coalition opposed it, just trying to get the cities to pass ordinances to oppose their licensing by the state. TNRCC gave back a report that was inconclusive. But what did come to pass was that Congress passed stricter standards and under those standards, I don't think anybody is really going to be looking to open cement kilns for burning garbage anytime soon in West Dallas.¹⁴⁷

The dismissal of *WDCEJ v. EPA's CERCLA* claims lessened the Coalition's focus on discrete scientific testing and evidence.

DISCUSSION

For decades a symbol of neglect by industry and agency officials, the RSR smelter smokestack (in addition to smelter site buildings) has finally been removed, brick by brick, from the West Dallas skyline. This development followed the approval of a consent decree between the federal government and eight principally responsible parties associated with the site.¹⁴⁸ Although the property lies dor-

¹⁴⁶ *Id.*

¹⁴⁷ Telephone Interview with Member, Dallas City Council, *supra* note 61; City of Dallas, Official Action of the Dallas City Council (Feb. 11, 1998) (requesting that the TNRCC ensure that the Clean Air Act attainment status of the Dallas-Fort Worth metropolitan area be considered in the hearing on TXI Operations, L.P.'s pending permit application).

¹⁴⁸ U.S. E.P.A. Region 6, RSR Corp. (Murph Metals) Site Description (Nov. 8, 2001); Kendall Anderson, *Lead Smelter set to be Demolished: Settlement Clears Way for Removal of Longtime West Dallas Structure*, DALLAS MORNING NEWS, June 23, 2000, at 27 A; Randy Lee Loftis, *Down to Earth: Crews to Begin Demolishing Old Lead Smelter Smokestack*, DALLAS MORNING NEWS, Jan. 8, 2001, at 1A.

mant¹⁴⁹, countless industries remain in operation in West Dallas, scattered among single-family homes. The Coalition has come full circle, with renewed smaller-scale efforts to oppose industry permit renewal applications. Luis Sepulveda, now serving as Justice of the Peace, also continues to lead a variety of neighborhood improvement efforts and serve as a voice for change.¹⁵⁰ Residents and experts alike continue to question the utility of soil remediation efforts, and relocation demands remain high.¹⁵¹ The legacy of the Coalition's decision to adopt a legal strategy remains, providing a number of important lessons for attorneys, policy analysts, and community organizers alike:

The Coalition evidenced a number of characteristics that made it prone to increasing reliance on scientific testing and evidence when it adopted a formal legal strategy. As attention shifted to scientific evidence, the use of resident stories of health effects and long-term exposure diminished;

Organizational characteristics included fluid participation, resource constraints, and an approach to data gathering and problem definition which undercut the true value of resident stories about cumulative exposure. These characteristics interfered with or discouraged evaluation of the utility of previous decisions;

¹⁴⁹ The EPA selected the site for a Superfund Redevelopment Pilot, through which \$100,000 will be devoted to activities aimed at identifying community needs and ranking potential future uses for the site. United States Env'tl. Prot. Agency Office of Emergency and Remedial Response, SUPERFUND REDEVELOPMENT PILOTS: RSR CORPORATION, DALLAS, TX (July, 2000).

¹⁵⁰ Sepulveda called for an independent audit of environmental health concerns in West Dallas, a demand that has been echoed by the area's State Representative. Rick Klein, *Lingering Legacy: Residents Concerned Lead, its Effects will Remain After Smelter Dismantling*, DALLAS MORNING NEWS, July 23, 2000, at 1A. Sepulveda has also led numerous neighborhood cleanup efforts in addition to his work with delinquent youths and educational initiatives. *Volunteers Wanted for West Dallas Project*, DALLAS MORNING NEWS, Aug. 7, 2001, at 2Y (seeking volunteers for cleanup of the corner of Singleton Boulevard and Bernal Drive); *Metro Plus Briefs*, DALLAS MORNING NEWS, July 24, 2001, at 1Y (mentions Sepulveda leading a cleanup of streets and alleys in the Cadillac Heights community).

