Power to the People? An Evaluation of State-Level Environmental Justice Policies

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A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy in Public Policy

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ABSTRACT

Communities of color in America lacking economical, educational, and political power have been largely invisible in the process of making major policy decisions. This is lack of access to decision-making venues has been viewed by many as the reason behind marginalized populations bearing the brunt of many societal burdens. The Environmental Justice Movement legitimized the claims of inadequate access to the decision-making process concerning environmental conditions in which African-Americans lived and worked. Through the use of disruptive actions reminiscent of those used throughout the Civil Rights Movement, the plight of communities plagued by the daily presence of hazardous waste gained national attention and gave way to political opportunities to address these concerns.

To date, Executive Order 12898 is the only government-stimulated action proposed at the federal level to correct this problem establishing an Office of Environmental Justice, an interagency workgroup, and establishing guidelines for each agency to include EJ principles into their overall mission and goals. More importantly, the order established a means for the exchange of information, placing great importance on the connectivity between communities and the decision-makers.

This study examines the relationship between government agencies and environmental justice communities to determine the extent to which various formal avenues of participation empower EJ communities to influence environmental policy decisions at the state-level. The journey begins as the evolution of the Environmental Justice Movement is presented to articulate elements essential to promoting empowering environments for the participation for diverse populations. An overview of individual state actions taken to comply with establishing
significant venues of participation provides the foundation of commonly used forms of citizen engagement for EJ communities. Analyses of Environmental Justice organizations via a national survey of EJ organizations determined that the inclusion of public values and the final outcome weigh heavily in determining efficacy when participating in formal structures of inclusion. However, these organizations reported spend most of their efforts in forms of engagement that fail to provide the best opportunities to influence final decisions.

The findings of this evaluation shed light on the methods and highlight possible deficiencies in the participation structures selected for this particular group. This study recommends future research in those areas to empower state environmental protection agencies and voiceless communities as they seek to achieve environmental justice for all.
ACKNOWLEDGEMENTS

Oswald Chambers defines perseverance as “…More than endurance. It is endurance combined with absolute assurance and certainty that what we are looking for is going to happen”. Many times on this journey that I did not know if I would make it. There were numerous mountains to climb and unforeseen obstacles that graced my path. Finances. Illness. Heartache. Heartbreak. Thankfully, after emerging from every valley and at the crest of every mountain, there were amazing people that encouraged me and provided shoulders to lean on that gave me a second wind. I am grateful to God for choosing me for this journey. I thank Him for the opportunity to live, learn, and serve the University of Arkansas & the community of Northwest Arkansas for this season. Thank you for ordering my steps and watching over me so lovingly. Your plan for me is good. Nana & Pa-Pa, thank you for the work ethic that you taught and the spiritual covering you’ve provided all these years. I am honored to be apart of such an amazing family with a strong legacy of love. I pray for an enduring love like yours. You are the wind beneath my wings. To my Mommy who has educated me both in the classroom and the school of hard knocks. Thank you for always being my biggest cheerleader and prayer warrior. I love you more than words. Thank you! To my Uncle, Dr H. James “Spenny” Williams, thank you for the summers when you took me to classes you taught at Winston-Salem State University and sharing your love of education. To my sister Pamela, thank you for your continued support, friendship, and listening ear. You bless me more than you know. To my brother Ben, thank you for your courage and heart to serve and protect our country and our family. You are my hero. To NeCole Whitehead, you are my sister in Christ & the Academy. Thank you for your encouragement. I’ll be cheering you on until you walk across that stage! Finally, to my dissertation chair, Dr Schreckheise, thank you for your understanding, guidance, and seeing me through.
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CHAPTER 1: INTRODUCTION TO THE STUDY

Introduction

As a unique blend of the Civil Rights and Environmental movements, Environmental Justice (EJ) activists viewed these converging social issues as the manifestation of political and economic powerlessness attributed to decades of disenfranchisement (Bullard 2000; Cole & Foster 2001). Leaders of both movements, having parallel demographic makeup and platforms, developed strategies designed to overcome many years of social and political inequity. These strategies would require the formation of new coalitions, which emphasize education on agenda setting for marginalized populations, the increase of grassroots organizing, and the creation of opportunities for active involvement in the political and economic arenas. All of these things would be done in the hopes of the movement’s members gaining a greater impact on decisions that affected the lives of groups marginalized from the decision making process (McGurty 2000; Roberts 1999; Warren 2001).

To reach goals, representatives for the First National People of Color Environmental Leadership (NPOCEL) Summit met October 24, 1991, in Washington DC. This meeting was the first official act institutionalizing the new coalition whose members had a shared goal of propelling environmental justice into the forefront of national policy (Bullard 2000). The NPOCEL summit produced 17 Principles of Environmental Justice (See Appendix A) that united the more than 250 grassroots organizations in an act of political solidarity against the disproportionate exposure of marginalized populations to hazardous waste. These principles outlined the collaborative values and official stance that participating organizations would use to establish platforms for the enforcement of environmental equity. The language used to present
this united front attributes the disproportionate exposure of marginalized groups to hazardous materials as the failure of government to protect vulnerable populations (minorities, children, aging adults, and the economically challenged) from environmental hazards. The principles articulate specific demands that protection of these vulnerable populations be extended through policy formation and reformation, policy enforcement, and implementation of the precautionary principle. This principle supposes, “in situations where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation” (Sampson 2000, 60). Standing on this principle, the EJM urges that precautionary means be extended to include environmental and public health of marginalized groups faced with potential exposure to hazardous materials.

The failure of governing bodies to include precautionary methods in the zoning of facilities maintaining and emitting hazardous waste serves to present a paradox of justice. This contradiction delays the protection of the communities most vulnerable to be chosen as sites to house Locally Undesirable Land Uses (LULUs). One of the strategies promoted to abate environmental inequities to be found in the movement’s declaration of environmental rights is the need for affected communities to become actively involved in the democratic process (Bullard et al. 2007). The principle of community involvement adopted by summit attendees articulates a key element responsible for the impact that the movement has had on decision-making structures across the nation. Principle number seven specifically demands the right of vulnerable communities “to participate as equal partners at every level of decision-making, including needs assessment, planning, implementation, enforcement and evaluation” (NPOCEL 1999).
The Problem Statement

Limited research has been conducted examining the impact of public participation on environmental justice groups. The central problem addressed in this study is the perceived efficacy and overall satisfaction groups maintain as a result of their participation in state sponsored inclusion methods.

Purpose of the Study

This dissertation examines the extent to which state environmental justice programs empower traditionally marginalized groups through the decision-making process. In particular the researcher will examine public participation methods employed across the United States at the state-level to answer two questions: What elements of public participation structures are most impactful in the perception of empowering participants to influence the environmental decision-making process? Which methods of inclusion are most satisfactory to the participants?

The overall objectives of this dissertation are:

1. To present an overview of the emergence of the environmental justice movement;
2. Identify the need for public participation in addition to the methods most appropriate for the cultural inclusion of affected communities into the environmental decision-making process suggested by literature;
3. Investigate the relationship between the participation of economically and politically marginalized communities in environmental decision-making and the entities charged to assist them in environmental protection; and to
4. Identify the level of engagement in these methods and to gauge the corresponding perceived efficacy by groups in the affected communities.
Examining the effectiveness of state-level efforts to ensure participation in decision-making will assist in accomplishing these goals. Focusing on the inclusion of marginalized populations at the state level allows us to examine varied levels of engagement employed across the nation, evaluate deviations in the different predictors of the levels of engagement, and use the states as the laboratories of democracy wherein they provide opportunities to inform and improve federal efforts (Gray and Hanson 2008).

**Scope and Organization of the Study**

This dissertation research design utilizes quantitative methods to determine group perceptions of the methods employed to include them in state-level environmental decision-making data was collected on the level of group engagement and elements essential to empowering environments. The study is organized into five chapters. In chapter two, a summary of the literature related to environmental justice policy that is consistent with the basis of this evaluation. The literature will include studies that address environmental justice as a social movement and a wicked problem, the theoretical frameworks for public participation and the need for evaluation, and also include independent variables related to this dissertation, along with policy approaches related to that issue.

Chapter three details the methods used for data collection and analysis. Additionally, in chapter three, the researcher will outline the data sources that form the basis of the evaluation. In chapter four findings will be analyzed. Chapter five, will summarize the findings of the study, discuss limitations, and outline areas of future research.
CHAPTER 2: LITERATURE REVIEW

Introduction

The purpose of this chapter is to underscore literature to support the need for public participation in addressing environmental justice concerns. Through this literature review, the researcher will focus on the nature of environmental justice as a social issue, address the impact of power in propelling and hindering EJ presence on the formal agenda, and present a case for public participation. In addition, this chapter will reveal methods most appropriate for the cultural inclusion of affected communities into the environmental decision-making process at the state level.

Anatomy of a Movement

Similar to other social movements, the environmental justice movement is rooted in the broader quest for social and political equality. While past movements have focused primarily on perceived inequities related specifically to race, class, or environmental protection, the Environmental Justice Movement (EJM) was the first to merge these three perspectives into one collaborative effort (Roberts 1998). Facing similar fundamental obstacles of political and economic powerlessness, activists were able to place these issues in the public consciousness by following the patterns found in previously successful movements (Cole and Foster 2001).

The battle of ideologies to determine selected issues for active consideration, better known as agenda setting, is taken on by those who have the ability to aid in resolving them and keep key supporters engaged in the problem long enough to abate it (Cobb and Ross 1997; Baumgartner and Jones 1993). Utilizing the appropriate knowledge is imperative in gaining an advantage in the epic battle of political outsiders challenging corporate conglomerates and
political giants. Properly identifying and defining the problem is a difficult, yet important task to successfully propel the issue through the multiple layers of policy formation; the problem must be identified in a manner that is acceptable on a large scale (Cobb and Ross 1997). The main requirement is presenting the problem in the appropriate light necessary to legitimize the need for action.

*Policy Image*

The construction of a hazardous waste landfill to accommodate polychlorinated biphenyls (PCBs) illegally dumped along miles of North Carolina roadways sparked, in 1982, a heated debate in a small community in Warren County. Initial concerns centered on the fact that the site selected for the landfill did not meet all of the requirements for hazardous facility construction (EPA 1992). Thus, the potential for contaminating the ground water, which supports both domestic and agricultural consumption, was a major concern. In addition, the local economic repercussions stemming from the negative stigma associated with the facility aided in cultivating a Not-In-My-Backyard (NIMBY) campaign against the landfill construction. Opponents were able to frame this case of landfill construction as an issue of watershed protection. Doing so enabled them to garner the attention of all potentially affected community members, including residents of all races. This, in turn, led to the formation of the Warren County Citizens Concerned about PCB, which initially consisted largely of Caucasian landowners (McGurty 2000). Despite these efforts, landfill construction commenced in 1982.

When the more traditional NIMBY-based efforts failed legally to deter landfill construction, the largely African-American populated community reached out to leaders of the National Association for the Advancement of Colored People (NAACP) for help in establishing
legitimate grounds to terminate construction. Subsequent research conducted by NAACP made a more significant connection to a more salient social issue. Organization leaders found while presenting a cost-benefit argument for shipping waste to an existing facility in Emilee, Alabama that they were shifting the problem to a community that mirrored their own. This site was also largely populated by low income African-Americans and home to the largest hazardous waste facility in the nation (Bailey et al. 1993).

Community activists sought to take advantage of the initial correlation between race, class, and hazardous waste locations exchanging the NIMBY frame for a newly developed problem identified as environmental racism. This action, initially prompted primarily by fears associated with the potential impacts on public health, was transformed into a much more politically charged issue: racism. Recently, EJM proponents have utilized the undesired effects of disproportionate exposure to hazardous waste to establish a new connection with the push for universal public health. The ability of proponents to articulate the movement’s grievances through appropriate punctuation and attribution of blame will continue to maintain the EJM’s presence as a highly salient political issue through the construction of collective action frames (Snow and Benford 1988).

Social Networks

Just as policy image played an important role in establishing this relatively new movement, the establishment of strong social networks plays an important role in the continued quest to achieve environmental equity. As mentioned earlier, in order to successfully propel any policy issue through the multiple layers of policy formation, the problem must be identified in a manner that is acceptable on a large scale (Cobb and Ross 1997). This was successfully done in
the Warren County case due largely to coalition building that facilitated a clearly distinct paradigm shift, which occurred early in the movement. Initial concern over the construction of the landfill in Warren County was not considered a “Black” problem, but an issue of a potential public health concern. Opposition to the landfill’s construction emerged as a preservation concern in an effort to protect ground water that was utilized for municipal and commercial purposes.

During the Civil Rights Movement, churches throughout the south provided a myriad of services to help organize the movement. This provided fertile ground for coalition building and expansion, community education, and the cultivation of community leaders. Likewise, many of the forerunners in the EJM were associated with religious institutions and aided in developing relationships with organizations such as the National Association for the Advancement of Colored People (NAACP), Southern Christian Leadership Conference (SCLC), and the Congress for Racial Equality (CORE), while educating communities about their rights and providing resources to fight imminent legal battles (Roberts 1999; Cole and Foster 2001). Conley Springs Baptist Church (Warren County, North Carolina) and the Commission for Racial Justice enacted by The Black Caucus of the United Church of Christ provided bridges (at the local and national levels respectively) that covered the now perceived racial divide and served as the nucleus of the mobilization of issues in the black community (McGurty 2000).

The leadership developed through the connections between these organizations cultivated the shift to incorporate racism into the frame and thus gain more attention, especially after discovering information that suggested a correlation between race and the placement of hazardous waste facilities (McGurty 2000; Bullard and Johnson 2000). This shift was initiated through networks established by community members working in close proximity with the
NAACP, the Southern Christian Leadership Conference, local churches, and other organizations that were actively involved in the Civil Rights Movement. Although this change in the overall platform of this grassroots movement allowed redefinition of the problem, specifically in Warren County, it did not specifically pinpoint the actual problem of incorporating the voices of this newly empowered segment of society into all aspects of society. The problem was no longer an issue of water conservation, but the problem of communities of color experiencing disproportionate exposure hazardous waste.

Disruptive Action and Political Opportunity

As political issues garner attention from important decision-makers and reach the formal governmental agenda and proceed throughout the policy-making process, events may occur that refocus the attention and resources of policymakers and advocates alike. These events translate attention into action (Baumgartner and Jones 1993; Downs 1979). One of the strategies regarded as the key to bringing broad-based attention to the grievances and plight of social movements is the ability to initiate disruptive actions that halt proposed projects (Beierle 1999).

In the likeness of the March on Washington in 1963 and the sit-ins and protests that occurred throughout the Civil Rights Movement, residents of Warren County opposed to landfill construction erected a human fence blocking the entrance of the hazardous waste facility. The image of a human fence, a symbol of a tide of change exemplified by unity and strength, represented the same spirit in September of 1982. This act of protest accomplished two goals. First, it temporarily deterred trucks from delivering hazardous waste to the facility. Second, it brought national awareness to the problem of unfair and undesired land use. The protest also had an unintended and far-reaching consequence. It gave rise to a new social movement. For the first
time in history African-Americans mobilized a national broad-based group to oppose racism related to environmental inequity (Bullard 1994).

Moreover, the employment of civil disobedience forced government officials to acknowledge the presence of racism existing beyond the ability to utilize public facilities. By emulating tactics used by Civil Rights organizations and focusing attention on acts of discrimination, supporters of this new movement were able to gain the attention needed to usher this new issue to the formal agenda. The efforts of the Warren County activists highlighted the fact that the political process of environmental decision-making overlooked the voices of those impacted directly by the decision. Empowering these voices required reforms to include these stakeholders in the process of making decisions regarding the health and physical environment of the communities in which they live, work, and play.

Mobilizing the Movement

The overwhelming amount of evidence pointing to unjust environmental practices set the stage for advocates to mobilize their concerns through the use of focusing events. A focusing event or set of events that capture the attention of the public at large and aid in mobilizing actions to mitigate an area of public concern (Baumgartner and Jones 1993; Kingdon 1995; Cobb and Ross 1997). These focusing events have been key elements to the initiation of social movements. A social and political movement of this type, characterized by a unique collection of actions, is intended to mitigate the perceived problem through policy formation or reformation (Andrews, 2001; McGurty, 2000; Roberts, 2000). Investigating the EJM as a social movement necessitates the identification of the institutional changes that emerged from the actions of the movement. Andrews (2001) limits the analysis of social movement outcomes of the Civil Rights Movement and The War on Poverty to their influence on institutional change. Grounded on the
political process theory’s connection between social movements and changes in the opportunities to engage in the political process, he provides conceptual models (The Action-Reaction and Access-Influence) that depict the overall impact of movement tactics on an institutional structure over time.

*Action-Reaction Model: Disruptive Action*

There are four causal mechanisms that dissuade empowerment and promote social and political inequality; exploitation, opportunity hoarding, borrowing, and adaptation (Tilly 1998). Piven and Cloward (1977) state, “whatever influence lower-class groups occasionally exert in American politics does not result from organizations, but from mass protest and the disruptive consequences of protest” (Piven and Cloward 1977, 36). This claim is further supported when Tarrow argues that, to counter the deterrents mentioned above, lower-ranked members of society have embraced the use of any action that “obstructs the routine activities of opponents, bystanders, or authorities” (Tarrow 1994, 108). Both the Civil Rights Movement and the Environmental Justice Movement employed demonstrations and protest characterized as “dramatic, disruptive, and threatening to elites” (Andrews 2001, 74).

These protests were successful in conveying the mistreatment of the African-American community. They were successful in bringing the plight African-Americans into the eye of the media and in propelling their platform onto the public agenda. While the use of protests often forces the political elite to quickly concede and address the immediate concerns of the mobilizing constituency to prevent escalation, this means of influence remains limited because it does not force elites to take actions that will be sustained over time. Conversely, these protest fail to create access to opportunities to directly influence policy decisions from the inside,
meaning that they do not often allow members of the protesting communities to become part of the decision making or agenda setting bodies (Andrews, 2001).

Groups seeking to infiltrate traditional power structures must be aware of the tactics utilized to thwart their membership or the advancement of their platform. Cobb and Ross (1997) offer in-depth insight to the specific roadblocks elites use to retard efforts of the out-groups and provide suggestions as to how to overcome them. Their working assumption about the use of agenda denial tactics is based on the resources available to new mobilizing units. The goal of the elite is to utilize the minimal amount of resources to prevent new issues from dominating the formal agenda. However, if proponents succeed in avoiding the initial barriers placed in their path, the use of higher-cost strategies will gradually be embraced by the prevailing powers (Cobb and Ross 1997).

One of the primary strategies employed at little to no cost in its execution is the act of simply failing to recognize the initiating group or deny that a problem exists (Cobb and Ross 1997). In the case of Buttonwillow, California, community members were initially unaware of a proposal by Laidlaw Environmental Services to expand the local landfill into the nation’s largest hazardous waste facility (Cole and Foster 2001). As the Hispanic population in this community expressed concerns about the impact the current facility was having on the health of the unborn, community officials disregarded their efforts and the expansion of the landfill moved forward. The Local Assessment Committee (LAC), erected in compliance with California’s Tanner Act, intends to allow residents to weigh in on the permitting process (California Health & Safety Code §25199(a) (3)). However, Buttonwillow’s officials failed to inform and include the community’s population in that process (Cole and Foster 2001). Furthermore, as the community
organized to voice its opposition to the LULU, county officials failed to provide translators to facilitate the discussion between the community and the decision makers (Cole and Foster 2001).

Medium-cost strategies include attacking the legitimacy of the proposed issue and/or the initiating group. While focusing events are effective in drawing attention to the problems of oppressed populations, elites are able to deter a transfer of power through the use of symbolic actions (Cobb and Ross 1997). The creation of commissions to “address the issue,” simply establishes a façade implying that something is being done to address those problems. Commissions are often used to dismantle the mobilization of an issue by presenting a venue to include the mobilizing proponents in discussions of their concerns which eventually pales in comparison to other problems that present a more formidable demand for governmental resources and attention (Cobb and Ross 1997). In effect, community members are given a placebo forum while action supporting elite interests continues unabated. These commissions or committees have often been effective vehicles to demobilize a community movements’ platform.

In fact, Cobb and Ross (1997) point to the establishment of commissions as the most commonly used tool to prevent issues from advancing to the institutional agenda. Still, if this strategy fails, those in power can turn to symbolic placation. In 1992 a few of the most important leaders in the EJ movement, Rev. Benjamin Chavis and Dr. Robert D. Bullard, were appointed to the Clinton-Gore Presidential Transition Team in the Natural Resources Cluster, while Deeohn Ferris was enlisted to assist in constructing a position paper addressing the presence of environmental inequity in the U.S. (Bullard et al. 2007). These efforts serve well to demonstrate the nature of political placation. The inclusion of these change agents in the bureaucratic infrastructure presents an inside view of the intricacies of policymaking and agency life. Hence,
this newly legitimized policy arena failed to produce significant progress towards meeting the goals of the movement.

