THE STRUCTURE OF ENVIRONMENTAL MOVEMENTS
IN SMALL U.S. STATES
AND THE IMPLICATIONS FOR ENVIRONMENTAL POLICY

by
David B. Carter

A dissertation submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Urban Affairs and Public Policy

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This research aims to improve our understanding of environmental movements that mobilize to influence state level policy in small U.S. States. Small states are defined as those found in the lowest quintile of total state populations. Small states provide an opportunity for us to evaluate whether or not state level environmental advocacy differs significantly among small, less populated states with less people from which to draw upon for resources. In particular, these states provide an opportunity for us to evaluate whether or not our broadly-utilized social movement theories and models adequately explain environmental movements, collective action, mobilization, and advocacy that occur at the scale of small U.S. States. These commonly-used theories primarily include Resource Mobilization Theory and Political Opportunity Theory.

This study of five small, less populated states in the Northeastern United States raises questions about the extent to which resource mobilization and political opportunity structure theories are useful models for understanding the environmental movements in small states. The environmental movements in the small states exhibit considerable breadth and diversity, but vary very little from state-to-state despite variation in the state policy contexts. The study also indicates there is a dominance of traditional conservation organizations and a significant underrepresentation of environmental health and justice groups in these movements, leading to questions about who the movements represent.
Groups with higher resource levels were found to differ from those with more limited resources primarily in their strategy of conducting research and disseminating technical information. The similarity of the groups indicates that the environmental movements in these states is now mature and may be better explained through institutional theory and isomorphism.

The institutionalization of these movements at a time when the context for environmental policy is changing leads to questions and concerns about how the movements will respond, and their impact on environmental policy in small states.
Chapter 1

INTRODUCTION

The U.S. Environmental Movement has largely been attributed to a core of large nationally-organized groups such as the Sierra Club, National Wildlife Federation, Nature Conservancy, and others that are often identified as the primary players in affecting government policy (Mitchell, Mertig, & Dunlop, 1991). Subsequent literature has challenged this assumption and highlighted the need to evaluate the broader environmental movement, particularly the role of local environmental groups in this process (Bosso, 2005; Straughan & Pollack, 2008; Kempton et al., 2001; Smith, 2000). An important, but poorly-understood aspect of this subnational environmental movement knowledge is their structure and the role these more local movements play in influencing state-level environmental policy.

The environmental movement’s role in influencing state policy is of increasing interest, despite the limited literature specific to advocacy efforts and the role of environmental movements on this geographic scale (Carter, 2011; Newmark & Grady, 2005; Andrews & Edwards, 2005; Kempton et al., 2001; Salazar, 1996; Bruelle, et al., 2007). This interest and concern arise in part, due to the devolution of environmental policy, the inability to make progress and improvements to federal law, and the perception of environmental policy stagnation at the federal level. (Bromley-Trujuillo, 2010; Newmark and Witko, 2007; Nash, 2006; Lester, 1990; Bryner, 2002).

While studies have documented the existence of greater numbers of local environmental groups in specific geographic areas than previously estimated, there is a
limited understanding of the extent to which these environmental groups collectively act to influence and affect state-level environmental policy (Kempton et al., 2001; Straughan & Pollack, 2008). State level communities of environmental organizations may vary greatly due to unique local factors that affect their emergence, structure, and approaches to environmental issues. We have a limited understanding of the differences and similarities among state environmental communities, especially those working within the context of smaller states, where resources may be limited and organizational density may be insufficient to mobilize and sustain movement efforts. In a small state context, it may be that these groups struggle to have influence on state policy. These struggles may also be compounded by resource dependencies related to government funding that limits their independence and autonomy and result in more limited options for securing non-government funding. As such, they may actually function much as shadow organizations or hollow environmental movements.

Conversely, small state environmental communities may network in different ways that cannot be readily understood such as through the aggregation of information on individual organizations. They may also adapt in different ways to the context of a small state to affect policy in ways different from that explained by mainstream social movement theories.