¹⁵¹ *Lingering Legacy*, *supra* note 150 (citing concerns about attic dust in homes, grassy areas between streets and sidewalks, and soil lead concentrations in yards neglected by the EPA's sampling protocol, which results in a cleanup action only when an average of five samples exceeds federal standards). An environmental lawyer, uninvolved in previous litigation, is attempting to file a relocation lawsuit on behalf of thousands of residents. *Id.* There is also movement on litigation against Intertek Testing Services Environmental Laboratories for bypassing procedures needed to ensure reliable results of soil lead levels in West Dallas. U.S. Dep't of Justice, Environmental And Natural Resources Division, For Immediate Release (Sept. 21, 2000); Todd Bensman, *Lab Fraud Trial to Proceed - Defense Denies Claims of Greed, Unreliable Testing of Pollutants*, DALLAS MORNING NEWS, Oct. 10, 2001, at 23A.

Historical processes, such as previous legal victories concerning childhood lead poisoning, a decision to store contaminated soil at the RSR facility, and the declaration of a Superfund site served to build a reliance on scientific rationality and on evidence ill-suited for the airing of Coalition member grievances.

Organizations are often responsible for shaping the long-run paths traveled by their constituents. They facilitate interactions within complex environments where the benefits of collective behavior are multiplied.¹⁵² At the same time, organizations can produce unintended consequences through incentives that dictate the kinds of coordinated behavior perceived to have the maximum pay-off. Evidence from West Dallas suggests that informal environmental justice organizations are susceptible to the coordination of routines, trial-and-error learning, and lack of feedback mechanisms that direct collective behavior down potentially sub-optimal paths. These processes make it difficult for organizations to move in different directions, particularly when tangible benefits are evident to legal representatives (i.e., value-added to the *Walker* case, use of testing to initiate further litigation).

The increasing returns process described above progressed through several stages, suggesting the importance of an organization's characteristics and decision-making environment, as well as the role of history. The importance of history is evident in the development of alternative trajectories prior to the Coalition's decision to litigate, including the use of scientific testing and cumulative exposure stories by Coalition members. A period of crisis following the EPA's decision to store lead-contaminated soil at the RSR site led to a "critical juncture" where the Coalition decided to proceed with a legal strategy. Critical junctures are periods, either brief or extended, that produce distinct legacies.¹⁵³ They produce increasing returns in that a critical juncture period establishes one or more distinct trajectories that are maintained and followed. A historical trajectory, such as reliance on scientific evidence, is established as a functional alternative that fulfills a group need.¹⁵⁴ Beyond this point, the functional alternative, created by previous

¹⁵² Douglass C. North, *Institutions and Credible Commitment*, 149 J. OF INSTITUTIONAL AND THEORETICAL ECON. 11. (1993).

¹⁵³ RUTH BERINS COLLIER & DAVID COLLIER, *SHAPING THE POLITICAL ARENA* 27 (1991). See also Andrew Abbott, *On the Concept of Turning Point*, 16 COMP. SOC. RESEARCH 85, 88-95 (1997).

¹⁵⁴ ARTHUR L. STINCHCOMBE, *CONSTRUCTING SOCIAL THEORIES* 103-106 (1968).

historical causes, *becomes its own cause*, resulting in a selective maintenance of organizational structures amenable to its continued existence.¹⁵⁵

While historic processes were vital in the creation of multiple paths from which one trajectory was established, the learning and adaptive behavior styles evidenced within the Coalition suggest that organizational characteristics and client expectations served to reinforce the increasing returns process that followed. Internal reinforcement of the use of litigation was facilitated by the organization's use of trial-and-error learning and lack of continued organizational search for alternative strategies. Trial-and-error learning encourages increasing returns as group members improve their competencies with frequently used procedures.¹⁵⁶ Knowledge of the success of previous litigation, for instance, can lead an organization to accumulate more experience with it, decreasing the likelihood that it will have sufficient experience with superior procedures to make them rewarding. The coordination of members to the expected benefits of scientific testing decreased the Coalition's search for other routines. Resource constraints also heightened reliance on legal representation and discouraged the proper evaluation of negative feedback regarding its utility. The Coalition lacked sufficient resources and communications channels to keep track of its changing membership or to apply their talents to various means of meeting organizational objectives. Participants varied in the amount of time and effort that they could contribute to the Coalition, and defined group objectives differently (for example, the order of importance for soil remediation, resident relocation, and comprehensive planning changes varied from member to member and across time). Groups with the above resource constraints tend to focus on the *allocation of attention* in terms of the amount of time that members devote to various tasks, as opposed to the monetary allocation concerns of more formal organizations.¹⁵⁷ Changing patterns of available time and energy will influence an organization's investment in and continuance with one over a set of competing historical trajectories.¹⁵⁸ When transaction costs in the form of time allocated are significant, or when informa-

¹⁵⁵ *Id.* at 105.