As new entrants press their way past medium-cost strategies and continue their campaign, parks begin to fly. High-cost strategies often erupt to take the form of electoral, economic, legal threats not limited to arrest imprisonment and intimidation through organized violence against the initiating group (Cobb and Ross 1997). As displayed through the Civil Rights Movement, leaders of social and political movements have combated these attacks by employing counter actions which many experts regard as an effective means to bringing broad-based attention to a movement’s grievances and plight: upping the ante and engaging in disruptive actions with the purpose of halting proposed projects (Beierle 1999; Piven and Cloward 1977; Tilly 1984). The determining factor for winners and losers at this level is often dependent upon the strength of available resources to thwart high-cost strategies and the ability for the initiating group to endure.

When implementing policy reform, often a stakeholder analysis is conducted to “assist policy managers in identifying those interest that should be taken into account when making a decision” (Brinkerhoff and Crosby 2002, 141). While this definition is broad and inclusive of any individual or group that may have a varied level of interest or impact, there is still the possibility that some voices may be overlooked and remain unheard. Brinkerhoff and Crosby (2002) note that stakeholders are considered “relevant if and only if the group or actor has significant resources that can be applied for or against the implementation of the policy” (143) and recognize that “critical stakeholders may be those without voice or resources to make their views and desires heard, for example, the poor, women, children, ethnic minorities, and so forth.
However, when strong social networks are established and resources are combined losers have the potential to become winners.

Members of Chester Residents Concerned for Quality of Life (CRCQL) was initially organized in 1992 by two community leaders Monsignor Probaski, the head of the Ukrainian-Polish Catholic Church and Reverend Strand who represented the African-American community, in an effort to abort the proliferation of hazardous waste facilities in Chester, Pennsylvania. The union of residents behind these community leaders signaled a move from environmental justice as an attack on African-Americans, as its genesis suggested, to a more diverse unified front against the quality of life for environmental inequality. After engaging in a local demonstration of a newly permitted hazardous waste facility, Monsignor Probaski revealed that he had received a $500 check from the business they were protesting against to make repairs to his church which was returned to the business, however, he later resigned as the co-chair of the group taking many of his parishioners with him (Cole and Foster 2001) presenting an old face to the CRCQL.

This loss and change in the identity of the movement in Chester caused members to seek to redefine themselves as more than just another movement spawned by the African-American community, but as one that was an attack on the quality of life for generations to come. In doing so, the Campus Coalition Concerning Chester (C4) was held on the campus of Swarthmore College to educate students from four college campuses in four states about the concept of environmental justice. This action to broaden the member base spawned the Chester-Swarthmore Community Coalition established by grant funds to promote faculty-student service learning that has surveyed the public health of community members to further legitimize the groups position to block the permitting of additional hazardous waste facilities in their community and established a variety of social services (Cole and Foster 2002).
Access-Influence Model: Political Opportunities

The ebb and flow of attention concerning the exposure of vulnerable populations to hazardous waste is largely because of the Issue Attention Cycle. This cycle encompasses five distinct stages (pre-problem, alarmed discovery, cost-benefit analysis, gradual decline in public interest, and the post problem states) that dominate the ebb and flow of public attention to domestic issues (Downs 1972). Social problems that fall into this category are connected by their limited impact on society (they affect a small segment; generated by the establishment of prior social arrangements, and interest in the problem declines as media ceases to report on it. Certainly EJ fits these criteria. In addition to its inability to maintain a high level of public interest, EJ retains the reputation of being a collection of isolated events that are often the unintended outcome of other policies and or social arrangements. This reputation supports, or reflects that ability of elite groups to effectively promote agenda denial (Cobb and Ross 1994).

The access-influence model addresses the success of disruptive action in providing “organizational and tactical shifts … accompanied by an increase in influence over relevant policy arenas” (Andrews 2001, 75). Disruptive actions proved successful as the newly mobilized EJ constituency developed the ability to facilitate such political and social shifts to create opportunities for engagement in the political process. These shifts included the accessibility of institutions, the availability of allies, and the implementation of reforms (McAdam 1982; Tarrow 1994). Cole (2000) notes that social ills stemming from powerlessness are overcome by providing opportunities through which marginalized groups are able to exert greater control over actions that affect their lives. Instituting a change in power necessitates that individuals or groups gain leverage to position themselves to influence policy directions.
In her analysis of the rise of environmental justice as a social movement, McGurty (2000) notes the impact of the change in the tactics used by Warren County residents to express their opposition to the zoning of a hazardous waste landfill in its borders. Recognizing that the use of legal actions, protests, and marches had not produced a sufficient outcome, community members realigned their actions to invade the political structure that had excluded them. Through a push for coalition members and other concerned citizens to register to vote, a large increase in voter registration in the black community “changed the political landscape. In November, 1982, African-Americans won the majority of positions in the county, including a majority of seats on the county board, the sheriff, the registrar of deeds, and state assembly representative” (McGurty 2000, 381). This example illustrates the necessity for socially and politically disenfranchised communities to utilize multiple avenues to promote their policy concerns (Warren 2001)

**Environmental Justice Conceptualized as a Wicked Problem**

Problems can be identified in every aspect of the human life, however; not all problems are created equally. Some problems are straightforward, have a limited impact on society, and require reasonably simple corrective measures. On the other hand, there are those problems that impact a large segment of society and require the attention of many policy actors to correct. Kreuter et al. (2004) identify these problems as tame and wicked based on the level of complexity associated with clearly defining the problem, determining the role of the stakeholders, the application of the stopping rule, and the nature of the problem (see Table 2.1). This section is presents the Environmental Justice as a wicked issue.
Table 2.1
Differentiation Between Wicked and Tame Problems

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Tame Problems</th>
<th>Wicked Problems</th>
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<tbody>
<tr>
<td><strong>1. The clear definition of the problem</strong></td>
<td>Also unveils the solution. The solution is determined according to criteria revealing the degree of effect—goal is achieved fully or partially, outcome is true or false.</td>
<td>No agreement exists about what the problem is. Each attempt to create a solution changes the problem. The solution is not true or false—the end is assessed as “better” or “worse” or “good enough.”</td>
</tr>
<tr>
<td><strong>2. The role of stakeholders</strong></td>
<td>The causes of a problem are determined primarily by experts using scientific data (e.g., clinical trials)</td>
<td>Many stakeholders are likely to have differing ideas about what the “real” problem is and what its causes are.</td>
</tr>
<tr>
<td><strong>3. The “stopping rule”</strong></td>
<td>The task is complete when the problem is solved.</td>
<td>The end is determined either by stakeholders, political forces, and resource availability or a combination thereof.</td>
</tr>
<tr>
<td><strong>4. Nature of the problem</strong></td>
<td>The problem is like other problems for which there are scientifically based protocols that guide the choice of solution(s).</td>
<td>Solution(s) to problem is (are) based on “judgments” of multiple stakeholders; there are no “best practices.” Every problem is unique and solutions must be</td>
</tr>
</tbody>
</table>

*Source: Kreuter et al. (2004)*

For wicked problems, problem definition is a difficult, yet important concept to address. It is necessary to identify the source or root of a problem in order to effectively construct an intervention to ameliorate that problem (Rochefort and Cobb 1994; Bosso 1994). In the pursuit of justice, EJ proponents initially promoted a Not-In-My-Backyard (NIMBY) frame to protest the placement of hazardous waste facilities in their communities. While commonly used, this platform successfully brings attention to the newly identified issue, yet lacks the ability to solidify immediate or significant change in policy directives. Acknowledging the lack of fortitude in this line of defense, EJ proponents realigned the movement to utilize a more substantiated platform to characterize this new source of discontentment found in the African-American community: environmental racism (McGurty 2000).
Properly defining a problem is an essential component of establishing a frame by which “problems are diagnosed, blame is directed, and solutions are constructed” (McGurty 2000, 374). In the case of environmental equity, scholars have pointed to a number of theories that address or uncover the root causes of environmental inequity. In addition to claims of environmental racism scholars point to powerlessness (both politically and economically) as driving forces behind the pervasiveness of environmental inequality (Roberts 1999, Cole and Foster 2001; Bullard et al. 2007; Cole 1992; Sandweiss 1998). While other policy arenas seem to have a clear cut explanations for defining their specific overarching problem, there exists no agreed upon problem definition to guide seamless EJ policy development and formation.

The second defining feature of wicked problems contributes to the difficulty in problem definition. This feature is that there are many stakeholders, each with a particular perspective on what the problem is and what should be done about it (Kreuter, et al.; 2004). Expansion of the concerns addressed by the EJM has resulted in a substantial increase in the number of stakeholders represented as community decision-makers recognize that government cannot or will not solve these societal ills without grassroots stakeholder action (Brinkerhoff and Crosby 2002). Thus the inclusion of stakeholders from outside of the governmental realm is necessary. Due to the different levels and types of policy (local, state, or federal) there are different actors at play at each level with their own communities of meaning defined by their individual perception of the problem and the steps necessary to address it (Brinkerhoff and Crosby 2002; Yanow 2000).

The term “stakeholder” refers to any individual or organization that has a vested interest in a policy or program, or is impacted directly or indirectly by any action by decision-makers at the local, state, or federal levels to achieve policy or program goals (Brinkerhoff and Crosby
As more connections to environmental equity emerge, the more stakeholders are brought to the table. These sometimes-competing voices fill the EJ policy process with a myriad of perspectives reflected through language, value differences, and proposed courses of action. Because of the complexity of EJ issues there is difficulty in determining when a particular problem or issue has adequately been addressed. Thus, there is no recognizable stopping point signaling when the problem has been mitigated.

Finally, also due to the layers of complexity associated with EJ claims there are great differences in the manifestation of environmental injustice from state to state. Scholars and activists alike have noted the ranges in environmental injustice from cases involving the placement of hazardous waste facilities in marginalized communities, the expansion of current facilities (Cole and Foster 2002), contamination of water sources (Berry 2002), and claims of air quality inequity (Pastor, Sadd, and Hipp 2001), and claims related to adverse health outcomes (Hipp and Lakon 2010). Variations in the claims associated with environmental inequity certainly compound the difficulty of addressing EJ in a comprehensive and coherent manner.

The Power Principle

The “authoritative allocation of values for society” (Easton 1953, 135), a definition of politics, suggests that elected officials chosen to serve as our governing authorities directly dictate the expression of our societal values. Gaventa (1980) defines power as the ability of a specific group in society (A) to get another group (B) to do something they would not ordinarily do. Therefore, those who maintain this power inherently have the ability to determine who benefits or bears the burdens of policy outcomes (Easton 1953). Thus, the practice of influencing policy decisions is traditionally reserved for elected officials who inherit their power by authority.
of “the people” (Dean 1999). The ability to make decisions on behalf of “the people” that will ultimately affect “the people” is marked by use of power. In a nation based on the underlying ideal that the government was established and maintained “by the people and for the people”, challenges arise when the governing authorities do not espouse the values of the people whom they represent. This often results in a small minority of the population bearing the undesirable burdens of society (Dean 1999). Historically, in America, some people win the policy wars and some people lose.

Traditional social constructs in the United States have predetermined and perpetuated this framework of policy winners and losers due to the lack of political power and positive social constructs among disenfranchised population groups (Ingram et al. 2007). Though there is a range that exists in the dispersion of benefits and burdens, winners are often deemed to be the beneficiaries of any impending policy. They are marked by the accumulation of wealth, acquisition of land, and influence or membership in circles of power laden with business owners and political elite (Bachrach and Baratz 1962). In stark contrast, the policy losers are overly characterized by poverty and poor education. They are devoid of power and politically oppressed. More often than not policy losers are society’s invisible residents; minority groups, immigrants, and blue-collar workers, whose opinions and voices are omitted in the decision making process (Camacho 1998).

Elite theory acknowledges two distinct groups of people in society: those who have power and those who are subject to it (Gaventa 1980; Bachrach and Baratz 1962). The elitist model depicts power as centralized to a small exclusive group where decisions are isolated from external input and aligned with the values of this particular group (Bachrach and Baratz 1962). The cohesiveness of this form of power tends to exist over long spans of time. Through the
influence of political power, the “elite” determine which segments of society either reap its benefit or bear its burdens. This is done by the elites prioritizing and manipulating which issues, out of many, make it onto the government’s formal agenda (Ingram et al 2007).

Those who maintain power have the inherent ability to affect those outside their circle of influence in a manner that may be contrary to the best interest of those outside the center of power (Gaventa 1980). The distinction between winners and losers from this perspective is often very clear; the beneficiaries of impending policy are marked by acquiring some social good. Winners may be identified by the accumulation of wealth, land, and influence. In stark contrast, the losers are economically marginalized groups who lack political involvement, are void of power and influence, and suffer continued oppression.

Cobb and Elder (1983) concur that policy elites determine “the list of items which decision makers have formally accepted for serious consideration” (Cobb and Elder 1983, 86; see also Kingdon 1994, 4). It becomes clear that, “[o]utsiders are excluded from decision making precisely because their bargaining position is too weak compared to the power of the insiders” (Camacho 1998, 19). However, acknowledging EJ issues as a wicked problem and addressing it as such, affords outsiders the ability, or power, to shape the face of the formal agenda through a more collaborative form of politics.

According to Grint (2005) when problems are recognized as being wicked, it immediately denotes the need for the application of a more flexible, collaborative power structure. Grint urges traditional policy makers to allow the complexity of a situation or problem to appropriate the form of decision-making that takes place. In particular, as a problem increases in its complexity, it should then reflect a softer structure of power, which engages parties outside of normal decision-making. Thus, the inclusion of those closer to the problem on a day-to-day
basis promotes the inclusion of new voices, which produces a more collaborative form of decision-making. Therefore, a pluralist structure of power must be taken to address this policy arena.

**Managing Wicked Problems**

Given the layers of complication associated with addressing wicked problems EJ advocates and policymakers alike must be challenged to consider the dynamics that power relationships play in mitigating environmental inequities. In her analysis of *power, strength, violence, and authority* Hannah Arendt (1970) notes that “[p]ower corresponds to the human ability not just to act but to act in concert. Power is never the property of an individual; it belongs to a group and remains in existence only so long as the group keeps it together” (pg 143). This evaluation suggests the idea that a pluralistic form of power, collaborative decision-making, may serve as the linchpin to managing wicked problems. This indicates that a shift from an elitist model of power to a pluralistic model is required to address EJ concerns (Gaunna, 1998; Lasswell and Kaplan, 1950; Cole, 1992). The question then becomes how to achieve a pluralist model of decision-making.

The presence of a pluralist power structure presumes that power rests with citizen activist groups (Gupta 2001, 4) and power is attained by being an “active participant in decision-making” (Lasswell and Kaplan 1950, 75). In his analysis of problems, power and authority Grint (2005) notes that problems tend to exist on continuum where the nature of the problem dictates the power structure and leadership approach most appropriate in mitigating the source of contention. Grint contends that traditional leadership approaches to solving problems focus more on what a situation is and not how it is placed within the power structure.
Collaborative efforts that include multiple stakeholders traditionally excluded from the decision making process is a critically important element when addressing issues layered with complexity. This is especially true when these are the voices that are primarily responsible for dictating when a problem is present. Figure 2.1 indicates that as situational complexity increases and viable solutions are less apparent leadership must exercise a normative form of power that focuses on how the problem is situated rather than what the problem is. The idea of inclusion is further supported when perceived as a mechanism where “new forms of participation are necessary in a world in which people increasingly lack control over social decisions that affect them” (Fiorino 1990, 228). Public participation in the implementation of programs has been deemed the answer to this problem (Abelson et al. 2007).

**Figure 2.1**


![Diagram showing the social construction of leadership](image)

*(Grint 2005)*
**Government Response**

On February 11, 1994 President William Clinton signed into effect Executive Order 12898 which established the first recorded governmental action addressing issues of environmental inequity at the national level. The order accomplished two major goals significant to the mobilization of the EJM. First, it legitimized the newly organized social movement by establishing the Office of Environmental Justice, an interagency workgroup, and presented a timeline for agencies to merge principles of environmental justice (EJ) into their overall mission and goals (Ringquist and Clark, 1999). This order provided an official definition of environmental justice in addition to requiring all federal agencies to promote environmental justice principles as part of their overall mission in an attempt to address the disproportionate exposure of minority and low-income populations to materials with potential adverse human health and environmental impacts. In addition, in issuing this order, President Clinton directed federal agencies to ensure compliance with Title VI of the Civil Rights Act by ensuring that programs or activities that may potentially affect human health or the environment and that receive federal financial assistance, do not use criteria, methods, or practices that discriminate on the basis of race, color, or national origin (E.O. 12898).

Secondly, and perhaps most importantly, it necessitated that decision-making include the voices of affected communities through significant public participation the intent is to include affected communities typically excluded from the formal decision-making process. Through the use of the Interagency working group composed of 17 federal agencies and White House Officials, the enhancement of environmental justice enhancement and community engagement, Grint’s theory of collaboration and soft power are evident, thus acknowledging the wicked nature of protecting diverse and marginalized populations.
In sections 5-5 the order emphasized the importance of the agencies’ responsibility to provide communities with full disclosure of all proposed actions, which may expose them to hazardous materials (E.O. 12898, 1994). The order established a means for the exchange of information, placing great importance on the connectivity between communities and the decision makers. The directive formulates three plausible venues for information flow.

The first venue should connect the voice of the public to the federal agency, allowing communities to submit recommendations to federal agencies relating to the incorporation of environmental justice principles into federal agency programs or policies. The communication to the agency is then passed on to the work group. This communication conveys public recommendations to the working group. The Interagency Working Group on Environmental Justice also referred to as “the working groups”, according to E.O. 12898 is:

“comprised of the heads of the following executive agencies and offices, or their designees: Department of Defense; Department of Health and Human Services; Department of Housing and Urban Development; Department of Labor; Department of Agriculture; Department of Transportation; Department of Justice; Department of the Interior; Department of Commerce; Department of Energy; Environmental Protection Agency; Office of Management and Budget; Office of Science and Technology Policy; Office of the Deputy Assistant to the President for Environmental Policy; Office of the Assistant to the President for Domestic Policy; National Economic Council; Council of Economic Advisers; and such other Government officials as the President may designate.” (E.O. 12898 Section 1-102, part a)

The order then designates responsibility of the working group to:

(1) provide guidance to Federal agencies on criteria for identifying disproportionately high and adverse human health or environmental effects on minority populations and low-income populations;

(2) coordinate with, provide guidance to, and serve as a clearinghouse for, each Federal agency as it develops an environmental justice strategy as required by section 1–103 of this order, in order to ensure that the administration, interpretation and enforcement of programs, activities and policies are undertaken in a consistent manner;
(3) assist in coordinating research by, and stimulating cooperation among, the Environmental Protection Agency, the Department of Health and Human Services, the Department of Housing and Urban Development, and other agencies conducting research or other activities in accordance with section 3–3 of this order;

(4) assist in coordinating data collection, required by this order;

(5) examine existing data and studies on environmental justice;

(6) hold public meetings as required in section 5–502(d) of this order; and

(7) develop interagency model projects on environmental justice that evidence cooperation among Federal agencies. (E.O. 12898 Section 1-102, part b)

Section 5-5 specifically requests each agency to ensure that materials such as public documents, notices, and hearings relating to human health or the environment are “concise, understandable, and readily accessible to the public”. Secondly, the public should have an avenue to agencies, allowing communities to submit recommendations to agencies relating to the incorporation of environmental justice principles into federal programs or policies. Finally, communication to the agency is then passed on to the working group. This communication conveys public recommendations to the working group.

The National Environmental Justice Advisory Council Report on the Integration of Environmental Justice in Federal Programs¹ (2000) indicated that while some changes have been made in an effort to encompass EJ principles, full implementation of the actions set forth by EO

¹ In response to public concerns, EPA created the Office of Environmental Justice in 1992, and implemented a new organizational infrastructure to integrate environmental justice into EPA's policies, programs, and activities. An Executive Steering Committee made up of senior managers represents each headquarters office and region. It provides leadership and direction on strategic planning to ensure that environmental justice is incorporated into agency operations; the most active group is the Environmental Justice Coordinators Council, which serves as the frontline staff specifically responsible to ensure policy input, program development, and implementation of environmental justice through the Agency. This new structure has established a clear commitment from EPA's senior management to all personnel that Environmental Justice is a priority.
12898 remains incomplete. In a push for full deployment of the order, and in yet another attempt to construct legislation to address this concern, the House Representatives drafted the Environmental Justice Access and Implementation Act of 2007, which would serve to establish an Office of Environmental Justice in each Federal agency to oversee implementation in adherence to the order (H.R. 4652). It died in committee.