At the state level, environmental groups navigate the policy framework that was largely structured by federal environmental laws. Our current U.S. environmental policy was built upon a complex system of shared responsibilities between federal and state governments. Throughout the 1970s and 1980s, many of the major U.S. laws guiding environmental policy were passed, providing states with guidance, a consistent framework, uniform national standards, and shared funding approaches as part of a federalist environmental policy approach to important environmental
problems. However, as far back as the 1980s starting with the policies of the Reagan Administration that promoted the devolution of policy much of the responsibility for implementation began shifting to the state level (Lester, 1990). This trend of increasing devolution and the shift of environmental policy implementation from the national level to the state level has many nuances. Devolution is most simply defined as the transfer or increased delegation of policy power from the federal to the state level of government or lower. Although it may be caused by intentional actions to transfer power to the states in a less direct manner, devolution may also occur due to federal inaction on environmental policy. When states perceive this inaction as leading to inadequate national policy, they may exercise their rights as states and take policy action at the state or local level in response to the political contention and inaction in Congress.

Devolution of environmental policy has not been a simple, straightforward transfer of policy authority from the federal to the state level. Many national environmental laws have remained intact and continue to establish a minimum standard or floor for environmental quality. However, these federal policies have stagnated in recent decades leading to calls for policy updates that include upper limits or ceilings on environmental standards for key pollutants and other environmental impacts (Nash, 2006; Bryner, 2002). This policy stagnation has raised concerns that U.S. Environmental Policy may lead to a “race to the bottom” as states competing for economic development are resistant to improving or going beyond the minimum requirements (Nash, 2006, p. 1005). This may result in: acceptance of a status quo of a lower level for uniform environmental standards; a condition of environmental mediocrity; and even a gradual decline in and reversal of past environmental
successes, rather than in new efforts to address emerging environmental concerns such as those presented by climate change.

The inability of the U.S. Congress to reauthorize many of the U.S. environmental laws, including: the Clean Water Act, Clean Air Act, Endangered Species Act, Coastal Zone Act, and other federal environmental laws in recent decades, combined with reduced federal funding for state-federal environmental partnership programs highlights the reduced federal role. These devolution concerns have led to efforts at the national level “urging the federal government to renew its commitment to the state-federal partnership for environmental protection” (Council of State Legislatures, 2014). In response to the changing policy landscape, states have increasingly taken the lead on environmental initiatives and policy since the 1990s (Hahn, 1994). This has also resulted in national environmental organizations increasing their emphasis on the need for state-based actions in the hope that state-level policy efforts will stimulate federal actions on environmental policy (Grass Roots Solutions, 2014; Andres, Ganz, Baggetta, Han, & Lim, 2010). National environmental organizations with state and local affiliates hope that improvements at the state level will generate discussion and action at the federal level.

This elevated interest in state environmental policy action arises out of the concern that the increasing trend of environmental policy delegation will undermine uniform standards, shared state-federal partnerships and funding, and many of the associated laws and support for agencies established to protect the environment. The interest also reflects a growing awareness of the need to update environmental laws that are perceived as stagnating at the national level. While it is difficult to predict the ultimate extent of federal to state delegation of environmental responsibility, it is important to understand the extent to which states have environmental movements to
advocate for state-level environmental policy due to the expected increase in the prominence of state policy in U.S. environmental protection and conservation.

The trend toward a greater emphasis on state policy for environmental improvement may create significant inconsistencies in U.S. Environmental Policy if it occurs without concurrent changes in federal policy. A particular concern with inconsistencies is that they may lead to disproportionally worse outcomes in states where the context for environmental movements is more constraining. Environmental groups recognize that devolution presents the potential risk of policy backsliding in some states as polluting industries increase their political advocacy and lobbying of local governments to reduce their regulatory obligations, or, at least, keep them at the minimal level of a stagnant federal policy and outdated uniform environmental standard.