¹⁵⁶ See Barbara Levitt & James G. March, *Organizational Learning*, 14 ANN. REV. OF SOC. 319, 322 (1988).

¹⁵⁷ See Michael D. Cohen et al., *A Garbage Can Model of Organizational Choice*, 17 ADMIN. SCI. Q. 1, 2 (1972).

¹⁵⁸ *Id.* at 1.

tion feedback regarding the appropriateness of chosen trajectories is fragmentary at best, even potentially inefficient decisions will be reinforced.

External reinforcement from government and legal assistance agencies amenable to scientific testing and evidence also contributed to the increasing returns process. For the Coalition, increasing returns in the form of expected benefits from the use of scientific evidence was heightened by an existing infrastructure of EPA regulations and norms of civil procedure. Risk assessment procedures endorsed by the EPA privileged efforts to focus on the present toxicity of soil to be excavated and "current site risk," rather than indicators of cumulative exposure to lead and other toxins by residents. Legal representatives, rationally seeking to bolster the effectiveness of their claims, also focused on tried and true methods of exposing resident harm. Blood lead level testing and other techniques were effectively employed, although they failed to capture the totality of resident experiences and demands.

Client expectations also appear to have played a vital role in disrupting the increasing returns process in the late 1990's, allowing a new equilibrium to emerge. As stated, the Coalition's primary allocation resource was attention in the form of time increments devoted to various tasks. The problem with time in a situation that requires its investment is that there are "no natural points of decision about whether to continue that line of investment."¹⁵⁹ Community organizations whose primary responsibility is to allocate time are more prone to overcommitment to a strategy as they have no objective criteria for measuring the effectiveness of time committed or when time has begun to prove more useful if shifted to other tasks. In order to avoid such a psychological trap, it is necessary to encourage periodic appraisal of a process in which time is invested.¹⁶⁰ Decisions external to the Coalition in the late 1990s, such as the deletion of residential neighborhoods from the National Priorities List or the dismissal of the Coalition's CERCLA claims, provided such a means of appraisal. These events marked the first real opportunity for the Coalition to compare time

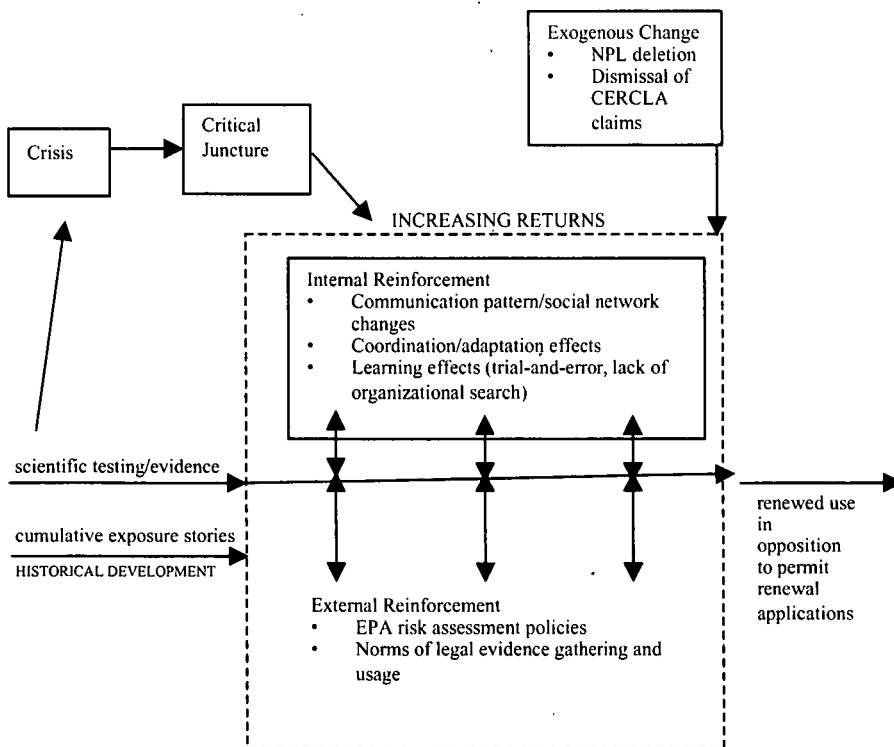
¹⁵⁹ DEAN G. PRUITT & JEFFREY Z. RUBIN, *SOCIAL CONFLICT: ESCALATION, STALEMATE, AND SETTLEMENT* 124 (1986); See generally, Jeffrey Z. Rubin et al., *Factors Affecting Entrapment in Escalating Conflicts: The Importance of Timing*, 16 J. OF RES. IN PERSONALITY 247, 255 (1982); Joel Brockner, *The Escalation of Commitment to a Failing Course of Action: Toward Theoretical Progress*, 17 ACAD. OF MGMT. REV. 39 (1992) (provides an overview of the factors which can encourage an escalation of commitment, including cognitive, interpersonal, group-level, and organizational processes).