The failure of federal governmental agencies to fully implement environmental justice principles into their operations causes both academic researchers and political activists to turn their attention towards the state level. In an effort to “bring government closer to the people through decentralization and devolution” (Cornwall and Gaventa 2001) federal mandates governing the regulating, storage and disposal of hazardous materials (specifically Superfund\(^2\)) ultimately place implementing responsibilities on the states. However, there is much still to be known about the performance of the states in implementing these mandates and even less is known regarding the states’ handling of environmental justice issues (Cline 2003; Daley and Layton, 2004; Daley 2007).

**State Responses**

Mooney (2001) presents the study of state level political activity as an area of both academic interest and governmental necessity essential in shaping the political landscape at the national level. Due to political science’s heavy emphasis on national activity, a major gap has emerged in the field of public policy. Researchers have overlooked the importance of providing a full picture of the role that states play in the politics and emerging policies in the U.S. As state legislators fight against unfunded mandates, and as new presidential administrations encourage

more state responsibility, the academic and governing bodies view states as the epicenter of our political future (Gray and Hanon 2006).

Characterized as “laboratories of democracy” (Osborne 1988), the states present 50 specimens that mirror the federal governmental infrastructure which possess multiple agencies that operate under the direction of a dual governing body (Senate and the House of Representatives). While they are all much the same, it is imperative to consider each as individual Petri dishes containing unique characteristics that structure their abilities to address societal ills found within their jurisdictions. These specifics are important to consider when examining the politics of policy creation due to the limitations or opportunities each state creates in the adoption and implementation of proposed interventions. The unique qualities of each state create variations that emerge through its socioeconomic and political environment, its demographic makeup, its specific political history, and its economic standing (Jewell 2001; Gray and Hanson 2008). Despite the uniqueness of individual states, politicians, administrators, and researchers can examine how individual states have addressed certain problems and apply these approaches to other states with similar problems.

Policy diffusion, the act of states emulating other states as they respond to problems (Berry and Berry 2007) occurred in the quest for environmental equity. While there is no national legislation established to codify EO 12898, some states have responded to the problem by creating their own responses. Scholars have noted that states emulate each other due to competition between states, conformity to national standards, and shared learning (Berry and Berry 2007). Benchmarking (or shared learning) is considered a tool used to evaluate programs or policies in order to produce better rules. Its use is also considered essential to wise public policy. It allows bureaucrats from a state that has already developed a policy the opportunity to
provide information about the details involved in the implementation of the policy and to also present additional data pertinent to better decision making regarding specific adjustments necessary to meet the needs of a newly adopting state. These benchmarks are often composed of ideas presented as newly conceived to the present governing officials that are often replicated in other states because of their success in other states (Berry and Berry 2007).

Morehouse and Jewell (2004) provide additional justification for shifting more attention to the states by emphasizing their importance as laboratories of democracy. They posit that the states present 50 specimens that mirror the federal governmental infrastructure and should therefore be viewed as mechanisms by which policies may be tested for acceptance or rejection. The No Child Left Behind policy that governs how state educators carry out preparing the future generations of our nation began as a state-level policy. However, as individual specimens it is imperative to consider the unique characteristics specific to each state. While the program for which it was modeled provided some level of success for the state of Texas, the national act has nonetheless been the subject of much debate nationwide. Noting differences that each state may present is vital when examining the state’s ability to address explicit societal ills. These unique differences emerge through their socioeconomic and political environment and researchers can investigate them by examining the states’ demographic makeup, political history, and economic conditions (Jewell 2001; Gray 2008).

More than half of the states have addressed EJ as a substantive policy issue through the institution of executive orders, commissions, committees, organizational restructuring, and the creation of legislation and or legislative changes (Ringquist and Clark 2000). Table 2.2 presents the variations in state responses to environmental justice concerns across the United States. Nonetheless, the challenge that states face when proposing these actions has significant
consequences on the fulfillment their intent. David Camacho (1998) points out two major deficiencies that may prevent successful implementation of state-level Environmental Justice (EJ) policies: “[s]tates generally do not have the expertise to handle this responsibility and there has been no corresponding increase in financial resources to assist them in meeting these new responsibilities” (Camacho 1998, 13). Because the states may lack the ability to properly manage and finance the application of EJ-related policy initiatives, states may adopt mere symbolic action, in which the driving force behind the mobilization of this issue would be halted. This action eventually placates the goals of the Environmental Justice Movement (EJM), yet lacks any substantive impact.
Table 2.2: State Responses to Environmental Justice Concerns

<table>
<thead>
<tr>
<th>Environmental Justice (EJ) Program, Initiative, Policy, or Regulation</th>
<th>States where such Programs exist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Orders</td>
<td>AL, LA, MD, NJ, NM</td>
</tr>
<tr>
<td>Anti-Concentration or Fair Share Regulations</td>
<td>AL, AR, GA, MS, TX, WY</td>
</tr>
<tr>
<td>Research &amp; Study</td>
<td>DE, HI, IN, KY, LA, NJ, NM, NY, RI, SC, VA</td>
</tr>
<tr>
<td>EJ Office</td>
<td>CA, NY, PA, TX, WV</td>
</tr>
<tr>
<td>EJ Strategic Plan</td>
<td>CA, HI, IN, MO, NH, TN</td>
</tr>
<tr>
<td>EJ Policy or Mission Statement</td>
<td>AZ, CA, CT, IL, IN, MA, MN, PA, RI, WV</td>
</tr>
<tr>
<td>EJ Staff Position</td>
<td>AL, AR, AZ, CA, CO, CT, DE, DC, GA, IL, LA, MD, MA, NC, NJ, SC, TN, UT, VA, WA</td>
</tr>
<tr>
<td>Statewide Advisory Board</td>
<td>CA, DE, IL, MD, NJ, NY, OR, PA, TX</td>
</tr>
<tr>
<td>Community or Local Advisory Board</td>
<td>AZ, CT, FL, LA, OH</td>
</tr>
<tr>
<td>Agency or Interagency Working Group</td>
<td>CA, MI, PA, WA</td>
</tr>
<tr>
<td>Performance Partnership Agreement</td>
<td>AR, CO, CT, IL, IN, MD, MA, MN, MT, NH, PA, RI, SD, UT, WA, VA</td>
</tr>
<tr>
<td>Agency EJ Personnel Training</td>
<td>IL, ME, TN, WA</td>
</tr>
<tr>
<td>Capacity Building and Citizen Tools to Enhance Public Participation</td>
<td>CA, CT, IL, IN, MA, NY, PA, TX</td>
</tr>
<tr>
<td>Accountability or Measurement of Success of EJ Programs</td>
<td>CA</td>
</tr>
<tr>
<td>Transportation Initiatives</td>
<td>AL, AK, CA, FL, GA, HI, MD, WI</td>
</tr>
<tr>
<td>Small Grants Programs</td>
<td>CA, MN, NY</td>
</tr>
<tr>
<td>Permit Criteria for Demographic, Impact and/or Alternative Site Analysis</td>
<td>AL, CA, DC, KY, MD, MA, MT, NM, NY, NC</td>
</tr>
<tr>
<td>Cleanup Initiatives</td>
<td>FL</td>
</tr>
<tr>
<td>EJ Program targeted to discrete EJ issues or concerns</td>
<td>AK, AR, CA, FL, MD, MA, MN, NJ, NC, PA, RI, WA, WI</td>
</tr>
<tr>
<td>Brownfield Program with EJ Criteria</td>
<td>FL, GA, IN, MA, NJ, NY, WI</td>
</tr>
<tr>
<td>Supplemental Environmental Projects with EJ Criteria</td>
<td>CO, CT, FL, MA, OR, VA</td>
</tr>
<tr>
<td>Enforcement Initiatives</td>
<td>CT, DE, MA, NJ, PA</td>
</tr>
<tr>
<td>NO EJ Programs, Policies, or Statutes</td>
<td>ID, IA, KS, NE, NV, ND, OK, SD, UT, VT</td>
</tr>
</tbody>
</table>

*Source:* Adapted from the American Bar Association and Hastings College of the Law Research Institute (2009)
Symbolic action is established by creating a false sense of security that an issue has been appropriately recognized and that action is in place to extinguish a problem. Showcasing a small portion of the proposed issue may be used to bandage a problem without addressing the true issue, but may appease the initiators. The creation of committees or commissions is the most commonly used tool to combat issues that advance to the institutional agenda (Cobb and Ross 1997). This tactic is often used in the case of newly organized groups because they lack the ability to maintain momentum due to their weak infrastructures. Often asking prominent members of initiating groups to join committees established by opponents or by government accomplishes this. This is an effort to weaken the claims of the initiating group by skewing their viewpoint. The goal is to co-opt the members and get them to adopt the symbols, and viewpoint of the opposition, thus effectively derailing the newly organized group. Another tool used in symbolic placation is the claim that there are many problems that deserve attention but due to financial limitations there are not adequate resources to address a specific issue. Many opponents follow this type of statement highlighting past accomplishments to stress their credibility despite their inability to address the issue at hand.

**The Case for Participation**

The failure of marginalized groups to engage directly in decision-making, according to Bullard (1994) is largely due to the inability of marginalized and poor individuals to readily access venues for inclusion. The solution to this perceived problem was specifically noted in the development of the Principles of Environmental Justice (1991) developed during the first National People of Color Environmental Leadership Summit. Authors of this document specifically demand the right for participation by the petition to be considered “as equal partners
at every level of decision-making, including needs assessments, planning, implementation, enforcement, and evaluation” (NPOCEL 1991, 1).

The issue of environmental injustice has been framed as a failure of policy to protect marginalized populations from disproportionate exposure to hazardous waste due to “practices, policies, and conditions that residents have judged to be unjust, unfair, and illegal” (Bullard and Johnson 2000, 558). From the community perspective environmental injustice was due largely to institutionalized racism which is manifested by the exclusion of politically and economically marginalized populations from venues where the decisions are made that impact the quality of the environment in which they live, work, and play (Bullard and Johnson 2000).

In his exposition on the future of the EJM Sandweiss (1998) notes “the movement must continue to point to larger questions about the distribution of political and economic power in society and the values that should inform environmental policy” (Sandweiss 1998, 51). Questions concerning the distribution of political and economic power in informing environmental policy specifically indicate the need for the inclusion of groups typically excluded from the decision-making process (Sandweiss 1998). The idea of extending this privilege to nonelected segments of society is viewed as a new paradigm in environmental governance.

Tools of Engagement

Brinkerhoff and Crosby (2005) identify levels of participation (information sharing, consultation, joint-decision-making, and shared control) and associated outcomes that are facilitated by the implementation of formal structures for inclusion. Information sharing provides a one-way flow of information from the government to the people. This information is often disseminated at multiple levels through media outlets or the release of official documents (Brinkerhoff and Crosby 2005). Consultation between community members and government
officials provides two-way communications through roundtables, focus groups, and town hall
meetings. Immediate feedback and response between public officials and the affected
communities regarding pending governmental actions is the main benefit of this level of
community participation (Brinkerhoff and Crosby 2005).

Methods providing joint activities provide a greater level of involvement by allowing
segments of the community to become involved in committees or workgroups and allowing them
to articulate concerns in a more legitimized setting (Brinkerhoff and Crosby 2005). However, the
power to impact the decision is retained by the governing officials. Only in joint-decision-
making structures (task forces, blue-ribbon commissions, and public private partnerships) are
knowledgeable stakeholders permitted to impact the decision-making process by sharing control
(Brinkerhoff and Crosby 2005). The most coveted level of participation is reached when the
power over activities and resources is legally granted to the affected population, allowing the
carrying out of policy mandates with little governmental involvement. This level of
empowerment manifests itself through resource management committees, community
empowerment zones and the like (Brinkerhoff and Crosby 2005).

The scholarly public policy literature presents numerous tools to initiate the involvement
of stakeholders in the construction of decisions (Hampton 199; Rowe and Frewer 2000; Rowe
and Fewer 2004; Fiorino1990). These practices have developed from general meetings
established to disseminate information to ones that maintain a high level of involvement of all
stakeholders. In an effort to identify key elements of the participation process, Rowe and Frewer
(2000) highlight eight of the most formalized public participation methods: referenda, public
hearings/inquiries, public opinion surveys, negotiated rule making, consensus conference, citizen
county/panel, public advisory committee, and focus groups.
The implementation of any number of these mechanisms presents a number of questions for scholars to explore. Laurian’s (2004) work with participatory methods employed in communities facing hazardous waste cleanup presents a traditional look inside the process. The overall purpose of her study focused on how many people were actively engaged in the process, identifying the structures employed, and the reasoning community members chose to participate or not. Nevertheless, the evaluation of these structures has evolved to include a number of elements. A number of scholars have evaluated participation regarding its cost effectiveness and its benefits for the government and society at large. A number of these studies have found that despite the fact that increased public participation may be costly and somewhat hindered by unwieldy requirements for space and time, the overall benefits of a more informed constituency result in increased trust in the government and a higher quality of policy outcomes (Irving and Stansbury 2004; Beirele 2002).

In an effort to determine if participation methods were working in the state of Montana, McKinney and Harmon (2002) conducted a survey of all stakeholders (government agencies, nonprofit organizations, industry, and community members) to assess the effectiveness of this component of environmental decision-making. Several themes emerged from the inquiry, implying that the process could be more effective by providing better information regarding each project, by the articulation of clearly stated objectives, by consistency in approaches to public participation, by inclusion of public comments, and by placing more emphasis on public comments.
The Purpose of Participation

Hickey and Mohan (2004) emphasize the importance of participatory approaches in contributing to the empowerment and development of the marginalized by improving the substantive quality of decisions, increasing trust in institutions, and reducing conflict. Public involvement in the form of citizen engagement or community action can be defined as “the process through which stakeholders’ influence and share control over development initiatives and the decisions and resources which affect them” (World Bank 1996, 3).

The overall goal of public participation is to allow members of society to attain a more active role in decision-making, and there is no arena where the implementation of this practice is more imperative than that of environmental justice policy (Bullard 2000). While the push for the integration of traditionally excluded groups to gain access to decision making may appear only to benefit a limited segment of society, there is evidence that public participation breeds dual benefits for both the initiating organization and the group or groups being included (Gaventa 2004). Legislators and other governmental officials reap benefits from public participation characterized by shifts in internal and external interactions.

Outka (2006) notes that “[a]t best, public participation can improve government decision-making by increasing government accountability, educating officials about the local impacts of their decisions, bringing the full range of stakeholder viewpoints into dialogue, and shaping end results to better serve the public interest” (Outka 2006, 607). Internally, policy makers are called take more responsibility for actions regarding the policies they implement by fully investigating the unintended consequences of policies and the bearers of the associated burdens. Consequently, part of this investigation requires the input of external voices (Gaventa, 2004). The inclusion of stakeholder input extends policy makers responsibility from
acknowledging the impact of their decisions to crafting policies that reflect this information to include these voices and creating more accountability in their decisions.

The increased use of public participation mechanisms serves to move citizens from political noninvolvement or passive involvement to one that is more active, thus creating a government more responsive to the voices and choices of the people they were selected to represent (Gaventa 2004). A more politically active citizenry is typically found when addressing concerns associated with potential threat of public health due to the volatile nature of environmental issues (Kreuter et al 2004). Beierle (1999) notes environmental problems require the inclusion of stakeholders in the decision making process due to their connections to multiple disciplines; the knowledge and insight that lay people bring to the table, and the success of these groups in delaying the progress of proposed projects if they are excluded. The act of inclusion is supported as a right of citizenship and democracy (Gaventa 2004). Equally important are those participation methods providing new participants “… the chance to increase their understanding of community concerns and assets to help build a network of community contacts (Konisky and Beierle, 2001; 818; also see McCoy et al. 1996).

Challenges to Implementing Citizen Participation

In a democracy created by the people and for the people there are drawbacks to including the voice of “the people” in decisions that directly affect them. Whenever citizens push governments to reform, innovate, or take new actions, two questions that immediately arise. The first and most crucial of these is directly related to the cost associated with funding these efforts. Irving and Stansbury (2004) note, “if citizen participants are misled into thinking their decisions will be implemented, and then the decisions are ignored or merely taken under advisement, resentment will develop over time (Irving and Stansbury 2004, 59). If a government lacks the
ability to allocate necessary funding for implementation, citizen responses may be further complicated which may breed more distrust towards governing officials.

The second, and equally important, consideration arises when the element of time is presented. It is of great consideration to account for time in counting up the cost of any venture. The reality of initiating public participation in decision-making is that it is costly in terms of time. Participation efforts have often proven time consuming for participants who have other, equally important concerns, such as survival. Opportunity costs may prevent stakeholders from participating to the extent they otherwise would (Smith and McDonough 2001; Konisky and Beierle 2001).

*The Positivist Approach to Citizen Participation*

Finally, two major barriers thought to placate the plight of significant public participation were identified by Yankelovich (1999) as public officials’ view of their positions and the ability of the public to become actively engaged in the process. Primarily, public officials get into office and often maintain their positions because of their ability to market their knowledge of the political system. A technocratic approach is taken when the administrator perceives their role as the “expert” knowing what decisions best suits the citizens or communities involved. It is therefore not in the interests of the “experts” to institute actions that create a better informed citizenry. This would serve to act in a manner that would displace the “experts”. The argument often used to solidify this stance is based on “…the assumption that citizens are so ill informed, narrowly selfinterested, unrealistic, and moralistic that they cannot add anything of value to the decisionmaking process (Mc Kinney and Harmon 2002, 167). This argument makes it clear that, while there are theoretical and practical benefits and burdens brought about by participant
inclusion, participants should be approach it strategically with an abundance of patience and endless optimism.

Increasing public participation in environmental decision-making is centered on the idea that it is necessary to “bring government closer to the people through decentralization and devolution” (Cornwall and Gaventa 2001, 32). This idealistic notion, however, contains its own set of challenges. Due in large part to the technical nature of environmental problems, governing agencies must balance the desire for increased citizen participation and the technocratic setting involved in environmental decisions. Traditional decision making processes have been characterized primarily as a “[d]ecide, announce, and defend” pattern when concerning issues of environmental protection (Beierle 1999, 76).

This is particularly relevant when considering that technocratic problems concerning risk tend to be grounded in a positivist policy approach, one that is dependent upon employing “such techniques as modeling, statistical inference, operations research, cost-benefit analysis, and risk-benefit analysis” (Wagle 2000; 208). Employing only these tools in developing solutions to EJ problems automatically limits the decision-making process in which the voice of “the experts” is superior to any other, due to the technical and educational training. While the approach has proven useful in establishing a blueprint for decision-making, it overlooks a crucial element of addressing societal problems: the voice of those impacted by their decisions (Wagle 2000). This empirical, or technocratic, approach tends to support the goals favored by “experts” to the exclusion of equally valid empirical evidence to the contrary (Bullard et al. 2007).

When a patient visits a doctor, the doctor’s position in making decisions on how to treat that patient is legitimized by his attainment of a medical degree. However, his qualification as an expert is limited. In a positivist or technocratic approach a doctor must produce an appropriate
diagnosis for the problem based solely on the symptoms reported to him by the nurse, or through the doctor’s own examination. Patient input is not sought. The doctor must then prescribe an intervention to thwart the problem based on available information. A post-positivist approach to this situation would for the doctor to solicit the input of the patient to identify symptoms, changes, or events that identify what the problem is. This may lead to a more appropriate course of treatment or action.

A Post-Positivist Approach to Citizen Participation

Fiorino (1990) presents three arguments that refute the use of technocratic decision-making and gives support for a post-positivist approach to citizen participation. The normative argument is grounded in the principle of democratic freedom: citizens as stakeholders have the right to participate in the decision-making process (Fiorino 1990). This is supported by Schrader-Frechette (1985), who states that the ideals of democracy are directly contradicted when decisions are considered without recognizing the social and political values of all parties affected by the policy or program. Webler and Tuler (2000) further support a normative theory of participation based on the foundations of fairness and competence. Their stance on inclusion emphasizes that the structures for participation permit all interested or affected parties the opportunity to maintain a legitimate role in the decision-making process and produce the best outcome. Overlooking the rights of stakeholders to participate in the political process ultimately results in the disenfranchisement of certain populations.

The instrumental argument further supports the inclusion of stakeholder voices based on the ability of stakeholder inclusion to yield actions that are more legitimate and that lead to better overall policies (Fiorino 1990). Engaging in the process empowers citizens by increasing their knowledge of governmental actions (Ohmer 2008; Fiorino 1990). Understanding governmental
processes gives citizens the ability to persuade or enlighten the government, to become more effective activists, to achieve outcomes, to control or influence the policy process, and to produce quality policies and to improve policy implementation. Equally the government gains a more educated citizenry with whom it can build alliances, legitimize government actions, break gridlocks, and produce better policies and implementation, all the while avoiding costly litigation (Fiorino 1990). Beierle (2002) found that the more intense stakeholder involvement is, the more likely higher quality decisions will be produced.