Compounding this erosion of national standards is the diffuse nature of many environmental problems that often require small individual actions. For example, nonpoint source water pollution reductions, unlike point source discharges from a large facility, must be implemented on farms and individual properties across the entire landscape. This makes the implementation very difficult and can often lead to localized efforts to reduce water quality standards or improvement standards due to local political influences by regulated groups such as the agricultural or development industries. The ability to resist these localized efforts to weaken environmental policy may be limited in smaller states with less population to draw upon for resources needed to develop a robust community of environmental groups to collectively advocate for state environmental policy.

Attitudes about environmental efforts may also be changing in the U.S. due to our economic restructuring that has contributed to recent financial crises, increasing
chronically-elevated levels of unemployment for working-class Americans, and slower economic growth. Prior to the 2008 economic recession, U.S. citizens consistently prioritized environmental protection over economic growth (Saad, 2013). However, this trend reversed from 2008-2013 during which time more U.S citizens prioritized economic growth over environmental protection (Swift, 2014). The preference did return to more Americans supporting environmental protection over economic growth in 2014. However, the shift in public opinion tracked by this annual Gallup Poll question does indicate that many people see environmental protection as a luxury. The U.S. economy is undergoing a fundamental transformation from a manufacturing society to an information society, and the impact on unemployment for those without specialized training will continue to increase (McNutt & Hoefer, 2016). Ironically, this may further erode support for environmental policy improvements despite the known negative impact of environmental degradation on economic growth (Brown, 2011; McNutt & Hoefer, 2016).

The changing preferences for economic growth versus environmental protection are also deeply entrenched in partisan politics at the national level with 66% of Democrats preferring environmental protection over economic growth as compared to 32% of Republicans (Swift, 2014). This bipartisan split has been a continuous trend since 2001 and likely reflects the deep divide in Congress that has resulted in gridlock and national environmental policy stagnation. Local governments must now rely on local policy changes if they have the interest and need for more up-to-date environmental policy, much of which now occurs at the state level.

In the small state context, small population sizes may restrict the resources available to environmental groups due to a smaller group from which funds may be solicited and members recruited. They may also be disproportionately hindered by
outsider status due to the intimate nature of policy development by other policy insiders and interests. Under such conditions, environmental groups may encounter different and more challenging contexts for policy advocacy in small states than the conditions encountered in other policy arenas.

Resource availability constraints combined with other limitations associated with small state socio-political cultures may affect the structure of the community of environmental organizations, the manner in which they work together, and the tactics utilized. New or different structures and tactics other than those used at the national or larger state context may be necessary. One example may be a heavier reliance on the use of information technology in state environmental policy advocacy to overcome resource constraints. Alternatively, they may rely much more heavily on the political opportunities of a small state such as ease of access to policymakers, increasing their face-to-face contact to influence state environmental policy. It may be an issue of more intimate quality time spent with contacts over numbers of people mobilized or dollars expended to influence policies.

If environmental movements in small states are more constrained than in other states, then they may structure themselves differently. The potential exists for these movement structures to be less effective for environmental policy advocacy. The small state movements may use different tactics creating very different types of policy networks and paths for policy diffusion leading to more variance in policy types than those that have been formed under a strong national framework. In a study documenting how states are taking the lead on many environmental policies previously addressed at the federal level, Bromley-Trujuillo (2010) highlighted the increasing importance of states with regard to environmental policy. As part of her study to determine whether climate change policy adoption fits into an overall
environmental policy dimension at the state level, she found that environmental policies that had larger networks of state interest groups were more coherent and successful. States that had a limited number of environmental groups, had environmental groups that did not integrate with broader advocacy interests, and those that focused on narrow single issues had more limited success influencing policy. The size of a state’s environmental movement and the number of organizations that advocate on state policy issues may be limited in the context of small states, placing them at a disadvantage in the development of environmental policies in their state.