¹⁶⁰ *SOCIAL CONFLICT*, *supra* note 159.

invested in a legal strategy with a lack of associated benefits. Prior to these events, local residents could not as easily contrast expectations of perceived benefits from litigation with time commitments devoted to a legal strategy. Environmental lawyers should consider their role in ensuring the ability of client-organizations to conduct evaluations of their investments of limited resources in a litigation process, through the maintenance of social networks and communication between and among group members and their attorneys.

The increasing returns process¹⁶¹ experienced by the Coalition is illustrated below:

FIGURE 1. INCREASING RETURNS PROCESS FOR THE WEST DALLAS COALITION FOR ENVIRONMENTAL JUSTICE.



As environmental justice organizations adopt legal strategies throughout the country, the present research suggests that the incentives for doing so are many and varied. While the choice of

¹⁶¹ This process is an adaptation of the Critical Juncture Framework developed in COLLIER & COLLIER, *supra* note 153, at 30.

litigation by the West Dallas Coalition for Environmental Justice has yielded a number of positive outcomes for local residents, cumulative exposure and the need for resident relocation, two of the driving forces behind the initial building of social networks in 1989-90, remain unaddressed. The compromising of strategies such as long-term exposure stories by an increasing returns process accounts for much of the variation in the "secondary effects" of the lawsuit. As legal scholars and local activists debate the utility of legal claims, the case of the West Dallas Coalition suggests that failure to consider the characteristics of client organizations, their expectations, or the paths that they could traverse *prior to* the adoption of a legal strategy may prove irresponsible at best.

APPENDIX A
TABLE 2. OVERVIEW OF EQUAL PROTECTION CLAIMS OF
ENVIRONMENTAL INJUSTICE.

Case	Cause of Action	Potential Remedy	Outcome
Harrisburg Coalition Against Ruining the Env't v. Volpe, 330 F.Supp. 918, 932 (M.D. Pa. 1971).	Proposed highways denied black residents equal opportunities to housing and recreation. Siting of highways through a park motivated by the predominant use of the park by black residents.	Sought to enjoin construction of the two highways.	Civil rights claims denied due to insufficient evidence of either discriminatory intent or impact. Parties entered into an amicable settlement, whereby highways were realigned.
Bean v. Southwestern Waste Management Corp., 482 F.Supp. 673, 676-81 (S.D. Tex. 1979), <i>aff'd</i> , 780 F.2d 1038 (5th Cir. 1986)	Proposed solid waste disposal facility near a predominantly black neighborhood and within 1700 feet of a high school was part of a pattern and practice of discriminatory siting.	Sought to enjoin siting of the solid waste disposal facility.	Denied preliminary injunction because statistical data did not prove that siting decision was made on the basis of race.
NAACP v. Gorsuch, No. 82-768-CIV-5 (E.D.N.C. 1982), <i>cited in</i> Maura L. Tierney, Comment, <i>Environmental Justice and Title IV Challenges to Permit Decisions: The EPA's Interim Guidance</i> , 48 <i>CATH. U. L. REV.</i> 1277, 1279 (1999)	Siting of a PCB disposal facility in the county with the highest percentage minority residents in North Carolina violates the 14th Amendment.	Sought preliminary injunctive relief.	Denied. "Little likelihood that plaintiffs will prevail on the merits." No evidence that race was the motivating factor in official decision making.
Lever v. Rapp, 760 F.2d 280 (6th Cir. 1985).	City manager and public works director of Flint, MI engaged in conspiratorial policy to allow pollution from a GMC plant to disproportionately harm residents of predominantly black housing project (St. Johns neighborhood).	Sought injunctive relief.	No grounds for construing actions as intentional discrimination; city met federal air pollution standards prior to established deadlines (including St. Johns area).
Terry Properties, Inc. v. Standard Oil Co., 799 F.2d 1523, 1533-36 (11th Cir. 1986).	Residential developers of 30 single-family homes and six apartment buildings claim that the location of an industrial plant adjacent to their property and rerouting of a road violated the 14th Amendment.	Sought injunctive and declaratory relief; compensatory and punitive damages.	Most claims disposed of through summary judgment; no evidence of discriminatory intent; as private actors, liability for 14th Amendment violation only through conspiracy with state actors.