The substantive view of participation is not the same as the substantive view of government. The substantive view of government suggests that government should do what the majority wants, regardless of what that is. It takes the idea of participation or citizens’ voice to an extreme (Fiorino 1990). The substantive view of participation reflects the ability of lay people to create sound decisions that protect the interests of multiple stakeholders. The construction of policy options is ideally completed in a rational, logical progression of thought, which begins with a problem, the generation of ideas to address it, several major goals and outcomes are established, and the program is implemented and then evaluated (Elmore 1983). Nevertheless, substantive processes often neglect to seek the opinions of the target audience affected by the intervention; hence, negating the power of the information from lay people as valuable resources in policy reformation. While general challenges to participate in government decision making exist, barriers are more acute in EJ decision-making.

Participation and Marginalized Groups

The platform for the EJM is propelled by EJ advocates throughout academic institutions and political discourses as a case of the haves and the have-nots. As outsiders to the policy arena, EJ communities are characterized by their racial or ethnic composition, economic status and
educational attainment. This portrayal presents new perspectives in the environmental policy arena. Elements of these diverse components raise concerns when determining how, and to what degree, these groups participate in agency-directed mechanisms designed to include them in the policy process. Brinkerhoff and Crosby (2000) note that when managing policy reform, stakeholder analysis should be conducted when formulating they policy and when formulating the implementation. All stakeholders are not created equally.

One of the major variations in stakeholders is centered on the goals of each entity involved. These goals have been divided into two groups: outcome and process. Chess and Purcell (1999) found that participant-based goals tend to “vary based on culture, environmental problem, historical context, and other factors” (p.2686). Beierle and Konisky (1999) conducted a study that sought to evaluate public participation using a combination of goals that would address both the outcome and process of participation. Grouped together as Social Goals they “meet a set of goals that represent a shared societal interest in a well-functioning environmental management system.” Outcome goals, the result of the participatory efforts, vary due to converging definitions of success (Chess and Purcell 1999). Is the outcome to get a large number of community members to come and listen to what has been already ordered to take place or is the goal to give a better understanding of the community input or perception prior to actions taking place?

In the studies examining who participates in environmental decision-making, past inquiry found that those participating in inclusion initiatives tend to be more educated and economically independent (Johnson et al. 1993). The counter argument to this claim maintains that local concerns may override level of education (Syme and Nanacarrow 1992). Nevertheless, it is
important to consider the unique make-up of the population targeted in the establishment of inclusionary structures. Dietz and Stern (2008, 35) note that:

The design of any public participation process reflects value choices and the political power of the players to influence those choices, beginning with the decision about what questions are the focus of analysis and deliberation… and those design choices have the potential to advantage some interests over others, empower some and disempowered others, and lend differential credence to some values, preferences, and beliefs over others.

In attempt to determine which actions are better suited for diverse populations Hampton (1999) surveyed the literature to identify methods effectively used to facilitate increased public participation in an arena specifically addressing environmental justice communities. This literature survey focuses attention on the benefits of each method, but highlights difficulties policymakers should be aware of when establishing structures for public participation. The first methods assessed by Hampton (1999) are the most commonly used methods of participation, citizen committees and public hearings. Cobb and Ross (1997) suggest that citizen committees and public hearings should be viewed with caution as methods of facilitating public participation because of the ability of political officials to co-opt the agendas of EJ communities by limiting who serves (Cobb and Ross 1997).

As public officials set the agenda for public hearings and choose committee members they can effectively direct and, as a result, limit the discussion, all the while giving the appearance of facilitating public participation. In both cases, political powers limit the groups’ ability to initiate new agenda items, and as a result, isolate and overwhelm them. Public hearings also require that community representatives possess high level of communication skills, be able to clearly articulate their concerns, and possess a thorough knowledge of the policy process in order to be even marginally effective (Cobb and Ross 1997). According to Hampton (1999)
survey instruments and focus groups have proved to provide higher levels of representation and to provide a more accurate method of analysis, however, these approaches must ensure that serious consideration is given to the difficulty of expressing communication regarding technical information in such settings (see also McCarney et al. 1999). This must be done on the basis of the educational and language barriers that may be present in the target audience. It does not facilitate public participation to present accurate information that the audience does not understand. The flexibility of focus groups allow for more immediate modifications addressing this concern in comparison to the survey method (Steward and Shamdansini 1990).

The nominal group and Delphi techniques have both proved to be very useful in leveling the playing field for diverse groups new to environmental decision making due in large part to their emphasis on participant input (Davis 1982). These techniques allow the inclusion of public voices by initiating deliberative discourse, ranking items of importance, evaluating feasibility of outcomes, and raising issues that have failed to be seen by the experts. Challenges arise for both methods, as with focus groups, regarding the literacy and verbal fluency of participants (Davis 1982). These challenges be can easily be realigned when using the Delphi approach to maximize the methods’ ability to promote equity by establishing the continual presence of a facilitator. On the other hand, a high level of literacy is almost a must for participants in the nominal group because it does not call for the presence of a facilitator (Davis 1982).

Hampton (1999) identifies the final method as the preferred method for inclusion of marginalized populations. Citizen panels allow participants to identify values, and evaluate decision options through intensive education on the problem and the process of decision-making through lectures, written material, and field tours (Rein et al. 1993). Hampton (1999) notes that the strong emphasis on the educational component increases access to the political process,
therefore increasing the ability of participants to more effectively engage in the process and make informed decisions. While the number of methods surveyed in this study is limited, the findings underscore the need for a more in-depth analysis of structures utilized to facilitate the involvement of marginalized populations in decision-making, specifically EJ communities.

**States as Empowering Environments**

“A desirable public participation process is one that enables citizens to shape planning decisions and outcomes while increasing their levels of social and political empowerment” (Laurian 2004; 53). According to deliberative democracy theorists, the process of deliberation is essential to the decision-making process which is based on its ability to extend our constitutional rights and reach beyond the right to vote (Dryzek 2000; Gutman and Thompson 1996; Fishkin 1995). Angelique et al. (2002) note that empowering environments consistently include the following characteristics: small group settings, a common belief system, opportunities to acquire skills and knowledge, leadership, and experience. Many of these characteristics indicate the need for deliberative democracy practices (Gutman and Thompson 1996. Therefore, elements of fairness and competence in public participation move beyond the mere representation of groups targeted for inclusion and specifically reflect “what people are permitted to do in a deliberative policy-making process,” while competence refers to the “construction of the best possible understandings and agreements given what is reasonably knowable to participants at the time discourse takes place” (Webler and Tuler 2000, 569, 571). Evaluating participation as a process reveals the extent, fidelity, and quality of an intervention (Butterfoss 2006).

An essential component of assessing the efficacy of public participation must consider elements that maintain “processes and structures that produce psychological empowerment for
their members” (Ohmer 2008; 46). Viewing states as empowering organizations and citizens as members allows the analysis of participation mechanisms through the use of the social goals. According to Beierle social goals “…are those goals which public participation ought to be expected to achieve but which transcend the immediate interests of parties involved in a decision. The benefits of achieving these goals spill over from the participants themselves to the regulatory system as a whole.” (1998, pg 5). According to Beierle, there are five goals that that are used to structure questions used to evaluate public participation in environmental decisions:

**Goal 1 Inform and educate the public** would answer questions pertaining to the quantity and quality of knowledge that enabled the public to engage competently in deliberations and decision-making.

**Goal 2 Incorporate public values, assumptions and preferences into decision-making;** Measures the scope of this goal would consider the ability of public input and the impact of their voice on final decision outcomes.

**Goal 3 Increase the substantive quality of decisions:** Determining the satisfaction of outcomes for all parties involved producing better outcomes by the creation of opportunities for compromise and presenting new information leading to new alternatives.

**Goal 4 Foster trust in Institutions:** Reflected the public’s confidence in the agency by gauging the change in the level of trust throughout the decision-making process.

**Goal 5 Reduce conflict among stakeholders:** Provides insight into participant perception of the working relationship with the agency interactions fostering or impeding cooperation and or improving or worsening communication after engaging in the formal structure(s) of inclusion.
Backward Mapping

Traditional policymaking presents a top-down decision-making framework that is prescriptive in nature. In a perfect world, directives present a well-structured response to social problems that outline “the policymaker's intent, and proceeds through a sequence of increasingly more specific steps to define what is expected of implementers at each level” (Elmore 1979, 602). Consequently, the implementation of such directives would not be easily achieved. Implementation research has identified over 300 variables that impact the success of implementation efforts. Each variable falls into one of three categories concerning the policy and the process; organizational characteristics, agents, and external factors (O’Toole 1986, Goggin 1990, Lipsky 1980). Overwhelming, as this may seem, the failure of a policy to be fully implemented does not surface until it is in the hands of the implementing agency. Implementation failure happens because agencies do not adhere to expressed directives or they are satisfied with minimally achieving policy goals (McLaughlin 1987).

Elmore posits that backward mapping “does not assume that policy is the only -- or even the major -- influence on the behavior of people engaged in the process; furthermore, it does not rely on compliance with the policymaker's intent as the standard of success or failure” (Elmore 1980, 604). Backward mapping is a policy evaluation process that starts with an outcome and traces policy implementation backward through each step in order to identify the point at which the policy failed. This process indicates that attention must be given to the factors that contribute to the intricacies of achieving policy goals (Matland 1995). Utilizing backward mapping to analyze policy opens the door to include measures of success that are influenced by those outside the nucleus of power, thus pointing to the significant need to evaluate public participation.

Bottom-up proponents of policy implementation (Hjern 1982; Hjern and Hull 1985; Hull and
Hjern 1987) approach the evaluation of governmental programs and additional forces influencing policy implementation by accessing knowledge of goals, concerns, progress, and collaborative efforts from actors at the lowest level. This information can then be utilized to create maps portraying the implementation frame at local, state, and national levels and forecast unintended consequences.

A backward mapping approach will be employed to frame this research initiative due in large part to the grassroots nature of the environmental justice movement. Backward mapping analysis “…begins not at the top of the implementation process but at the last possible stage, the point at which administrative actions intersect private choices” (Elmore 1979, 604). This point of interaction will specifically illuminate how the states structure interactions with marginalized communities in environmental decisions, itself an area overlooked in assessment of the overall impact of the diffusion of EJ policies. The interaction between states and marginalized communities is manifested in the ability of key stakeholders to affect the behavior that is the target of the policy and the resources required to produce the desired outcome.

EJ proponents have utilized traditional social movement strategies to impact the decision-making process by shifting cultural frames, establishing social networks, conducting civil disobedience, and launching other opportunities for political action (McGurty 2000). The grassroots movement that set the stage for national attention to environmental inequities was initiated at the local level, which resulted in an executive order (EO 12898) that would then diffuse to the state level. But the question that remains is how the EJM is impacting policy decisions and implementation at the state level. In addition to initiating reform in public agencies, a gauge of a community or an organization’s ability to demand resources reveal the level of power it has in the decision-making process (Warren 2001).
Failure to attain resources is often the product of symbolic politics, one of the most effective methods of thwarting the momentum of new movements. Public officials have the ability to use power to thwart effective policy implementation through multiple forms, such as the formation of commissions, co-opting key players, showcasing, or postponement. These strategies have the potential to result in policies or programs, which present the façade of political action, yet allow the policy problem to persist (Cobb and Ross 1997, Gaventa 2004).

**Conclusion**

In the plight of the Environmental Justice Movement, marginalized populations have more often than not; found themselves on the losing side of environmental decisions. As losers, the stakes are high, presenting disproportionate exposure to hazardous waste that ultimately impacts the economic, health, and future growth of host communities. The literature presented in this chapter highlights several elements imperative to investigating the perceived efficacy of public participation for EJ communities. First, environmental justice must be conceptualized as a wicked issue with a constellation of social issues that require the involvement of additional actors. The unique nature of these problems dictates the need for the application of soft power, which serves to foster a collaborative method of decision-making.

Secondly, public participation has been presented as the answer to addressing environmental justice concerns. Through development of a more educated citizenry, leveling the playing field for voices overlooked in decision-making in addition to producing better overall outcomes. States serve an crucial role in ensuring an empowering environment, one where education, communication, the inclusion of public values, improved decision outcomes, trust are fostered and conflict is diminished for its participants. However, caution must be taken in
addressing participation methods that co-opt participant efforts and as a consequence, reintroduce the same power struggles that presented the need for public participation. All groups are not created equally and differences emerge in areas of group resources, values, and ultimately power they bring to the table.

Finally, evaluating state-level public participation efforts in addressing environmental justice through the use of social goals will provide insight into perceptions of EJ groups as they engage in state sponsored programs. These insights will assist in improving the working relationship with EJ groups and government entities at the state-level to extend equal protection for all segments of society.
CHAPTER 3: Methodology

Introduction

The overarching goal of this dissertation is to gain an understanding of the relationship between state-level environmental protection agencies and communities seeking to address concerns of environmental inequity. This chapter will present the research design that will be utilized to detail the relationship between government agencies and the environmental justice communities. These elements will be examined by answering the following research question: to what extent are formal state structures of participation perceived efficacious for EJ groups?

Chapter 2 outlined the social networks, frames, and actions that propelled EJ to become a national concern compelling action both at the federal and state level. Theoretical insight into the overlapping social issues underlying this policy arena (poverty, race, public health, environmental protection, fair housing etc.) served to further highlight the wicked nature of addressing concerns of environmental equity. Based on the literature, wicked problems necessitate an interdisciplinary approach in an attempt to abate them. Thus requires the use of soft power, pluralistic in nature, which requires a collaboration to adequately address the problem.

A theoretical framework of backward mapping was introduced as the method of analyzing actions taken to address concerns of environmental equity that will look beyond the intent of the policymakers (to increase communication with affected communities and promote significant inclusion in the decision-making process) to focus on the behavior of the groups engaged in the public participation process and their perception of the impact of methods used to further engage them in the decision-making process. This chapter will proceed by presenting the
research design and logic model that will serve to frame this backward mapping approach; identify social goals used to evaluate inclusion mechanisms utilized; detail the data collection and survey respondents. This will be followed by an introduction of the hypothesis that will guide the data analysis presented in Chapter 4.

**Research Design**

Research has placed a significant emphasis on the establishment of cultural frames, collective action, and disruptive methods used to promote the EJ platform, however, very little is known about the impact of prescribed remedies on these emergent organizations; specifically the level of empowerment achieved from taking part in various forms of the decision making process. The application of a quantitative research design in this study is undertaken to determine the extent to which formal state participation methods are perceived as most efficacious for traditionally marginalized groups in state level environmental decision making. To adequately depict the value of backward mapping in the evaluation of participation for marginalized populations, this study employs a primary data collection process requiring the construction of an internet-based survey instrument and the identification of data sources.

As mentioned in chapter 2, program evaluation presents itself as a highly complex and value-laden activity, which lacks widely accepted criteria for determining program “success” or “failure.” While interest-oriented evaluations limit themselves in determining “the extent to which particular parties achieved their own specific goals in participatory decision-making” (Beirle and Konisky 2000, 589), the use of social goals in evaluating public participation is deemed more appropriate for this study. The use of social goals proves more of a suitable approach due to their ability to “transcend the immediate interests of parties involved in a
decision. The benefits of achieving them spill over from the participants themselves to the regulatory system as a whole” (Beierle 1999, 81).

Lucie Laurian noted that, “[a] desirable public participation process is one that enables citizens to shape planning decisions and outcomes while increasing their levels of social and political empowerment” (Laurian 2004, 53). Considering evidence that vulnerable communities have been excluded from decision-making (McGurty 2000; Bullard 1999; Hampton 1999; Cole 2000), it is the purpose of this study to assess the empowerment leveraged state-level structures of inclusion. Through the application of a backward mapping approach to program evaluation, this study will gauge the efficacy of participation mechanisms employed by state level environmental protection agencies.

The overarching goal of this study is to establish the level of efficacy that is facilitated through formal structures of participation for traditionally marginalized groups. Based on Ohmer’s (2008) definition of efficacy, this study will investigate the processes, structures, and perceptions that have been found to provide the greatest affect its presence. The remainder of this section will focus on variables that will provide the foundation for the data collection process.

**Identification of Variables**

As mentioned in Chapter 2, evaluating public participation in regards to environmental justice groups through the use of social goals is crucial due in large part to the assumption that “how well [social goals] are achieved often depends as much on how participants feel about the decision-making process as by the substantive decisions made during it” (Beierle 1999, 81). There is one independent variable for this study, *Overall Satisfaction*, which reflects participant perception regarding the culminating elements related to the structure, or comprehensive nature, of state-sponsored inclusion mechanisms (See The survey instrument Appendix B).
This study makes use of social goals in evaluating the perceived efficacy of engaging traditionally marginalized populations in public participation methods to provide a comprehensive summary of the process and outcome goals specific to this study and point to how agencies and citizens interact throughout the process (Chess 2000). The researcher established a logic model reflecting an empowerment model for evaluating state-level public participation efforts. Figure 3.1 presents a framework with states acting as empowering agents, present empowering environments (formal structures of public participation) as tools to engage EJ communities to the decision-making process. Using social goals as the variables essential to constructing empowering environments survey questions will be constructed to assess social goals to determine the level of perceived efficacy attained through participant involvement in environmental decision-making process concerning environmental justice concerns.

![Figure 3.1](image)

**Logic Model: States as Empowering Environments**

**Dependent Variable**

As mentioned in Chapter 2, social goals present a “set of goals that represent a shared societal interest in a well functioning management system” (Beirle and Konisky 1999, 7). The

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*Figure 3.1 derived from David Easton’s (1965) system’s model.*
unit of analysis for this study is conducted from a dual perspective at the organizational level of both state-sponsored public participation methods and the organizations that engage through these structures. The researcher developed a logic model for the evaluation derived from David Easton’s 1965 System’s Model. In this model the State Agency, considered the empowering agency, is assumed as the well functioning management system. As such, this empowering agency provides an environment that exhibits the social goals that impact empowerment for participants. The evaluation of the process and structure that serve, as the foundation for each type of public engagement will be conducted through the use of social goals.

Assessing the structure of state-level inclusion efforts requires grassroots organizations to gauge the satisfaction of EJ groups with the overall efforts to engage them in the decision-making process. The dependant variable, Overall Satisfaction, represents a culmination of the decision-making process, which provides an overall assessment of all social goals found to be essential in establishing an empowering environment. Questions regarding equity, access, and the overall level of engagement of groups provide a big picture of elements essential to measuring the perception of equity. Overall Satisfaction was measured by the use of thirteen questions. Prior to the execution of statistical analysis these questions were combined to establish a single variable. Table 3.1 presents the questions used to determine the overall satisfaction of group inclusion. Table 3.2 displays the univariate analysis of each individual question and the scaled variable.
Table 3.1 Question Index: Dependent Variable Scalar Construction

<table>
<thead>
<tr>
<th>Questions To Assess Overall Satisfaction With The Decision-Making Process</th>
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<tbody>
<tr>
<td>• The publicity of state-sponsored public participation events by state agencies</td>
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<tr>
<td>• The information provided by agencies at state-sponsored events</td>
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<tr>
<td>• The organization of these events</td>
</tr>
<tr>
<td>• The way your group was treated at these events</td>
</tr>
<tr>
<td>• The ability to express your organization’s values and opinions concerning proposed environmental decisions</td>
</tr>
<tr>
<td>• The degree to which state agencies take your group’s views and opinions seriously</td>
</tr>
<tr>
<td>• The degree to which your group is engaged in the decision-making process</td>
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<tr>
<td>• Your group’s overall involvement in the decision-making process at the state level</td>
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<tr>
<td>• The discussion of concerns related to proposed decisions made by state agencies</td>
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<td>• The outcomes of decisions made by state agencies</td>
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<td>• The degree to which state decisions reflect the values expressed by your organization</td>
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<tr>
<td>• Your group’s influence on the final decision outcome</td>
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<td>• The fairness of the process that produced the outcome</td>
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<tr>
<td>The publicity of state-sponsored public participation events by state agencies</td>
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<td>The information provided by agencies at state-sponsored events</td>
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<td>The way your group was treated at these events</td>
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<td>Ability to express your organization's values and opinions concerning proposed environmental decisions</td>
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<td>Degree to which state agencies take your groups' views and opinions seriously</td>
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<td>Degree to which your group is engaged in the decision-making process</td>
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<td>Your groups overall involvement in the decision-making process at the state level</td>
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<td>Discussion of concerns related to proposed decisions made by state agencies</td>
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<tr>
<td>Outcomes of decisions made by state agencies</td>
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<tr>
<td>Degree to which state decisions reflect the values expressed by your organization</td>
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<tr>
<td>Groups influence on the final decision outcome</td>
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<tr>
<td>Fairness of the process that produced the outcome</td>
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<tr>
<td>Valid N (listwise)</td>
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<tr>
<td>Overall Satisfaction</td>
</tr>
</tbody>
</table>
**Independent Variables**

To evaluate the process of inclusion, independent variables reflecting social goals will be assessed independently. The first of these independent variables, Information/Education Flow would answer questions pertaining to the quantity and quality of knowledge that enabled the public to engage competently in deliberations and decision-making. Public Value/Decision Outcome will measure the inclusion of public input and the impact of their voice on final decision outcomes. Decision Outcomes refers to the satisfaction of outcomes for all parties involved producing better outcomes by the creation of opportunities for compromise and presenting new information leading to new alternatives. Therefore, major focus will be placed on the perceived satisfaction of EJ groups regarding final decision outcomes.