In a study of state environmental and natural resource spending, Newmark and Witko (2007) found that the strength of a state’s environmental movement was a significantly more important factor in determining state environmental spending than the severity of environmental problems. They considered population size and land and water area as factors affecting state environmental spending. Newmark and Witko (2007) also factored for citizen and elite ideology by using a measure of state public opinion liberalism that was previously found by Erikson, Wright, and McIlver (1993) to be a significant predictor of state elite attitudes. Newmark and Witko (2007) use this measure of public opinion liberalism because they had found that it influences environmental spending. Their work documented that the social and political context matters for environmental policy and environmental groups may be more or less effective based on their collective size, orientation toward contestation, and the political context at the state level. But what if organizations do not respond to local context? What if they simply mimic approaches used at the national level or elsewhere that were designed and evolved to influence policy in a very different context? Would this help reinforce a common policy framework or might it simply result in ineffective local efforts?
Our common research approach to understanding social and environmental movements is dependent upon Resource Mobilization Theory (Dianna, 2013). While this approach has significantly increased our understanding of movements, it is less clear if the dominant use of the aggregation of instrumental values collected for variables from individual organizations fully explains the environmental movements. In a small state context where people are more intimately associated, it may be that this aggregation of resources is less important than other factors such as interpersonal relationships and factors associated with Political Opportunity Structure Theory. In a small state context, collaborative activities and networks may be disproportionally more important than in larger states or for work on a national scale. Political opportunities may be more pronounced in smaller states due to the close relationships that are more easily established due to the close proximity and accessibility to policymakers in these smaller states. This up close and personal policy environment may create better opportunities for influence without significant resource requirements. Also, it may be possible that emotionally-charged controversial activities or crises are more important at the local scale where responses are more personal in nature.

Other theories or perspectives used to explain social movements have included: cultural theories that consider why movements emerge; new social movement theories that diverge from the mainstream theories of resource mobilization and political opportunity; and new media theories that consider the effect of new internet communication technology.

Increasingly, scholars have found that social movements may take on various organizational forms that can range from being hierarchal to exhibiting considerable decentralization (Diani, 2011; Edwards & McCarthy, 2004; Zald, 1966). Studies of
social movements have often viewed the combined analyses of organizations as individual cases rather than as an organizational network.

The environmental movements in small states can be expected to experience challenges in the mobilization of resources due to the limited population and resources upon which to draw within a state’s geography. In response, they may organize very differently, use different tactics, face very different opportunity structures, and experience very different levels of state policy influence and effectiveness. Simply put, broad approaches and issues dilute limited resources and blur the focus on issues. This is even more exaggerated in a local context that is resource-limited and should lead to adjustments by members of these environmental communities.

Issues associated with resource availability and the socio-political context in states are keys to understanding environmental advocacy in smaller, less populated states as U.S. environmental policy continues to shift from the federal to state level. It can be expected that this social and political context for advocacy will influence both the structure of the environmental movements as well as the ways in which they operate to overcome the obstacles to influencing state environmental policy. If small states experience significantly higher barriers to mobilization due to the limited base from which they pull resources and support mobilization actions, we may see a growing divergence in environmental quality among states in the U.S. in the future.

**Significance of Research**

Environmental advocacy organizations are critical to the establishment of public policies for natural resource conservation and the protection of environmental resources (Bosso, 2005; Andrews & Edwards, 2005; Carter, 2011). These organizations play an essential role in the public policy process by bringing attention
to conservation and environmental issues, building support for change, and lobbying for new laws. These groups gather financial and human resources, educate the public, increase awareness, galvanize voters, and reframe policy issues (Pendall & Schmidt, 2011). They often identify many environmental problems and perceive that government agencies and elected officials sometimes lack the political will to address these problems. They organize in order to influence decision-makers, policy, and public perception of issues related to the environment.