TABLE 2. CONTINUED

Case	Cause of Action	Potential Remedy	Outcome
East Bibb Twiggs Neighborhood Ass'n v. Macon-Bibb County Planning and Zoning Comm'n, 706 F.Supp. 880, 887 (M.D. Ga. 1989), <i>aff'd</i> , 896 F. 2d 1264, 1267 (11th Cir. Nov. 30, 1989).	Local zoning board decision to permit the location of a privately owned landfill in predominantly black community motivated by considerations of race, resulting in denial of substantive/procedural due process, a taking without just compensation, and denial of equal protection of the law.	Sought to enjoin the granting of a conditional use permit for non-putrescible waste landfill.	Denied. Evidence of disparate impact relied on decisions of local authorities other than zoning board. No evidence of racial animus provided.
Bordeaux Action Comm'n. v. Metro. Nashville, No. 390-0214 (M.D. Tenn. 1990), <i>cited in</i> Luke W. Cole, Correspondence, <i>Remedies for Environmental Racism: A View From the Field</i> , 90 MICH. L. REV. 1991, 1992 (1992).	Improper operation and oversight of a garbage dump in a 70% black community violated the equal protection clause of the 14th Amendment.	Sought preliminary injunction.	Denied.
El Pueblo Para El Aire y Agua Limpio v. Chemical Waste Management, No. CV-F-91-578-OWW (E.D. Cal. 1991), <i>cited in</i> Luke W. Cole, Correspondence, <i>Remedies for Environmental Racism: A View From the Field</i> , 90 MICH. L. REV. 1991, 1992 (1992).	Siting of a toxic waste incinerator in a predominantly Latino farmworker community furthered CWM's pattern and practice of siting incinerators in communities of color nationwide.	Sought injunctive relief.	Dismissed on grounds of ripeness (CWM did not have all required permits); due process violation claim held in abeyance pending final judgment in related case.
R.I.S.E., Inc. v. Kay, 768 F.Supp. 1144, 1149-50 (E.D. Va. 1991), <i>aff'd</i> , 977 F.2d 573 (4th Cir. 1992).	Siting of regional landfill in a majority black neighborhood in addition to the operation of the county's three garbage dumps in predominantly black areas marked a deprivation of 14th Amendment rights.	Sought to enjoin the siting of the regional landfill.	Denied. Equal protection clause does not impose an affirmative duty to equalize the impact of official decisions on different racial groups.
Bowman v. City of Franklin, 980 F.2d 1104, 1110 (7th Cir. 1992).	Installation of a sewer line through the Bowmans' property marked a violation of 14th Amendment rights.	Sought injunctive and monetary relief.	District Court dismissed all counts; Appeals Court affirmed.

TABLE 2. CONTINUED

Case	Cause of Action	Potential Remedy	Outcome
Rozar v. Mullis, 85 F.3d 556, 565 (11th Cir. 1996).	Racial discrimination (rejection of other sites due to white protests, addition of site in question to list despite unsuitable land characteristics, voting by all-white majority) in the siting and permitting of a solid waste landfill furthered a pattern and practice of placing landfills in minority areas	Sought damages, preliminary and permanent injunction of solid waste landfill.	Denied due to time-barred nature of the claim (equal protection claim accrued when plaintiffs knew or should have known about the siting decision); two year limitation period applied.

TABLE 3. TITLE VI ENVIRONMENTAL JUSTICE LITIGATION.