Trust and Conflict variables reflect the public’s confidence in the agency by gauging the change in the level of trust throughout the decision-making process and insight into participant perception of the working relationship with the agency interactions fostering or impeding cooperation and or improving or worsening communication after engaging in the formal structure(s) of inclusion. These individual items reflect elements critical to an empowering process.

The five characteristics used to structure the survey instrument were combined into three categories prior to running this model. Questions regarding communication and the knowledge attained after participating in state sponsored events were combined to create the Education/Information Flow. Likewise questions focusing on the final decision outcome, fairness, equity, and the inclusion of public value were combined into the Public Value/Final Decision Outcome variable.
<table>
<thead>
<tr>
<th>Scale</th>
<th>QUESTIONS</th>
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<tbody>
<tr>
<td>Public Value/Decision</td>
<td>• The way your group was treated at these events?</td>
</tr>
<tr>
<td>Value/Decision Outcome</td>
<td>• The ability to express your organizations values and opinions concerning proposed environmental decisions?</td>
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<td></td>
<td>• How well your views and opinions are taken seriously?</td>
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<td></td>
<td>• Your ability to effectively engage in the decision-making process</td>
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<td></td>
<td>• Your group’s overall organizational involvement in the decision-making process</td>
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<td></td>
<td>• The discussion of concerns related to a proposed decision?</td>
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<td></td>
<td>• The decision outcome(s)?</td>
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<tr>
<td></td>
<td>• The degree to which state decisions reflect the values expressed by your organization?</td>
</tr>
<tr>
<td></td>
<td>• Your group’s influence on the final decision outcome?</td>
</tr>
<tr>
<td></td>
<td>• The fairness of the process that produced the outcome?</td>
</tr>
<tr>
<td>Education/Information Flow</td>
<td>• Has a good understanding of the important environmental issues facing our community.</td>
</tr>
<tr>
<td></td>
<td>• Clearly understands the state’s goals and efforts in addressing environmental justice issues.</td>
</tr>
<tr>
<td></td>
<td>• Has gathered invaluable knowledge through participating in state participation efforts.</td>
</tr>
<tr>
<td></td>
<td>• Is aware of opportunities to participate in environmental decision-making.</td>
</tr>
<tr>
<td></td>
<td>• Has found participation in events very informative</td>
</tr>
<tr>
<td></td>
<td>• Knowledge of state-level environmental issues</td>
</tr>
<tr>
<td></td>
<td>• Competence to engage in the environmental issues</td>
</tr>
<tr>
<td></td>
<td>• Knowledge of state-level environmental justice issues</td>
</tr>
<tr>
<td></td>
<td>• Environmental planning and development</td>
</tr>
<tr>
<td></td>
<td>• Navigating the decision-making process</td>
</tr>
<tr>
<td></td>
<td>• The publicity of state-sponsored public participation events by state agencies</td>
</tr>
<tr>
<td></td>
<td>• The information provided in these venues</td>
</tr>
<tr>
<td>Trust/Conflict</td>
<td>• How has the participation in state participation structures affected your:</td>
</tr>
<tr>
<td></td>
<td>• Trust in the state as an advocate in the protection of EJ communities?</td>
</tr>
<tr>
<td></td>
<td>• Distrust of the state an advocate in the protection of EJ communities?</td>
</tr>
<tr>
<td></td>
<td>• Conflict between EJ communities and private industry?</td>
</tr>
<tr>
<td>Involve</td>
<td>Identify the frequency in the past 5 years that your group has participated in the following forms of public participation:</td>
</tr>
<tr>
<td></td>
<td>Roundtables, Blue-Ribbon Commissions; Focus Groups; Public Hearing/Inquiries; Public Opinion Surveys; Task Forces; Negotiated Rule Making; Consensus Conferences; Citizen Jury/Panel; Public Advisory Committees; Town Hall Meeting</td>
</tr>
</tbody>
</table>
Table 3.4 reflects the reliability of each scale created to determine if the item should be included in determining the overall efficacy of the decision making process. The Chronbach’s Alpha is a measurement that reflects the internal consistency of each of the items combined to formulate both dependent and independent variables.

<table>
<thead>
<tr>
<th>Table 3.4 Item Reliability Analyses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Public Value/Decision Outcome</td>
</tr>
<tr>
<td>Education/Information Flow</td>
</tr>
<tr>
<td>Trust/Conflict</td>
</tr>
<tr>
<td>Satisfaction with Inclusion Method</td>
</tr>
<tr>
<td>Involvement level in inclusion method</td>
</tr>
<tr>
<td>Overall Satisfaction</td>
</tr>
</tbody>
</table>

**Research Question and Hypotheses**

The study primarily addressed the following research question: To what extent are formal structures of inclusion at the state level efficacious for Environmental Justice groups. The following hypotheses were developed to assist in answering this question.

**Hypothesis 1: Groups within states will be equally satisfied with formal structures of inclusion.** This hypothesis specifically pertains to states with multiple respondents (California, New Jersey, Oregon, and Texas). Hampton’s 1999 study surveying formal structures of inclusion emphasizes the importance of fairness and justice, elements key to the plight of the Environmental Justice Movement. As pros and cons of each method are presented, he suggests that some methods may have considerable challenges related to the inclusion of diverse populations (educational, language, race, ethnicity). However, he maintains that it is possible to implement
modifications to empower and further level the playing ground for these newly engaged
groups. As states work to address EJ concerns some of these modifications may have
been implemented.

This hypothesis will seek to identify states that present formal structures of
inclusion that provide empowering engagement of all groups within states. Survey
preliminary results identified four states with multiple respondents: California (4), New
Jersey (2), Oregon (2), and Texas (4). This evidence will surface when evaluating group
responses for each form of inclusion in hopes that groups within a state that report
 equivalent levels of satisfaction (be it positive or negative) to address this supposition.

**Hypothesis 2:** As group satisfaction with states response increases, satisfaction with
 state-level forms of participatory mechanisms will also increase. The relationship between
groups and state officials is essential to fostering an empowering environment. This study
approaches satisfaction with how state officials respond to EJ groups from two distinct
perspectives: concerns specific environmental equity and the perception groups have of state
officials positions as it relates specifically to EJ issues. Perceptions that state officials do not
respond well to concerns of EJ groups may reflect a negative response to any form of formal
structure of participation. While positive perceptions may produce a higher level of satisfaction
in forms of participation thought to be less effective for this group demographic.

Table 1.1 in Chapter 1 details the specific approaches each state has taken to address EJ
issues across the US. This table displays actions that range from nothing at all to the
establishment of staff positions that specifically address concerns related to environmental
inequity. McGurty (2000) noted that EJ proponents in Warren County found the use of legal
actions, protests, and marches had not produced a sufficient impact on the decision-making and
therefore, realigned their actions to invade the political structure that had excluded them. As states employ methods more appropriate for marginalized populations, there is expected to be a positive relationship between the state’s responses to specific EJ concerns as groups are engaged in participation methods that promote empowerment.

As environments of empowerment, states possess an authoritative component that must also be considered. Public officials have the ability to use power to thwart effective policy implementation through multiple forms, such as the formation of commissions, co-opting key players, showcasing, or postponement (McGurty 2000, Gaventa 1980, Cobb and Ross 1997).

**Hypothesis 3:** As Education/Information Flow regarding opportunities to participate in increase, there will be an increase in overall group satisfaction.

McKinney and Harmon (2002) conducted a survey of all stakeholders (government agencies, nonprofit organizations) concerning environmental decision-making where one of the major areas of improvement noted was regarding communication. Responses suggested more informative communication of project details, clearly stating the goals, the inclusion of public comments, and by placing more emphasis on public comments. These findings insinuate the desire of stakeholders to hear and to be heard. This hypothesis proposes that communication between states and EJ organizations will gauge the overall satisfaction.

**Hypothesis 4:** As Levels of Involvement in formal state-level structures of participation increase, there will be an increase in the overall satisfaction of EJ groups. Chapter 2 focused on the ability of EJ groups to garner attention from key decision-makers to address environmental equity on the formal governmental agenda and proceed throughout the policy-making process. These events convert attention into action
(Baumgartner and Jones 1993; Downs 1979). This hypothesis posits that the level of
group involvement in specific formal structures of inclusion presents a perceived level of
self-efficacy that should translate when engaging in formal structures of participation.
Therefore, as groups are motivated to actively engage in formal structures of inclusion,
the overall satisfaction with the forms of inclusion increases.

**Hypothesis 5:** As Levels of Trust increases and Conflict decreases in
association with formal state-level structures of participation, the overall
satisfaction of EJ groups will increase. Chapter 2 highlights actions often taken to
dissuade mobilizing efforts of new items for consideration on the formal agenda. Tactics
such as intimidation are often found to add to the volatile relationships between EJ
communities and governing agencies called to protect and serve them (Cobb and Ross
1997, Gaventa 2004). Hypothesis five will focus on the social goals trust and conflict and
their combined impact, influences satisfaction of participants engaged in the process.
Thus influencing perceived efficacy of groups garnered from state structures of inclusion.

**Hypothesis 6:** As the Level of Public Value/Decision-Outcomes increase in
formal state-level structures of participation, there will be an increase in group
overall satisfaction. In an attempt to determine the level of efficacy participants have
gained by participating in formal state structures of inclusion, the ability to see
fingerprints of every stakeholder in the final outcome is crucial. This hypothesis focuses
on social goals public value and final decision outcomes. A portion of Chapter 2 draws
attention to the connection between garnering resources and the risk of symbolic political
actions by presenting Warren’s findings that In addition to initiating reform in public
agencies, a gauge of a community or an organization’s ability to demand resources reveal the level of power it has in the decision-making process (2001). Therefore, failure to attain resources is often the product of symbolic politics, one of the most effective methods of thwarting the momentum of new movements; presenting the façade of political action, yet allow the policy problem to persist (Cobb and Ross 1997, Gaventa 2004). The researcher presumes that as EJ groups perceive that their values and input are evident in final decision outcomes, the level of satisfaction with overall decision-making process will increase.

**Data Collection**

Surveys are considered the most systematic, objective method of collecting vital information from stakeholders (Berman 2007). The instrument used to assess the perceived efficacy of participants in formal state-level structures of participation efforts were influenced by research conducted by Ohmer (2007, 2008) and the most recent satisfaction survey distributed by the U.S. Department of Housing and Urban Development (2007). Satisfaction surveys primarily provide an assessment of interventions that is solely based on the opinions of those who use programs or services. The goal of satisfaction surveys is to provide feedback to enable agencies to realign program goals and produce more effective responses to users (Royce et al. 2001).

Data collection was conducted through the use of Qualtrics, an electronic, web based, survey instrument. The survey was estimated to be 10-20 minutes in length, and composed of 42 items that assess the social goals of empowering environment in public engagement as outlined in figure 3.1. Survey items are structured to divulge details specific to the relationship between study participants and state agencies.
Survey Respondents

There were two main sources utilized to identify organizations that specifically advocate for environmental justice concerns and would therefore be appropriate for inclusion in this study. The first National People of Color Environmental Summit, an event intended to clearly define the overarching goals of the movement and to unify communities across the globe, established the first comprehensive list of entities specifically organized to advocate against environmental injustices. As mentioned in Chapter 3, the Multicultural Environmental Leadership Development Initiative database of environmental justice organizations was cross-referenced with the participants in the summit, which resulted in a list containing approximately 929 organizations reflecting all active EJ organizations across the United States.

The survey instrument (See Appendix B) was distributed using Qualtrics online survey system from August 9th to October 25th, 2011. 929 organizations were targeted, of which, 654 did not have valid e-mail addresses. Of the remaining 420 valid e-mail addresses, 51 organizations opened and reviewed the survey, with 38 actually responding to our request for participation. Phone calls were conducted to ensure that surveys were received beginning week 2 and continued through the last week of October. Through these calls, could not be established with 336 organizations due to unreturned messages, disconnected phone lines, and failure to respond. Utilizing The American Association for Public Opinion Research table response rate calculator (http://www.aapor.org/Resources.htm) a cooperation rate of 34% was determined by dividing the total number of incomplete surveys by the sum of the total number of respondents (both partial and incomplete), refusals, and others.
Groups that responded to the survey stated they focus their operations primarily in 16 states; but collectively have engaged in some type of advocacy in all 50 states, with 40% of participants representing the states of California and Texas. When investigating the age of the organizations 68% were organized between 1960 and 1990 with a vast majority (56%) maintaining a member base between 100 to 1,000 members. Yearly monetary budgets of these organizations ranged greatly with 43% reporting less than $100,000.00; 28% between $100,000.00 and $500,000.00 and 29% with budgets of one million dollars or more. Descriptive and inferential statistical analysis will be conducted to provide insight into the nature of variable relationships in addition to highlighting the inferences that can be made from the findings. Frequency distributions, bivariate correlations, and linear regressions are used to provide summary statistics for analysis.

**Summary**

This chapter has outlined the research design to determine the extent to which formal structures of inclusion are efficacious for environmental justice groups. To answer this question a logic model presenting study variables that were essential to constructing the survey instrument. In addition, the researcher presented four hypotheses that will guide the data analysis. Chapter Four will report findings from survey respondents. A frequency distribution of program-efficacy survey responses will detail the number and range of responses associated with each survey question. Demographic characteristics reflecting the age, budget, and membership size will also be presented for organizations. Chapter Five will then be devoted to presenting the statistical analysis used to analyze survey responses, interpreting analysis results, testing the hypothesis for each goal, and discussing the findings.
CHAPTER 4: Findings

Introduction

This chapter provides an overview of results from the National Environmental Justice Program Participation Survey, an electronic survey sent to all environmental justice groups operating in the U.S. Data collection took place between August and November 2011. Investigating this particular activity at the state level will aid in better understanding the relationship between the participation of economically and politically marginalized communities in environmental decision-making and political involvement. Additionally, analyses in this chapter will identify the most popular methods states use when including marginalized groups in environmental decision-making and determine how frequently they are used. This chapter will also examine the overall impact of these methods on how government officials’ environmental decisions are currently being made as perceived by the environmental communities.

This chapter will proceed by establishing the foundation for data analysis by reviewing the target population and the actual survey participants. Next, responses to questions concerning organizational satisfaction with public participation methods in how they promote the exchange of knowledge; the incorporation of the public values; decision outcomes; institutional trust; and the reduction of conflict in the environmental decision-making process. A summary of responses in the form of frequency distributions (tables 4.1-4.11) provide insight into the relationship between engagement in specific participation mechanism and the resulting efficacy perceived by respondents.
Frequency Distributions

The use of public participation methods in the environmental arena have often been characterized as placative actions that present an idea that has been already decided on and simply use this venue as an opportunity to announce and ultimately defend the decision (Beierle 1999). While a significant burden is placed on the governing body to engage the population that is impacted by the decision, it is important to gauge how proactive the groups have been in these communications. The evaluation of state participation opportunities can only be fairly assessed by organizations that actively engaged in the process. Therefore, the first four questions of the survey seek to determine the overall level of engagement the environmental justice organizations in the policy process. This portion of the survey also examines the degree to which states initiate communication with these groups.

The first question asks how often their group or members of their group have discussed issues of environmental justice with specific members of various levels of governing bodies over the course of the past five years. Nearly all groups stated they had some contact: 21% -- of respondents reported discussing these issues with an elected member of a local government such as a city council member or mayor at least once, but not more than twice in the past five years; 10% at least three times, but not more than four; 62% more than four times; and 7% never engaged in these discussions. Overall, Table 4.1 reveals that participants more frequently contacted other organizing bodies (70%), members of the state legislature (55%), and a member of the local government (62%) in the past five years. At least three-quarters of survey participants (75%) reported communicating with media outlets and multilateral institutions such as World Bank and the Inter-American Development Bank to discuss issues of environmental equity four or more times in the past five years.
Table 4.1
Frequency Distribution of Group Engagement:
Communicating Environmental Justice Concerns
(N=29)

<table>
<thead>
<tr>
<th>Role</th>
<th>Never %</th>
<th>1-2 times %</th>
<th>3-4 times %</th>
<th>More than 4 times %</th>
</tr>
</thead>
<tbody>
<tr>
<td>An elected member of a local government such as a city council member or mayor</td>
<td>7.0</td>
<td>21.0</td>
<td>10.0</td>
<td>62.0</td>
</tr>
<tr>
<td>A member of a state legislature</td>
<td>7.0</td>
<td>21.0</td>
<td>17.0</td>
<td>55.0</td>
</tr>
<tr>
<td>A state governor or members of his or her staff</td>
<td>17.0</td>
<td>31.0</td>
<td>24.0</td>
<td>28.0</td>
</tr>
<tr>
<td>An official in a state agency</td>
<td>10.3</td>
<td>10.3</td>
<td>20.7</td>
<td>58.6</td>
</tr>
<tr>
<td>A member of Congress</td>
<td>20.7</td>
<td>27.6</td>
<td>10.3</td>
<td>41.4</td>
</tr>
<tr>
<td>An official in the White House</td>
<td>35.7</td>
<td>28.6</td>
<td>14.3</td>
<td>21.4</td>
</tr>
<tr>
<td>An official in a federal agency</td>
<td>6.7</td>
<td>20.0</td>
<td>13.3</td>
<td>60.0</td>
</tr>
<tr>
<td>Other (please specify):</td>
<td>25.0</td>
<td>0.0</td>
<td>0.0</td>
<td>75.0</td>
</tr>
</tbody>
</table>

The next two questions seek to distinguish the level or organizational engagement by establishing how organizations have voiced concerns about the issues as well as the specific issues that motivate these actions. Table 4.2 reports the type of activities used by organizations to communicate concerns about environmental issues. Nearly 87% of survey participants utilized public forums or guest speakers multiple times. Although a commonly utilized practice in the early days of the movement, 17% said they did not use any disruptive actions; 25% report utilizing a protest or demonstration at least two times in the past five years; about 18% three to four times; and 39% employed this practice more than four times. Litigation, another commonly used tactic in the environmental justice movement, has remained a viable option in organizational engagement with 32% of respondents reporting one to two court-related activities; nearly 10% three to four times, and 16% taking legal action more than four times. Communication via media and new outlets remain the most frequently used form of organizational engagement employed by 93.5% of survey participants.
Table 4.2
Frequency Distribution of Group Engagement
Engagement Methods
(N=31)

<table>
<thead>
<tr>
<th>Engagement Method</th>
<th>Never %</th>
<th>1-2 times %</th>
<th>3-4 times %</th>
<th>More than 4 times %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaged in a protest or demonstration related to an issue of environmental justice</td>
<td>17.9</td>
<td>25.0</td>
<td>17.9</td>
<td>39.3</td>
</tr>
<tr>
<td>Held a public forum or brought in public speakers to discuss issues of environmental justice</td>
<td>12.9</td>
<td>12.9</td>
<td>16.1</td>
<td>58.1</td>
</tr>
<tr>
<td>Initiated litigation in a court related to an issue of environmental justice</td>
<td>41.9</td>
<td>32.3</td>
<td>9.7</td>
<td>16.1</td>
</tr>
<tr>
<td>Participated in an interview with the news media regarding environmental justice issues</td>
<td>6.5</td>
<td>12.9</td>
<td>16.1</td>
<td>64.5</td>
</tr>
</tbody>
</table>

Table 4.3 presents responses that reflect the frequency in communication between the respondents and state agencies. These questions are associated with the frequency in communication specific to general environmental issues, the desire to engage in the decision-making process, and human health and safety concerns. Two-thirds of respondents report that they have contacted state agencies about general environmental issues more than four times in the last five years, a little over 18% report initiating communication three to four times, and just a little over 7% state they have prompted contact once or twice while the same rate of response reports never taking action in this manner. The same rate of 7.4% is found to have never contacted officials concerning participating in the environmental decision-making. In addition, 70 and 80 percent of the organizations surveyed respectively report contacting state agencies concerning opportunities for engagement and concerns for human health more than four times.
Table 4.3
Frequency Distribution of Group Engagement
State Level Communication during the Past Five Years
(N=27)

<table>
<thead>
<tr>
<th></th>
<th>Never %</th>
<th>1-2 times %</th>
<th>3-4 times %</th>
<th>More than 4 times %</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organization has contacted state agencies to voice general concerns about environmental issues?</td>
<td>7.4</td>
<td>7.4</td>
<td>18.5</td>
<td>66.7</td>
</tr>
<tr>
<td>The organization has contacted state government agencies to participate environmental-decision making?</td>
<td>7.4</td>
<td>14.8</td>
<td>7.4</td>
<td>70.4</td>
</tr>
<tr>
<td>The organization has contacted state agencies to voice general concerns for issues regarding human health and safety?</td>
<td>7.7</td>
<td>7.7</td>
<td>3.9</td>
<td>80.8</td>
</tr>
<tr>
<td>State agencies contacted your organization to participate in activities to voice concerns for environmental issues that pose a threat to vulnerable human populations such as minority groups, children, the elderly, and the poor?</td>
<td>11.1</td>
<td>29.6</td>
<td>3.7</td>
<td>55.6</td>
</tr>
</tbody>
</table>

Organizations identified a myriad of environmental justice issues they considered to be the most important, including toxic emissions, air quality, water quality, land use, and hydraulic fracturing. They stated:

• **Failure of the Maricopa County Air Quality Department to enforce laws and permit conditions in minority communities; Fisher Sand and Gravel's illegal emissions and no zoning; BF Goodrich's toxic emissions and expansion; Motorola Superfund Site and vapor intrusion/clean up issues; Hayden ASARCO smelter emissions and defacto Superfund Site now; HF emissions from Phoenix Brick; City of Phoenix scamming EPA Brownfield's program with its grant and discriminating against the local Latino community the grant is supposed to be about;**

• **EJ communities being impacted by industrial toxic air emissions. EJ communities being impacted by violations of waste water discharges and drinking water quality. EJ communities having elevated levels of Dioxin and Dioxin like compounds in their blood due to living in close proximity to industrial facilities releasing dioxin and dioxin like**
compounds into the environment. EJ communities being targeted as the locations for industrial development. EJ communities experiencing impacts due to hydraulic fracturing of natural gas plays. EJ communities health and livelihood being impacted by hurricanes and the BP Oil Disaster

- Transportation equity, air quality, land use, Portland air toxics action committee, equity at decision-making tables

- Pesticide exposure of farm workers; contaminating industries located in residential, low-income, minority neighborhoods; lack of enforcement of health and safety protections for farm workers.

Research has shown that the prevalence of environmental inequities across the nation bear marked similarities. The 1987 findings of an independent study conducted by the Commission for Racial Justice found that “Race was found to be the most potent variable in predicting where these facilities were located-more powerful than poverty, land values, and home ownership” (Bullard and Johnson 2000). In quantifying and legitimizing the claims of EJ communities across the country the questions of uniformity must be approached. While organizational responses vary regarding major agenda items in their particular community and state, it is quite evident that there is the need to gauge the severity of environmental equity across the board.

To gain perspective on how organizations viewed the severity of environmental degradation participants were asked to rate on a scale from 1 to 7 their thoughts regarding who bears the greatest burden of environmental degradation such as pollution at the local, state, and national landscape. A value of 1 indicates the respondent thought everyone shares the burden equally, and a value of 7 indicates the respondent believes only one group bears the entire cost. Only 8.5% of groups that responded actually felt that everyone shared the cost equally, while about 73% perceived that one group bore the burden, and a little over 15% remained neutral. However at the state level the line was clearly drawn with 15.4% viewing the cost shared equally and 84.6%
holding firm that one group bore all of the cost, with no neutral votes. The community level responses closely mirrored those for the national distribution of environmental degradation where 7.7% feel that everyone shares the cost, nearly 12% responded neutrally, and just at 81% felt that one group bore more of their share of the cost.

<table>
<thead>
<tr>
<th>Table 4.4</th>
<th>Frequency Distribution of Group Perception of Shared Cost of Environmental Degradation (N=26)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Everyone shares costs equally %</td>
</tr>
<tr>
<td>In the U.S.</td>
<td>7.7</td>
</tr>
<tr>
<td>In your state</td>
<td>7.7</td>
</tr>
<tr>
<td>In your community</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**Methods of Inclusion**

The next battery of questions serves a dual purpose. First, the questions measure the involvement of the groups participating in the survey. Secondly, they identify the forms of public participation that most satisfied them ranking the overall process basing all answers on activity in various forms of inclusion over the past five years. Tables 4.5 and 4.6 (a-c) present frequency distributions of the level of group activity in state sponsored events and their satisfaction with their involvement in these events. Respondents consistently reported attending five specific events at least four times or more in the past five years. The top five most highly attended state sponsored events were: public hearings (69%), town hall meetings (61%), round tables (56%),
public advisory committees (50%), and task forces (48%). Interestingly, two of the top five -- public hearings and town hall meetings -- are the forms of involvement scholars have identified as allowing the least amount of influence from public interest (Brinkerhoff and Crosby 2005, Hampton 1999; Rowe and Frewer 2000; Rowe and Frewer 2004; Fiorino 1990). The least attended events were blue-ribbon commissions (70%), inter-agency working groups (66%), citizen jury panels (53%), consensus conferences (50%), and negotiated rule-making (38%).

Interestingly, the most highly attended state sponsored event, Public Hearings was reported by respondents to be the second most dissatisfying event, just after Negotiated Rule-Making (60%), with an overall 52% dissatisfaction rating. Public Advisory Committees, the fourth most attended event was found to be the most satisfying process (38%) with focus groups, town hall meetings, and public opinion surveys lagging just behind at 33% (See Table 4.6).
Table 4.6
Group Satisfaction with State Sponsored Events
(N= 26)

<table>
<thead>
<tr>
<th></th>
<th>Very Satisfied %</th>
<th>Satisfied %</th>
<th>Neutral %</th>
<th>Dissatisfied %</th>
<th>Very Dissatisfied %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roundtables</td>
<td>4.4</td>
<td>17.4</td>
<td>30.4</td>
<td>34.8</td>
<td>13.0</td>
</tr>
<tr>
<td>Task Forces</td>
<td>5.0</td>
<td>20.0</td>
<td>40.0</td>
<td>10.0</td>
<td>25.0</td>
</tr>
<tr>
<td>Blue-Ribbon Commissions</td>
<td>0.0</td>
<td>11.1</td>
<td>44.4</td>
<td>16.7</td>
<td>27.8</td>
</tr>
<tr>
<td>Focus Groups</td>
<td>4.8</td>
<td>28.6</td>
<td>28.6</td>
<td>23.8</td>
<td>14.3</td>
</tr>
<tr>
<td>Public Hearing/Inquiries</td>
<td>0.0</td>
<td>16.0</td>
<td>32.0</td>
<td>32.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Public Opinion Surveys</td>
<td>4.8</td>
<td>28.6</td>
<td>28.6</td>
<td>14.3</td>
<td>23.8</td>
</tr>
<tr>
<td>Negotiated Rule Making</td>
<td>0.0</td>
<td>20.0</td>
<td>20.0</td>
<td>40.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Consensus Conferences</td>
<td>0.0</td>
<td>20.0</td>
<td>45.0</td>
<td>10.0</td>
<td>25.0</td>
</tr>
<tr>
<td>Citizen Jury/ Panels</td>
<td>0.0</td>
<td>10.0</td>
<td>45.0</td>
<td>30.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Public Advisory Committees</td>
<td>0.0</td>
<td>38.1</td>
<td>19.1</td>
<td>23.8</td>
<td>19.1</td>
</tr>
<tr>
<td>Town Hall Meetings</td>
<td>8.3</td>
<td>25.0</td>
<td>37.5</td>
<td>16.7</td>
<td>12.5</td>
</tr>
<tr>
<td>Other (Please specify)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Voice of the Public Interest

When asked to provide additional insight into the rating of state sponsored events, two particular responses stood out:

“[Our organization has been] frequently asked for suggestions and comments but rarely does the state agency follow through on our recommendation or suggestions, and when they do, it is after a lengthy process and time”.

“Often times, public engagement - as practiced - is essentially a pro-forma exercise designed to check the procedural boxes and justify a decision that's long been made”.

These responses, while specific to organizations facing varied challenges in different parts of country speaks to the same concern, the view of public participation as an agenda item and not as tool for crafting policy using the most useful information, the people at the ground level. To gain a better perspective on this topic, organizations were prompted to rate their level of satisfaction not only the degree they feel their voices being heard, but they extent to which
they think they are having an impact on the decisions that are made concerning the communities in which they live, work, and play.

Table 4.7 reveals that while 32% of respondents are just as dissatisfied as those who are satisfied with the ability to voice concerns to state level officials concerning EJ issues, only 12% are satisfied with their state’s willingness to listen to their concerns. Only 20% of the respondents state they are satisfied with the degree to which they are invited to take part in the decision-making process. The lowest levels of satisfaction are associated with the governors’ response to organizational input (8%), the state legislature’s response to concerns (8%) and input (8%) concerning decisions impacting EJ communities.

<table>
<thead>
<tr>
<th>Question</th>
<th>Very Satisfied %</th>
<th>Satisfied %</th>
<th>Neutral %</th>
<th>Dissatisfied %</th>
<th>Very Dissatisfied %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your ability to voice your concerns regarding environmental justice to state-level officials.</td>
<td>16.0</td>
<td>16.0</td>
<td>36.0</td>
<td>12.0</td>
<td>20.0</td>
</tr>
<tr>
<td>The degree to which your organization is asked to participate in environmental decision-making.</td>
<td>4.0</td>
<td>16.0</td>
<td>28.0</td>
<td>28.0</td>
<td>24.0</td>
</tr>
<tr>
<td>The state’s willingness to listen to your organization’s concerns.</td>
<td>4.0</td>
<td>8.0</td>
<td>20.0</td>
<td>44.0</td>
<td>24.0</td>
</tr>
<tr>
<td>The state legislature's response to your organization’s concerns.</td>
<td>0.0</td>
<td>8.0</td>
<td>20.0</td>
<td>44.0</td>
<td>28.0</td>
</tr>
<tr>
<td>The state legislature’s response to your organization’s input.</td>
<td>0.0</td>
<td>8.0</td>
<td>28.0</td>
<td>40.0</td>
<td>24.0</td>
</tr>
<tr>
<td>The governor’s response to your organization’s input.</td>
<td>0.0</td>
<td>8.0</td>
<td>28.0</td>
<td>24.0</td>
<td>40.0</td>
</tr>
<tr>
<td>State agencies’ responses to your organization’s input.</td>
<td>4.0</td>
<td>16.0</td>
<td>24.0</td>
<td>36.0</td>
<td>20.0</td>
</tr>
</tbody>
</table>

These overwhelmingly low levels of satisfaction are further punctuated by the fact that 66.7% of respondents reported being dissatisfied with the states willingness to assist communities with EJ concerns. The willingness to assist with concerns of this nature may also
reflect the overall feeling that EJ issues (73%) and issues that impact vulnerable populations (79%) are not a major agenda item at the state level (Table 4.8).

Table 4.8
Frequency Distribution of State Response to Environmental Justice Concerns
N=22

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree %</th>
<th>Agree %</th>
<th>Neither Agree nor Disagree %</th>
<th>Disagree %</th>
<th>Strongly Disagree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>The state is willing to assist communities with environmental justice concerns.</td>
<td>0.0</td>
<td>12.5</td>
<td>20.8</td>
<td>33.3</td>
<td>33.3</td>
</tr>
<tr>
<td>Environmental justice issues are a major concern at the state-level</td>
<td>0.0</td>
<td>8.7</td>
<td>17.4</td>
<td>30.4</td>
<td>43.5</td>
</tr>
<tr>
<td>The state is very concerned about environmental issues that impact vulnerable populations such as minority groups, children, the elderly, and the poor.</td>
<td>0.0</td>
<td>4.2</td>
<td>16.7</td>
<td>41.7</td>
<td>37.5</td>
</tr>
</tbody>
</table>

Transfer of Knowledge and Institutional Trust

As mentioned in Chapter 2, the “[d]ecide, announce, and defend” (Beierle 1999, 76) pattern that has prevailed in the environmental protection process has proven to be the biggest setback in the advancement of significant public participation. In an effort to discontinue the degradation of similar communities across the nation, Section 5-5 of Executive Order 12898 not only emphasized public participation, but also included the dissemination of knowledge concerning the introduction of potentially hazardous facilities into marginalized communities. When analyzing survey participants’ responses it is interesting to find that although respondents expressed a high level of dissatisfaction on items in previous sections of the survey, it appears a vast majority has gained a considerable amount of knowledge concerning the decision-making
process, general environmental issues and the extent of environmental justice concerns across the state.

Table 4.9 reveals in-depth information on the transfer of knowledge after participation in state-sponsored events. 43% acknowledged an increase in their awareness of state-level environmental justice issues. 52% of survey respondents agree that their knowledge of state-level environmental issues has improved. Even more significant, nearly 48% feel that they are more competent to engage in discussions concerning environmental issues. In addition, a little over half of these organizations (56.6%) reported that understanding in environmental planning and development has improved. Furthermore, 47.9% were confident that after participating in state-sponsored events they are now better able to navigate the state decision-making process.
Table 4.9  
Frequency Distribution Transfer of Knowledge  
(N=26)

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>After participating in state-sponsored events, My group’s knowledge of state-level environmental issues has improved.</td>
<td>4.4</td>
<td>47.8</td>
<td>17.4</td>
<td>13.0</td>
<td>17.4</td>
</tr>
<tr>
<td>After participating in state-sponsored events, my group is more competent to engage in discussions on environmental issues.</td>
<td>8.7</td>
<td>39.1</td>
<td>17.4</td>
<td>13.0</td>
<td>21.7</td>
</tr>
<tr>
<td>After participating in state-sponsored events, my group’s awareness of state-level environmental justice issues has increased.</td>
<td>13.0</td>
<td>30.4</td>
<td>26.1</td>
<td>8.7</td>
<td>21.7</td>
</tr>
<tr>
<td>After participating in state-sponsored events, my group’s understanding of environmental planning and development has improved.</td>
<td>4.4</td>
<td>52.2</td>
<td>17.4</td>
<td>8.7</td>
<td>17.4</td>
</tr>
<tr>
<td>After participating in state-sponsored events, my group is now better able to navigate the state decision-making process.</td>
<td>4.4</td>
<td>43.5</td>
<td>26.1</td>
<td>8.7</td>
<td>17.4</td>
</tr>
</tbody>
</table>

As an offspring of the Civil Rights Movement, an element embedded in the DNA of the Environmental Justice Movement is that of distrust in governmental decisions. In her comparative analysis of both movements, McGurty refers to exploring misgivings concerning governmental intent as “an analysis of distrust for government decisions” (McGurty 2000, 377). This distrust was seen clearly as a Warren County community member spoke from her first-hand experience: “They use black people as guinea pigs. Anytime there is something that is going to kill, we’ll put it in the black area to find out if it kills and how many. They don’t care. They don’t value a black person’s life” (McGurty 2000, 380).
Table 4.10 reveals that after engaging in state-level inclusion activities the level of trust is slightly increased for some respondents (12.5%) concerning advocacy for the protection of vulnerable populations, yet decreased for nearly 67% of respondents. Interestingly enough, when considering the conflict between environmental justice advocates and state agencies, 45.8% felt that after interactions, the level of conflict decreased. The decrease in conflict could be due to the revelation that with more knowledge comes more grief (Gaventa 1980). Due to the nature of past relationships with state officials, regression of EJ groups may have experienced further actions that pontificate that state officials do not truly care about their voices or communities, as a result decreasing the overall level of conflict.

Table 4.10
Frequency Distribution Level of Trust/Conflict (N=36)

<table>
<thead>
<tr>
<th>Question</th>
<th>Increased Significantly %</th>
<th>Somewhat Increased %</th>
<th>Neutral %</th>
<th>Somewhat Decreased %</th>
<th>Decreased Significantly %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your group’s general level of trust towards the state as an advocate in the protection of vulnerable populations?</td>
<td>0.0</td>
<td>12.5</td>
<td>20.8</td>
<td>29.2</td>
<td>37.5</td>
</tr>
<tr>
<td>The conflict between individuals concerned with environmental justice issues and state agencies.</td>
<td>4.2</td>
<td>20.8</td>
<td>29.2</td>
<td>33.3</td>
<td>12.5</td>
</tr>
</tbody>
</table>

*Measures of Overall Satisfaction With State-Level Decision Making*

When asked to rate their overall satisfaction with the inclusiveness of the environmental decision-making process at the state level, organizations seem to be overwhelmingly dissatisfied with the overall inclusion structures used at the state level. Overall, out of 12 items evaluating the overall process, no item received a satisfactory rating (See table 4.11). Questions that reflect
the manner in which the organizations were treated and the ability to express their organizational values and opinions were rated as neutral with 41.7 and 37.5% respectively.

Participants found three items in particular to be unsatisfactory. First, 83.3% of EJ organizations were dissatisfied with the overall fairness; 70% found final decisions and those decisions that reflect the values of the organization unsatisfactory and, over 60% percent of respondents reported dissatisfaction with the degree to which their claims and concerns are taken seriously, their impact on final decisions, and discussion of concerns related to proposed decisions at the state level.
## Table 4.11
Frequency Distribution of Overall Satisfaction
(N=36)

<table>
<thead>
<tr>
<th>Question</th>
<th>Very Satisfied %</th>
<th>Satisfied %</th>
<th>Neutral %</th>
<th>Dissatisfied %</th>
<th>Very Dissatisfied %</th>
</tr>
</thead>
<tbody>
<tr>
<td>The publicity of state-sponsored public participation events by state agencies</td>
<td>0.0</td>
<td>18.2</td>
<td>36.4</td>
<td>22.7</td>
<td>22.7</td>
</tr>
<tr>
<td>The information provided by agencies at state-sponsored events</td>
<td>0.0</td>
<td>20.8</td>
<td>33.3</td>
<td>20.8</td>
<td>25.0</td>
</tr>
<tr>
<td>The organization of these events</td>
<td>0.0</td>
<td>25.0</td>
<td>33.3</td>
<td>29.2</td>
<td>12.5</td>
</tr>
<tr>
<td>The way your group was treated at these events</td>
<td>4.2</td>
<td>25.0</td>
<td>41.7</td>
<td>8.3</td>
<td>20.8</td>
</tr>
<tr>
<td>The ability to express your organization’s values and opinions concerning proposed environmental decisions</td>
<td>4.2</td>
<td>29.2</td>
<td>37.5</td>
<td>8.3</td>
<td>20.8</td>
</tr>
<tr>
<td>The degree to which state agencies take your group’s views and opinions seriously</td>
<td>0.0</td>
<td>12.5</td>
<td>20.8</td>
<td>41.7</td>
<td>25.0</td>
</tr>
<tr>
<td>The degree to which your group is engaged in the decision-making process</td>
<td>4.4</td>
<td>8.7</td>
<td>30.4</td>
<td>30.4</td>
<td>26.1</td>
</tr>
<tr>
<td>Your group’s overall involvement in the decision-making process at the state level</td>
<td>4.2</td>
<td>12.5</td>
<td>33.3</td>
<td>29.2</td>
<td>20.8</td>
</tr>
<tr>
<td>The discussion of concerns related to proposed decisions made by state agencies</td>
<td>0.0</td>
<td>8.7</td>
<td>30.4</td>
<td>39.1</td>
<td>21.7</td>
</tr>
<tr>
<td>The outcomes of decisions made by state agencies</td>
<td>0.0</td>
<td>4.2</td>
<td>25.0</td>
<td>45.8</td>
<td>25.0</td>
</tr>
<tr>
<td>The degree to which state decisions reflect the values expressed by your organization</td>
<td>0.0</td>
<td>4.2</td>
<td>25.0</td>
<td>29.2</td>
<td>41.7</td>
</tr>
<tr>
<td>Your group’s influence on the final decision outcome</td>
<td>0.0</td>
<td>4.2</td>
<td>33.3</td>
<td>37.5</td>
<td>25.0</td>
</tr>
<tr>
<td>The fairness of the process that produced the outcome</td>
<td>0.0</td>
<td>4.2</td>
<td>12.5</td>
<td>50.0</td>
<td>33.3</td>
</tr>
</tbody>
</table>
Hypothesis Testing

Hypothesis 1 states that groups within a state will not be equally satisfied with the participation mechanisms provided by their state, focuses specifically on states with multiple respondents. Due to the low number of respondents, a small number of states with multiple respondents surfaced (California, New Jersey, Oregon, and Texas). Slight variations were found in the levels of satisfaction in relation to the methods of inclusion utilized by their states. Specifically in the case of California the four groups that responded were either satisfied or neutral in their satisfaction with Public Opinion Surveys. Texas displayed similar variations in the satisfaction with Town Hall Meetings where the responses ranged from neutral to dissatisfied to very dissatisfied. However, statistical significance could not be determined due to the extremely small N for each state (See Table 4.12).