Case	Cause of Action	Potential Remedy	Outcome
Coalition of Concerned Citizens Against I-670 v. Damian, 608 F.Supp. 110, 129 (S.D. Ohio 1984).	Construction of an extension to Interstate 670 would have a disproportionate impact on minority citizens of Columbus; failed to involve the public.	Declaratory and injunctive relief.	Defendants presented non-discriminatory reasons for location; injunction until compliance with public involvement requirements.
North Carolina DOT v. Crest St. Community Council, Inc., 479 U.S. 6, 8, 9, 11 (1986).	Extension of East-West Freeway would destroy much of a predominantly black community including its park and church, leaving isolated sectors likely to undergo commercial development.	Injunctive relief.	DOT informed the state that construction would constitute a Title VI violation; negotiated settlement rerouted freeway.
Clean Air Alternatives Coalition v. U.S. DOT, No. C-93-0721-URW (N.D. Cal. 1993).	Siting of a freeway in Oakland, California would have a more negative impact on African-American neighborhoods.	Injunctive relief.	Settled.
Chester Residents Concerned for Quality Living v. Seif, 132 F.3d 925, 937 (3rd Cir. 1997).	Issuance of solid waste facility permit in predominantly black community marks the fifth waste facility permit for Chester since 1987.	Injunctive relief.	District Court found no private right of action; Appeals Court held private right existed; state revoked permit at issue.
NAACP-Flint v. Engler, 456 Mich. 919 (1997).	Michigan Dept. of Natural Resources' approval of permit for Genesee Power Station violated Title VI.	Injunctive relief.	Civil rights claim dismissed; plaintiffs moved for rehearing. Application for leave to appeal denied.

TABLE 3, CONTINUED

Case	Cause of Action	Potential Remedy	Outcome
South Bronx Coalition for Clean Air v. Conroy, 20 F.Supp. 2d 565, 573 (S.D.N.Y. 1998).	Proposed de-inking facility (36 acres) in Harlem River Yard and expansion of waste transfer facility will create disparate impact of noxious effects of garbage on minority residents of the South Bronx.	Injunctive relief.	Denied: must establish that injunction necessary to prevent irreparable harm, is likely to succeed on the merits.
Bryant v. New Jersey Dep't of Transp., 1 F.Supp. 2d 426 (D.N.J. 1998).	Siting of a highway and tunnel through predominantly black neighborhood would require condemnation and cause flooding, noise, and traffic, constituting a disparate impact.	Injunctive relief.	Defendant motions to dismiss (sovereign immunity and state eminent domain) denied; case on-going.
Goshen Road Env'tl. Action Team v. U.S. Dept. of Agric., No. 98-2102 (4th Cir. 1999).	Siting of a wastewater treatment facility in a predominantly black neighborhood violated Title VI and NEPA.	Preliminary and permanent injunction.	Summary judgment affirmed for defendants; no violation of Title VI where nondiscriminatory reason exists for a decision.
Tolbert v. Ohio Department of Transportation, 172 F.3d 934, 936 (6th Cir. 1999).	ODOT discriminated against the residents of Cherrywood apartment complex (predominantly black) in its allocation of highway sound barriers.	Equitable relief.	District Court's dismissal due to statute of limitations reversed; case on-going.
New York City Environmental Justice Alliance v. Giuliani, 50 F.Supp. 2d 250, 255 (S.D.N.Y. 1999), <i>aff'd</i> , 214 F.3d 65 (2d Cir. 2000).	City initiative to sell or destroy 1100 city-owned parcels comprising 600 community gardens will have a disparate impact on black/Latino communities.	Preliminary injunction.	Plaintiffs properly alleged irreparable harm but failed to demonstrate a likelihood of success on the merits. Motion denied.
Jersey Heights Neighborhood Ass'n v. Glending, 174 F.3d 180, 194 (4th Cir. 1999).	Siting of a new highway adjacent to predominantly black neighborhood would have a disparate impact on the community; DEIS/FEIS ignored SES data and impacts; inadequate notice of public meetings.	Injunctive relief.	Title VI claim is time-barred (court applied the state of Maryland's personal injury limitations period of three years to the claim); reversed District Court's dismissal of Association's NEPA challenges.



MAP OF WEST DALLAS

Operation Unit 1 includes almost all of the area displayed.

Operation Unit 3 includes other slag piles to the west of the area shown.

Boundaries are approximate and are intended to show the general location of operable units.