Table 4.12
Frequency Distribution of Group Satisfaction With Inclusion Method By State (N= 26)

<table>
<thead>
<tr>
<th>Method</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Neutral</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roundtables</td>
<td>CA</td>
<td>KY LA TX</td>
<td>AL CA CO CT LA NJ TN</td>
<td>AL CA NJ TX OR OR IL</td>
<td>AZ TX</td>
</tr>
<tr>
<td>Task Forces</td>
<td>KY</td>
<td>CA OR TX</td>
<td>AL CA CT IL LA NJ</td>
<td>NJ TX</td>
<td>AL AZ OR TX</td>
</tr>
<tr>
<td>Blue-Ribbon Commissions</td>
<td>----</td>
<td>KY LA</td>
<td>AK CA CT NJ OR TX</td>
<td>CA NJ TX</td>
<td>AL AZ TX</td>
</tr>
<tr>
<td>Focus Groups</td>
<td>TX</td>
<td>CA CT LA NJ OR</td>
<td>AK CA CA CO KY TN</td>
<td>NJ OR TX</td>
<td>AZ TX</td>
</tr>
<tr>
<td>Public Hearing/ Inquiries</td>
<td>----</td>
<td>AK CA CT IL</td>
<td>CA CA NJ OR</td>
<td>AL KY NJ OR TX WA</td>
<td>AZ TX TX TX</td>
</tr>
<tr>
<td>Public Opinion Surveys</td>
<td>OR</td>
<td>AK CA CA CT IL LA</td>
<td>CA CO KY NJ TX</td>
<td>NJ TX</td>
<td>AL AZ TX</td>
</tr>
<tr>
<td>Negotiated Rule Making</td>
<td>----</td>
<td>CT IL LA</td>
<td>AK KY OR</td>
<td>AL CA CA CO CT NJ NJ TX TX</td>
<td>AZ TX</td>
</tr>
<tr>
<td>Consensus Conferences</td>
<td>----</td>
<td>CT KY NJ TX</td>
<td>AK CA CA CO LA OR OR</td>
<td>AL TX</td>
<td>AZ NJ TX</td>
</tr>
<tr>
<td>Citizen Jury/Panels</td>
<td>----</td>
<td>IL TX</td>
<td>AK CA CA CO CT KY LA NJ</td>
<td>AL NJ OR TX</td>
<td>AZ TX</td>
</tr>
<tr>
<td>Public Advisory Committees</td>
<td>----</td>
<td>AL AK CA CO IL KY LA</td>
<td>CA CT NJ</td>
<td>NJ OR OR TX</td>
<td>AZ TX TX</td>
</tr>
<tr>
<td>Town Hall Meetings</td>
<td>IL OR</td>
<td>AK CA CA CT</td>
<td>CA CO KY LA NJ OR TN TX</td>
<td>AL NJ TXTX</td>
<td>AZ TX</td>
</tr>
</tbody>
</table>

84
In examining hypothesis 2: The degree to which respondents are satisfied with states’ response to EJ issues will be related to their satisfaction with their participation in specific state-sponsored EJ-related events. This group of questions refers to the overall response of state officials in their responsiveness to concerns of vulnerable populations, willingness to assist communities with EJ concerns, and their perception of EJ as a major concern at the state level. Bivariate correlations were run to determine if there was a relationship between the method of inclusion and the level to which groups were satisfied with their states’ response to environmental justice concerns (See Table 4.13).

Table 4.13

<table>
<thead>
<tr>
<th>Inclusion Method</th>
<th>The State is very concerned about environmental issues that impact vulnerable populations</th>
<th>Environmental Justice issues are a major concern at the state-level</th>
<th>The state is willing to assist communities with environmental justice concerns</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roundtables</td>
<td>0.266</td>
<td>0.381</td>
<td>0.140</td>
<td>23</td>
</tr>
<tr>
<td>Task Forces</td>
<td>0.351**</td>
<td>0.463*</td>
<td>0.393</td>
<td>20</td>
</tr>
<tr>
<td>Blue-Ribbon Commissions</td>
<td>0.540**</td>
<td>0.563*</td>
<td>0.462</td>
<td>18</td>
</tr>
<tr>
<td>Focus Groups</td>
<td>0.363**</td>
<td>0.477*</td>
<td>0.404</td>
<td>21</td>
</tr>
<tr>
<td>Public Hearing/Inquiries</td>
<td>0.470*</td>
<td>0.522*</td>
<td>0.561**</td>
<td>24</td>
</tr>
<tr>
<td>Public Opinion Surveys</td>
<td>0.441**</td>
<td>0.499*</td>
<td>0.474*</td>
<td>21</td>
</tr>
<tr>
<td>Negotiated Rule Making</td>
<td>0.579</td>
<td>0.487*</td>
<td>0.620**</td>
<td>20</td>
</tr>
<tr>
<td>Consensus Conferences</td>
<td>0.406**</td>
<td>0.338</td>
<td>0.494*</td>
<td>20</td>
</tr>
<tr>
<td>Citizen Jury/Panels</td>
<td>0.213**</td>
<td>0.290</td>
<td>0.277</td>
<td>20</td>
</tr>
<tr>
<td>Public Advisory Committees</td>
<td>0.263**</td>
<td>0.320</td>
<td>0.228</td>
<td>21</td>
</tr>
<tr>
<td>Town Hall Meetings</td>
<td>0.403*</td>
<td>0.469*</td>
<td>0.552**</td>
<td>24</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
When examining the relationship between the states’ concern for vulnerable populations, 9 out of 11 methods of inclusion were found to be statistically significant. Only Roundtables and Negotiated Rule Making were found not to be significantly significant at p-values of 0.01 or 0.05 (7 at .001 and 2 at 0.05).

When examining the relationship between the consideration of EJ issues as a major concern at the state level, 7 out of 11 methods of inclusion were found to be statistically significant. Roundtables emerged again along Consensus Conferences, Citizen Jury Panels, and Public Advisory Committees as not being found significantly significant at p-values of 0.01 or 0.05 (7 at .001 and 2 at 0.05).

When examining the relationship between the states willingness to assist communities with environmental justice concerns, 6 out of 11 methods of inclusion were found not to be statistically significant at p-values of 0.01 or 0.05. The six found to have no significance were as follows: Roundtables, Task Forces, Blue Ribbon-Commissions, Focus Groups, Citizen Jury Panels, and Public Advisory Committees. The degree to which respondents are satisfied with their states response to EJ issues will be related to their satisfaction with their participation in specific state-sponsored EJ-related events; the results of a bivariate correlation conclude that there is significant statistical evidence to support the rejection of the null hypothesis.

Bivariate correlations were run to determine the relationship between the level to which groups were satisfied with their states response to the input of groups (specifically from the governor, legislature, and state agencies) and the response of the state concerning issues regarding environmental justice claims in relation to their satisfaction with their participation in specific state-sponsored public participation events. Pearson’s correlations are useful in observing correlations as it reveals both the magnitude and direction of the association that is
displayed between two variables (Pollock 2005). Table 4.14 present data that suggest that the degree of satisfaction with state responses is not related to the type of inclusion mechanism utilized by the state.

<table>
<thead>
<tr>
<th>Inclusion Method</th>
<th>Legislature’s Response</th>
<th>Governor’s Response</th>
<th>State Agencies' Response</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roundtables</td>
<td>0.270</td>
<td>0.347</td>
<td>0.460*</td>
<td>23</td>
</tr>
<tr>
<td>Task Forces</td>
<td>0.236</td>
<td>0.33</td>
<td>0.362</td>
<td>20</td>
</tr>
<tr>
<td>Blue-Ribbon Commissions</td>
<td>0.365</td>
<td>0.635**</td>
<td>0.532*</td>
<td>18</td>
</tr>
<tr>
<td>Focus Groups</td>
<td>0.378</td>
<td>0.577**</td>
<td>0.627**</td>
<td>21</td>
</tr>
<tr>
<td>Public Hearing/Inquiries</td>
<td>0.582**</td>
<td>0.674**</td>
<td>0.656**</td>
<td>24</td>
</tr>
<tr>
<td>Public Opinion Surveys</td>
<td>0.336</td>
<td>0.688**</td>
<td>0.606**</td>
<td>21</td>
</tr>
<tr>
<td>Negotiated Rule Making</td>
<td>0.690**</td>
<td>0.604**</td>
<td>0.652**</td>
<td>20</td>
</tr>
<tr>
<td>Consensus Conferences</td>
<td>0.552*</td>
<td>0.710**</td>
<td>0.639**</td>
<td>20</td>
</tr>
<tr>
<td>Citizen Jury/Panels</td>
<td>0.630**</td>
<td>0.666**</td>
<td>0.674**</td>
<td>20</td>
</tr>
<tr>
<td>Public Advisory Committees</td>
<td>0.500*</td>
<td>0.383</td>
<td>0.377</td>
<td>21</td>
</tr>
<tr>
<td>Town Hall Meetings</td>
<td>0.457*</td>
<td>0.447*</td>
<td>0.467*</td>
<td>24</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

When examining the relationship between the legislature’s response to the input of EJ groups, 6 out of 11 methods of inclusion were found to be statistically significant. Roundtables, Task Forces, Blue-Ribbon Commissions, Focus Groups, and Public Opinion Surveys were identified as not being found significantly significant at p<0.01 or p<0.05. Of those found to be significant three were significant at p<0.001 and another three at p<0.05.

When examining the relationship between the governors’ response to the input of groups advocating for environmental justice concerns and the inclusion methods they engaged in, 8 out
of 11 methods of inclusion were found to be statistically significant. Only Roundtables, Tasks Forces, and Public Advisory Committees were found not to be significantly significant at p<0.01 or p<0.05. 7 methods were found to be significant at p<0.001 and only one, Town Hall Meetings were significant at p<0.05.

When examining state agency response to the input of groups advocating for environmental justice concerns, 9 out of 11 methods of inclusion were found to be statistically significant. Only Task Forces and Public Advisory Committees were found not to be significantly significant. Seven methods were found to be significant at p<0.001 and only two, were significant at p<0.05. The data presented suggest that the degree of satisfaction with state responses is slightly, positively related to the type of inclusion mechanism utilized by the state. Therefore the null hypothesis can be rejected though with mildly significant findings.

In the review of literature regarding the inclusion of marginalized populations in Chapter 2 several critical elements were identified as crucial in facilitating efficacy for parties included in the decision-making process. Brinkerhoff and Crosby (2002) note that Empowerment is less something that governments given, but it is rather a right that is derived from governments putting in place features of democratic governance that offers citizens the space to plan an empowered role in the policy process (70). The empowerment model presented in Chapter 3 highlights the elements essential to establishing empowering environments. These social goals, which served as, the foundations for survey questions and the independent variables used in the regression model. The resulting data will identify which of these predictors of empowering environments (social goals), presents the greatest impact on the overall satisfaction (the dependent variable) of group participation in all formal structures of inclusion regarding the environmental decision-making process.
The survey instrument utilized for this study was crafted to capture the presence of these elements by the most valuable assessment tool: the participants. OLS regression models were run to determine the influence of independent variables on the overall efficacy of the inclusion mechanisms. Regression analysis is used due to its ability to produce precise accuracy in determining the nature of the relationship between variables (Pollock 2005). Prior to running the regression, scales were created by combining multiple questions into a single variable (Refer to Table 3.3). Three additional variables are included in this model to establish additional influences on group involvement. The variable Members reflects the actual number of members associated with the groups surveyed. The variable Involve reflects the level of group involvement in public participation methods provided by the state. Subtracting the year the group was created from 2010, the year the survey was conducted, produced “Age”. Variables representing the frequency in which groups discussed EJ issues with state officials (include legislators, governors and their staff, and state agencies).

Restricted and full models were run to analyze survey responses. ANOVA results determine that the regression models explain 97.8 and 98% of the variance respectively. Table 4.15 details the results of the restricted logistic regression analysis with the limited to the independent variables: age of group, number of members, Education/Information Flow, Public Value/Final Outcome, Trust Conflict, and level of involvement. With the inclusion of each of these variables and Overall Satisfaction into an overall logistic regression model the researcher found the predictor Public Value/Final Outcome was the only significant impact on the overall satisfaction of participants at p < .05 relative to the extent to which groups feel empowered by inclusion in the environmental decision-making process. Controlling for other variables in the model, all independent variables except for number of members in an organization had a positive
relationship with the overall satisfaction with the decision-making process. Specifically, the more satisfied groups are with the overall process of decision-making the more satisfaction with each variable increases.

Table 4.15
Linear Regression Analysis
Overall Satisfaction With Decision-Making Process
Restricted Model

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Standardized Coefficients</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-4.143</td>
<td>4.682</td>
<td></td>
<td>-0.885</td>
</tr>
<tr>
<td>Education/Information Flow</td>
<td>.108</td>
<td>.072</td>
<td>.114</td>
<td>1.505</td>
</tr>
<tr>
<td>Public Value/Final Outcome</td>
<td>1.022</td>
<td>.139</td>
<td>.812</td>
<td>7.340</td>
</tr>
<tr>
<td>Trust/Conflict</td>
<td>.151</td>
<td>.209</td>
<td>.070</td>
<td>.723</td>
</tr>
<tr>
<td>Age</td>
<td>.010</td>
<td>.066</td>
<td>.009</td>
<td>1.277</td>
</tr>
<tr>
<td>Members</td>
<td>.000</td>
<td>.000</td>
<td>.063</td>
<td>.929</td>
</tr>
<tr>
<td>Involve</td>
<td>1.956</td>
<td>1.532</td>
<td>.082</td>
<td>1.277</td>
</tr>
</tbody>
</table>

a. Overall Satisfaction is the Dependent Variable
b. Degrees of freedom = 13

The results displayed in Table 4.16 details the results of the logistic regression analysis with the inclusion of the independent variables of age of group, members, Education/Information Flow, Public Value/Final Outcome, Trust Conflict, level of group involvement. Also added in this model are variables that reflect the level of communication groups maintained with the state legislature, state governor’s office, and state agency charged with environmental protection. With the inclusion of each of these variables and Overall Satisfaction into an overall logistic regression model the researcher found that again, Public Value/Final Outcome was significant at p < .05 relative to the extent to which groups feel empowered by inclusion in the environmental decision-making process. In addition to these findings, inverse relationships are found with regards to age of the organization, discussing EJ concerns with state agency, and members of the
state legislature. As overall satisfaction with the process increases, these variables decrease. Tables 14.19-22 reflect normal frequency distributions for the variables Trust-Conflict, Education-Information flow, Public Value-Final Outcome, and Satisfaction.

Table 4.16
Linear Regression Analysis
Overall Satisfaction With Decision-Making Process
Full Model

<table>
<thead>
<tr>
<th>Model 2</th>
<th>Standardized Coefficients</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>Education / Information Flow</td>
<td>.143</td>
<td>.085</td>
<td>.151</td>
</tr>
<tr>
<td>Public Value/ Final Outcome</td>
<td>1.054</td>
<td>.170</td>
<td>.838</td>
</tr>
<tr>
<td>Trust / Conflict</td>
<td>.058</td>
<td>.248</td>
<td>.027</td>
</tr>
<tr>
<td>Age</td>
<td>-.004</td>
<td>.076</td>
<td>-.004</td>
</tr>
<tr>
<td>Members</td>
<td>.000</td>
<td>.000</td>
<td>.064</td>
</tr>
<tr>
<td>Involve</td>
<td>1.597</td>
<td>1.990</td>
<td>.067</td>
</tr>
<tr>
<td>Discussed environmental justice issues with member of a state legislature</td>
<td>-.477</td>
<td>1.008</td>
<td>-.040</td>
</tr>
<tr>
<td>Discussed environmental justice issues with state governor or members of his or her staff</td>
<td>.712</td>
<td>.713</td>
<td>.079</td>
</tr>
<tr>
<td>Discussed environmental justice with an official in a state agency</td>
<td>-.471</td>
<td>1.072</td>
<td>-.033</td>
</tr>
</tbody>
</table>

a. Due to the large number of missing cases the variable Explog was omitted from the full model
b. Overall Satisfaction is the Dependent Variable
c. Degrees of freedom = 13
Figure 4.1
Trust-Conflict Frequency Distribution

Mean = 22.32
Std. Dev. = 4.922
N = 22

Figure 4.2
Education-Information Flow Frequency Distribution

Mean = 40.13
Std. Dev. = 11.315
N = 23
Figure 4.3 Public Value - Final Outcome Frequency Distribution

Mean = 37.86
Std. Dev. = 7.63
N = 22
Chapter Summary

This chapter presented the findings from data collected from self-identified environmental justice groups across the United States of America, which participated in the National Environmental Justice Program Participation Study from July 2011-October 2011. Quantitative data collected from the online survey was analyzed using frequency distributions, bivariate analysis, and linear regressions.

Initial results revealed that groups spent a considerable amount of time engaging in forms of inclusion that they were least satisfied with. Public hearings, the most highly attended state sponsored event, was reported to be the second most dissatisfying event, just after Negotiated Rule-Making (60%), with an overall 52% dissatisfaction rating. Conversely, Public Advisory Committees, the fourth most attended events were found to be the most satisfying venue (38%). Despite efforts to engage in formal structures of inclusion, groups were overwhelmingly dissatisfied with the degree to which they were asked to participate in environmental decision-making the states willingness to listen to their concerns, and the response to both their concerns and input from the state legislature, governor, and state environmental protection agencies (Table 4.7).

Group responses prove contradictory concerning the transfer of knowledge after engaging in state-sponsored public participation events. Respondents consistently report that after participating in these events their knowledge of state-level environmental issues improved, they are more competent to engage in discussions concerning environmental issues, their awareness of state-level EJ issues increased along with their understanding of the planning and development process for environmental projects, and they were better able to navigate the
Hypothesis testing was conducted through the use of bivariate correlations and regression models.

Hypothesis 1 posits that groups within states will be equally satisfied with formal structures of inclusion based on the methods of inclusion. Hypothesis 2 anticipated that **group satisfaction with state-level forms of participatory mechanisms would increase as their satisfaction with states responses increased.**

Bivariate correlations revealed the relationship between levels of satisfaction with public participation mechanisms and responses from state decision-makers regarding group input and response to EJ specific concerns are only slightly positively correlated. Regression analysis found that while a positive correlation was found between overall satisfaction and Education/Information Flow, this predictor was found not to have a significant impact. Similar findings were reported for group involvement, trust and conflict (hypothesis 4 and 5). Regression results provide evidence that Public Value/Decision Outcome is positively correlated to the satisfaction of group participation in state sponsored inclusion events, and the perceived efficacy from engaging in these events.

Chapter 5 will present further discussion surrounding these contrasting results that will connect these elements to the literature presented in Chapter 2, identify study limitations, and suggest future areas of research on the plight of the EJ Movement.
Chapter 5

Introduction

The primary aim of this evaluation study was to assess the self-reported efficacy of the public participation methods employed across the United States to include marginalized populations in the environmental decision-making process. A society is defined as one where “every individual, each with rights and responsibilities, has an active role to play” (UN, 1995, chap. I, resolution 1, annex II, para. 66). The emergence of environmental justice as a significant social concern came into play as communities marginalized economically, politically, and racially moved from being spectators, to becoming actively involved in the American society. Nearly four decades after the beginning of the movement, vulnerable populations in communities impacted by environmental degradation are still fighting to remain actively engaged members of society. However, Executive Order 12898 specified environmental decision-making to include the voices of affected communities through significant public participation purposely intended to include affected communities typically excluded from the formal decision-making process (E.O. 12898, 1994) to assist these invisible members of society, the opportunity to achieve the hope of environmental justice for all.

Previous chapters have outlined the emergence of the EJ movement in marginalized communities and governmental attempts to combat the disproportionate placement of environmental risks. As efforts to address these concerns across the nation seem to be on the rise through the manifestation of executive orders, committee initiatives, and state legislative action, it is important to consider the long-term involvement of the agents of change who brought this issue to national attention. Chapter 5 addresses key finding raised by the data analysis, discusses
implications based on findings, and presents study limitations. The chapter concludes with suggestions for future areas of research. The findings from this study present challenges for organizations still in the fight for environmental equity and guidance as well as for states seeking to improve the lives of their most vulnerable populations.

Discussion

Public participation serves as a mechanism by which members of society can become actively engaged in “development initiatives and decisions and resources, which affect them” (World Bank 1996:3). The overarching goal of this study was to assess the self-reported efficacy of public participation methods as marginalized communities seek to promote environmental equity in light of environmental decisions made by state officials. Brinkerhoff and Crosby (2002) posit that empowering relationships between government and citizen groups is a two part relationship where:

1. Governments offer citizens the opportunity to have an “empowered role” in the policy process.

2. Citizens embracing the right to take on an “empowered role” and demand to exercise this right.

Based on these findings and the literature reviewed in Chapter 2, states that wish to create an efficacious environment for EJ groups participating in the decision-making process should develop an effective means of facilitating communication between groups and government agencies throughout the process and emphasize the importance of a high level of group involvement in obtaining the greatest benefits and comprehensive policy output.
Chapter 4 results pertaining to group satisfaction with inclusion mechanisms displayed a disproportionate dissatisfaction with the most employed methods of inclusion. On the contrary, groups report overwhelmingly that they are more knowledgeable of state level environmental and EJ concerns, the decision-making process, and the ability to navigate the process. How is this so? Another concern finding focuses on the misplaced efforts of EJ groups. Respondents appear to be satisfied with the overall transfer of knowledge taking place in public participation events, however there is little correlation to form of inclusion and satisfaction with state officials response to their input and concerns regarding EJ issues. Interestingly enough, these same groups spend most of their time engaged in forms of inclusion that they rate very low in satisfaction and often fail to allow their voices and values to impact the final decision outcome. Nevertheless, they report significant decrease in conflict between EJ proponents and state agencies and an overall decrease in trust in the state to protect vulnerable population.

In regards to the transfer of knowledge, it is possible that by attending formal structures of inclusion, groups gain knowledge as to the extent of environmental issues the state has to address, the complexities that surround these issues, and the scope of EJ concerns in the grand scheme of the planning and financing of environmental protection and remediation. This new knowledge may bring a new level of understanding of the competition for attention on the formal agenda. However, full knowledge of internal low-level tactics that may be used to dissuade grassroots organizations from fully engaging may not be realized, specifically the use of tokenism, co-optation and the creation of symbolic actions (Cobb and Ross 1997). A contradiction is found, as participants seem to gain an abundance of knowledge by engaging in
state-sponsored events, there is an overall dissatisfaction with state response to group input and dissatisfaction with the overall process of inclusion. The paradox in these findings points to a common theme-the method of inclusion utilized by each state. To avoid the continuation of the epic power struggle in this policy arena, states and EJ groups alike must be poised to engage in public participation methods that not only focus on the incorporation of public values, but engagement mechanisms that truly empower the participants. While respondents appear to be satisfied with the overall transfer of knowledge taking place in public participation events, there is little correlation to form of inclusion and satisfaction with state officials response to their input and concerns regarding EJ issues.

An interesting finding, these same groups spend most of their time engaged in forms of inclusion that they rate very low in satisfaction and often fail to allow their voices and values to impact the final decision outcome. Nevertheless, they report significant decrease in conflict between EJ proponents and state agencies and an overall decrease in trust in the state to protect vulnerable population. The researcher concludes that the significance found in the impact of Public Value and decision outcome on the overall satisfaction with the decision-making process present found in the regression analysis speaks to groups’ ability to be heard. Hampton (1999) states that “The extent to which public participation and promote environmental equity is dependent upon the degree to which public preferences influence the final outcome” (169). Based on the findings of this study, the extent to which groups are empowered by formal state-level participation methods is based on the inclusion of public values into the decision-making process. States must be willing to spend the money and time to employ and or modify forms of inclusion to accommodate diverse populations. Likewise, EJ groups must be educated on the forms of engagement that will both communicate their concerns and include their voices in the
overall discussion and final outcome in order to improve their overall quality of life and impact on final decisions.

**Limitations**

While surveys provide an effective means of identifying the concerns of the public, in this case EJ organizations, and communicating that information to governing bodies, it also bears its share of challenges. One of the greatest limitations for this study is directly related to the outdated directory and database used to distribute the survey. As mentioned in chapter 4 following the First National People of Color Environmental Leadership (NPOCEL) Summit produced the National People of Color Environmental Groups Directory (NPOCEGD), the first of its kind. This potentially exhaustive information bank contains over 400 organizations and resources specifically promoting environmental concerns and representing people of color from the District of Columbia, the United States, Mexico, Canada, and Puerto Rico (Bullard and Doyle 2000). However, due to a lack of funding, a subsequent directory has not been reproduced. As a result, many of the organizations were no longer in existence, or changed their overall organizational mission and primary focus.

Although the directory was cross-referenced with the database maintained by the University of Michigan, there was little variation in the organizations listed for each. The lack of accurate information on EJ focused organizations may also be directly related with the lack of response from multiple organizations within states regarding the efficacy of public participation methods. The lack of an updated directory may have resulted in overlooking newly organized groups or new contact information.

The second limitation experienced in this study is a dichotomy of response bias and institutional trust. Upon distributing the survey to specified EJ groups, follow up contacts
revealed a level of distrust with who was issuing the survey and reluctance to divulge information regarding the groups’ activities. While only 38 organizations actually participated in the survey, there were a number of groups who opened the survey, yet did not participate. Upon initiating follow up calls, segments of the target population questioned the researchers relationship with the government and declined to participate in the study or determined that they were unable to participate due to legal restrictions. A number of Native American organizations determined that they were unable to engage in this survey due to current gag orders limiting communication.

In his work *Contaminated Communities* (1988), Michael R. Edelstein analyzed a community in the Jacksonville Township of New Jersey impacted by residential toxic exposure and highlighted the lost of trust. He notes that:

“[The] loss of trust by toxic victims is consistent with a more general trend towards loss of trust in government identified in national polls. However, the degree of distrust found among toxic victims...results from a gradual breakdown of the assumption that others, particularly those in government, will aid toxic victims to make their lives once again whole” (71)

Based on this insight, it is quite possible that groups failed to participate in this survey to avoid further disappointment by organizations associated with a government already proven to be unable to restore their communities.

**Suggestions for Future Research**

This study evaluated, the efficacy of inclusion methods used to engage marginalized populations in the environmental decision making process. The findings of this study indicated that a statistically significant relationship exists between the Inclusion of Public Value/Decision
Outcomes and the efficacy of state-sponsored inclusion methods. Based on the findings of this study, further research should investigate the most commonly used forms of inclusion and the influences that may determine which forms to employ. Using states as laboratories for EJ issues, an assessment of most commonly employed public participation methods based on states could provide benchmarking opportunities for states who are interested in increasing the inclusion of diverse populations. Establishing baselines for how states determine the forms of participation that will be used regarding environmental justice issues is imperative. Which states approach Environmental Justice as a wicked issue that is to be addressed collaboratively? Is it the decision to use specific forms of inclusion based solely on budget or assessment of risk? Is there evidence of government-community relationships where trust has been restored?

Based on McGurty’s (2000) analysis of Environmental Justice as a social movement, one of the results is the emergence of political opportunities for the mobilizing group. Could we actually measure the actual effectiveness of public participation methods? This inquiry could be pursued through an investigation of the emergence of African-Americans in political and environmental careers as a result of their involvement in formal structure of inclusion. Has their presence impacted programmatic focus and furthered the plight of the Environmental Justice Movement? What is being done to prepare future generations to address environmental inequities facing vulnerable populations? Additionally, research can look for causal stories that connect EJ groups to forms of engagement where the final outcomes were strongly impacted by the voice and values of these groups.

While efforts to address the protection of marginalized populations from disproportional exposure to hazardous environmental toxins have occurred, the battle is far from over. Through
continued inquiry into what is being done and what is left to do, agents of change will be empowered to continue the fight for equity environmentally for all.

References


University of Michigan School of Natural Resources and Environment. 2011. About Us.
http://www.snre.umich.edu/about_snre.


APPENDIX A

Principles of Environmental Justice

PREAMBLE

WE, THE PEOPLE OF COLOR, gathered together at this multinational People of Color Environmental Leadership Summit, to begin to build a national and international movement of all peoples of color to fight the destruction and taking of our lands and communities, do hereby re-establish our spiritual interdependence to the sacredness of our Mother Earth; to respect and celebrate each of our cultures, languages and beliefs about the natural world and our roles in healing ourselves; to ensure environmental justice; to promote economic alternatives which would contribute to the development of environmentally safe livelihoods; and, to secure our political, economic and cultural liberation that has been denied for over 500 years of colonization and oppression, resulting in the poisoning of our communities and land and the genocide of our peoples, do affirm and adopt these Principles of Environmental Justice:

1) **Environmental Justice** affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.

2) **Environmental Justice** demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.

3) **Environmental Justice** mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.

4) **Environmental Justice** calls for universal protection from nuclear testing, extraction, production and disposal of toxic/hazardous wastes and poisons and nuclear testing that threaten the fundamental right to clean air, land, water, and food.

5) **Environmental Justice** affirms the fundamental right to political, economic, cultural and environmental self-determination of all peoples.

6) **Environmental Justice** demands the cessation of the production of all toxins, hazardous wastes, and radioactive materials, and that all past and current producers be held strictly accountable to the people for detoxification and the containment at the point of production.

7) **Environmental Justice** demands the right to participate as equal partners at every level of decision-making, including needs assessment, planning, implementation, enforcement and evaluation.

8) **Environmental Justice** affirms the right of all workers to a safe and healthy work environment without being forced to choose between an unsafe livelihood and unemployment. It
also affirms the right of those who work at home to be free from environmental hazards.

9) **Environmental Justice** protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.

10) **Environmental Justice** considers governmental acts of environmental injustice a violation of international law, the Universal Declaration On Human Rights, and the United Nations Convention on Genocide.

11) **Environmental Justice** must recognize a special legal and natural relationship of Native Peoples to the U.S. government through treaties, agreements, compacts, and covenants affirming sovereignty and self-determination.

12) **Environmental Justice** affirms the need for urban and rural ecological policies to clean up and rebuild our cities and rural areas in balance with nature, honoring the cultural integrity of all our communities, and provided fair access for all to the full range of resources.

13) **Environmental Justice** calls for the strict enforcement of principles of informed consent, and a halt to the testing of experimental reproductive and medical procedures and vaccinations on people of color.

14) **Environmental Justice** opposes the destructive operations of multi-national corporations.

15) **Environmental Justice** opposes military occupation, repression and exploitation of lands, peoples and cultures, and other life forms.

16) **Environmental Justice** calls for the education of present and future generations, which emphasizes social and environmental issues, based on our experience and an appreciation of our diverse cultural perspectives.

17) **Environmental Justice** requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth’s resources and to produce as little waste as possible; and make the conscious decision to challenge and reprioritize our lifestyles to ensure the health of the natural world for present and future generations.

The Proceedings to the First National People of Color Environmental Leadership Summit are available from the United Church of Christ Commission for Racial Justice, 475 Riverside Dr. Suite 1950, New York, NY 10115.
June 17, 2011

MEMORANDUM

TO: Angela Hines
    William Schreckhise

FROM: Ro Windwalker
      IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 11-06-684

Protocol Title: Power to the People? An Evaluation of State-Level Environmental Justice Public Participation

Review Type: ☑ EXEMPT ☐ EXPEDITED ☐ FULL IRB

Approved Project Period: Start Date: 06/17/2011  Expiration Date: 06/16/2012

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form Continuing Review for IRB Approved Projects, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (http://vpred.uark.edu/210.php). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

This protocol has been approved for 929 participants. If you wish to make any modifications in the approved protocol, including enrolling more than this number, you must seek approval prior to implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 210 Administration Building, 5-2208, or irb@uark.edu.
Dear John Smith:

You have been selected from a sample of environmental organizations to participate in a study on matters of public participation conducted by researchers at the University of Arkansas. By consulting organizations who advocate for environmental equity for marginalized communities such as yours, we hope to determine how well states are facilitating participation. The questionnaire should take only a few minutes to complete; please skip over any questions which you do not care to answer, and feel free to include additional information in the comment sections whenever you wish. Your candid answers will be greatly appreciated.

This is a request for completely voluntary participation, and your responses will remain totally anonymous -- neither your name nor any other identifying information will be asked or recorded. The University of Arkansas supports the rights of research participants and the provisions established for the protection of respondent anonymity have been approved by the University's Institutional Review Board. You can be assured that the confidentiality of all survey results will be maintained. Please click on the link below to provide your input.

Thank you in advance for your valuable thoughts and insights contributed to this important research project. If you have any questions, concerns, or complaints with this research, you may contact the University of Arkansas Institutional Review Board at (479) 575-3845.

If you would like to receive a summary of survey results, please check this box [ ].

Sincerely,

<table>
<thead>
<tr>
<th>Dr. William D. Schreckhise</th>
<th>Angela Hines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Professor,</td>
<td>Doctoral Candidate</td>
</tr>
<tr>
<td>Department of Political Science</td>
<td>Public Policy Program</td>
</tr>
<tr>
<td>and Public Policy Program</td>
<td>University of Arkansas</td>
</tr>
<tr>
<td>University of Arkansas</td>
<td></td>
</tr>
</tbody>
</table>
Survey Instrument

Opportunities to participate: This section asks about your organization’s PARTICIPATION in activities related to environmental decision-making sponsored by your state government.

Over the past year, how many local environmental issues has your organization identified?

<table>
<thead>
<tr>
<th>None</th>
<th>1-2 concerns</th>
<th>3-4 concerns</th>
<th>More than 4 concerns</th>
</tr>
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<tbody>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Over the past year, how many environmental justice concerns has your organization identified with?

<table>
<thead>
<tr>
<th>None</th>
<th>1-2 concerns</th>
<th>3-4 concerns</th>
<th>More than 4 concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Over the past year, how many times have state government agencies asked your organization to participate in the environmental decision making process?

<table>
<thead>
<tr>
<th>None</th>
<th>1-2 times</th>
<th>3-4 times</th>
<th>More than 4 times</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

In what types of state sponsored events has your organization taken part? (please check all that apply)

___Roundtables  ___Task forces  ___Blue-ribbon commission

___Focus groups  ___Referenda  ___Public hearings/inquiries

___Public opinion surveys  ___Negotiated rule making  ___Consensus conference

___Citizen jury/panel  ___Public advisory committee  ___Town hall meetings

___ Other (Please specify all that apply)  ____________________________________________
Comments: Please provide any additional comments you may have about your organization’s participation state-level environmental decision-making:

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

Communication: This section asks about COMMUNICATION that has occurred between your organization and your state government on issues related to environmental protection and environmental justice. Please indicate your level of satisfaction on each of the following items.

**How satisfied are you with:**

a. Voicing your concerns of environmental justice to state level officials?

Very satisfied  Satisfied  Dissatisfied  Very dissatisfied  N/A

b. The degree to which your organization was asked to participate?

Very satisfied  Satisfied  Dissatisfied  Very dissatisfied  N/A

c. The state’s willingness to listen to organizational concerns?

Very satisfied  Satisfied  Dissatisfied  Very dissatisfied  N/A

d. The state’s response to your organization’s input?

Very satisfied  Satisfied  Dissatisfied  Very dissatisfied  N/A
If your organization has expressed an environmental justice concern to the state, how long did it take to get a response?

Less than a week  1-4 weeks  More than 4 weeks  We never received a response

Comments: Please provide any comments you may have about communication between the state and your organization:

______________________________________________________________________________

______________________________________________________________________________

Knowledge: In this section we would like to assess your organization's level of KNOWLEDGE of environmental issues facing your community and your state.

Please indicate your level of agreement with each statement by ranking each response from Strongly Agree to Strongly Disagree

My organization:

   e. Has a good understanding of the important environmental issues facing our community.

   Strongly agree  Agree  Neutral  Disagree  Strongly disagree

   f. Clearly understands the state’s goals and efforts in addressing environmental justice issues.

   Strongly agree  Agree  Neutral  Disagree  Strongly disagree
c. Has gathered invaluable knowledge through participating in state participation efforts.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

d. Is aware of opportunities to participate in environmental decision-making.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

e. Has found participation events very informative

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

Comments: Please provide any comments you may have about communication between the state and your organization:

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

In the following section, we would like to know what impact participation in government sponsored activities has had on your organization. Please indicate below how each activity has impacted your activity, from (1) increased significantly to (3) no change to (5) decreased significantly
a. Knowledge of state-level environmental issues?

1  2  3  4  5

b. Competence to engage in the environmental issues?

1  2  3  4  5

c. Knowledge of state-level environmental justice issues?

1  2  3  4  5
d. Environmental planning and development?

1  2  3  4  5
e. Navigating the decision-making process?

1  2  3  4  5

Comments: Please provide any comments you may have about communication between the state and your organization:

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
Decision-Making: In this section we would like to assess your organization's involvement in the DECISION-MAKING process to address environmental issues in your community and your state.

Based on your experience, how satisfied are you with:

a. The publicity of state-sponsored public participation events by state agencies?

<table>
<thead>
<tr>
<th>Very satisfied</th>
<th>Satisfied</th>
<th>Dissatisfied</th>
<th>Very dissatisfied</th>
<th>N/A</th>
</tr>
</thead>
</table>

b. The information provided in these venues?

<table>
<thead>
<tr>
<th>Very satisfied</th>
<th>Satisfied</th>
<th>Dissatisfied</th>
<th>Very dissatisfied</th>
<th>N/A</th>
</tr>
</thead>
</table>

g. The organization of these events?

<table>
<thead>
<tr>
<th>Very satisfied</th>
<th>Satisfied</th>
<th>Dissatisfied</th>
<th>Very dissatisfied</th>
<th>N/A</th>
</tr>
</thead>
</table>

h. The way your group was treated at these events?

<table>
<thead>
<tr>
<th>Very satisfied</th>
<th>Satisfied</th>
<th>Dissatisfied</th>
<th>Very dissatisfied</th>
<th>N/A</th>
</tr>
</thead>
</table>

i. The ability to express your organization's values and opinions concerning proposed environmental decisions?

<table>
<thead>
<tr>
<th>Very satisfied</th>
<th>Satisfied</th>
<th>Dissatisfied</th>
<th>Very dissatisfied</th>
<th>N/A</th>
</tr>
</thead>
</table>

j. How well your views and opinions are taken seriously?

<table>
<thead>
<tr>
<th>Very satisfied</th>
<th>Satisfied</th>
<th>Dissatisfied</th>
<th>Very dissatisfied</th>
<th>N/A</th>
</tr>
</thead>
</table>

k. Your ability to effectively engage in the decision-making process

<table>
<thead>
<tr>
<th>Very satisfied</th>
<th>Satisfied</th>
<th>Dissatisfied</th>
<th>Very dissatisfied</th>
<th>N/A</th>
</tr>
</thead>
</table>
Based on your experience, how satisfied are you with:

a. Your group’s overall organizational involvement in the decision-making process?
   Very satisfied   Satisfied   Dissatisfied   Very dissatisfied   N/A

b. The discussion of concerns related to a proposed decision?
   Very satisfied   Satisfied   Dissatisfied   Very dissatisfied   N/A

c. The decision outcome(s)?
   Very satisfied   Satisfied   Dissatisfied   Very dissatisfied   N/A

d. The degree to which state decisions reflect the values expressed by your organization?
   Very satisfied   Satisfied   Dissatisfied   Very dissatisfied   N/A

e. Your group’s influence on the final decision outcome?
   Very satisfied   Satisfied   Dissatisfied   Very dissatisfied   N/A

f. The fairness of the process that produced the outcome?
   Very satisfied   Satisfied   Dissatisfied   Very dissatisfied   N/A

Comments: Please provide any comments you may have about communication between
the state and your organization:

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
Trust/Conflict: In this section we would like to assess your organization’s level of TRUST or CONFLICT with state and local agencies in addressing environmental issues facing your community and your state.

Please indicate your satisfaction with each statement by indicating the appropriate response

a. The state is willing to assist communities with concerns of environmental justice.

Very satisfied Satisfied Dissatisfied Very dissatisfied N/A

b. Environmental justice issues are a major concern at the state level

Very satisfied Satisfied Dissatisfied Very dissatisfied N/A

c. The state is highly responsive to issues that impact vulnerable populations such as minority groups, children, the elderly, and the poor.

Very satisfied Satisfied Dissatisfied Very dissatisfied N/A

Comments: Please provide any comments you may have about communication between the state and your organization:

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________
Please indicate your agreement with each statement by ranking each response from 1 to 5 where 1=Significantly decreased; 2=Decreased moderately; 3=No change; 4=Increased moderately; and 5=Increased significantly

How has the participation in state participation structures affected your:

a. Trust in the state as an advocate in the protection of EJ communities?
   - Significantly decreased  Decreased moderately  No change  Increased moderately  Increased significantly

b. Distrust of the state as an advocate in the protection of EJ communities?
   - Significantly decreased  Decreased moderately  No change  Increased moderately  Increased significantly

c. The conflict between EJ communities and the state?
   - Significantly decreased  Decreased moderately  No change  Increased moderately  Increased significantly

d. The conflict between EJ communities and private industry?
   - Significantly decreased  Decreased moderately  No change  Increased moderately  Increased significantly

Comments: Please provide any comments you may have about communication between the state and your organization:

__________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

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Demographic Information: Please complete the information in this section to provide supplemental information about your organization.

In what state does your organization registered to operate in? ______________

In what year was your organization founded? ______________

How many members are registered with your organization? ______________

What is the yearly organizational budget? $_______________

Thank you for your participation in this survey!