The focus of U.S. environmental policy has been dominated by the passage of laws and the development of programs at the national level. This has led to a considerable concentration of policy advocacy by environmental groups on national policy, often concentrated in Washington, D.C. However, in recent decades, we have seen significant devolution of environmental policy from the national to the state level for action. This shift highlights the need for increased attentional and organizational efforts by environmental groups to advocate for policies at the state level. However, it is less clear how efforts may differ under various contexts among these different geographies. In particular, it is of interest to understand the conditions for advocacy in small states that may be disadvantageous due to: 1) resource mobilization challenges associated with a smaller concentration of resources; and 2) the lower number of organizations that can collaborate to influence policy. Movements in small states may also experience an advantage for advocacy due to: 1) the more intimate nature of political relationships that arise from the physical closeness of geography, and 2) a smaller size community of politically-active people. In this context, small states may need to develop alternative advocacy tactics or operate with different models to be successful. Failure to understand and address these issues could lead to increased
divergence of state environmental policies and inequities in environmental quality among states in the U.S.

Environmental movements in small states provide an opportunity for analysis of local environmental communities at a scale less likely to mask subtle theoretical anomalies readily observable in larger regional or national contexts (Straughan & Pollack, 2008; Kempton, Holland, & Howarth, et al., 2001). Nonetheless, the small state context appears to have been overlooked due to the challenge and effort required to obtain the necessary data at this scale, potentially biasing the theoretical understanding of the structure of state environmental movements. It is the very constraint on resources arising from the smaller population from which to solicit for essential resources combined with the intimate personal nature of political discourse that may cause movements in these locations to use a very different approach to mobilization, or, perhaps, limit their development. Therefore, the small state context provides fertile ground for research to advance our understanding of environmental movements and their efforts to influence state policy.

This research builds upon several mainstream social movement theories to examine the extent to which they can be used to understand environmental movements on the scale and in the context of small states. These theories include Resource Mobilization Theory (RM) and Political Opportunity Structure Theory (POS). By evaluating variables associated with these theories, the research seeks to determine which theoretical model or models best explains the environmental movement in small states and to develop a richer understanding of the process of collective involvement to influence policy within these different state contexts. Heuristic consideration was also given to inter-organizational network theory (Network), recognizing the importance of inter-organizational collaborations. Additionally, consideration was
given to emerging theoretical perspectives used to understand social movements. In particular, this research considered the explanatory power of new social movement theories (NSM) in providing possible explanations of anomalies that arise within mainstream social theories.

This research expands the existing literature on environmental advocacy by evaluating the extent to which existing theories explain how environmental movements or the lack of movements may influence environmental policy in a previously understudied context of state environmental policy. It may also lead to insights on future environmental policy development due to devolution and the changing nature of environmental policy and its governance.

This research works to provide valuable insights into environmental advocacy in a new context. Understanding how environmental movement organizations may collectively influence or be hindered from influencing state policy may confirm or refute that state environmental movements exist and are effective in a small state context. It may also provide insights on the efficacy of existing tactics, describe needed changes in movement structures and organization, and lead to the development of new approaches to influencing policy by those marginalized from much of the policy-making process. For those interested in environmental advocacy, this research provides a better understanding of socio-political conditions, resource needs, and other factors needed for mobilization on environmental policy issues in specific state contexts. It helps enable advocacy groups to better plan and develop effective strategies to ensure environmental improvements at the state level, particularly for small states that may face significant challenges.

Ultimately, this work aims to provide useful knowledge to environmental movements that will allow them to more effectively give voice to marginalized
citizens and the groups they form on the increasingly important environmental policy-making process in small U.S. States.

**Research Questions**

Outlined below are the research questions examined in this study. These questions are designed to evaluate key factors associated with Resource Mobilization Theory and Political Opportunity Structure Theory to determine the extent to which they explain small state movements in differing contexts. The first two research questions relate to the structure of state environmental movements. The third question relates to how state level social and political context explains the movements’ structures, and the final question is related to identifying the role of these movements in the policy-making process.

1. What are the structures of environmental movements in small U.S. States?
   a. Do these structures vary across the environmental movements seeking to influence state environmental policy in small U.S. states? If so:
   b. Do organizations that comprise state environmental communities in small Northeastern states vary in size, tactics used, and strategies used to influence environmental policy?

2. What factors account for the differences in size, tactics, and goals among small Northeastern states in terms of their environmental communities?

3. How does state context explain the structure and variation of the environmental movements in the five small U.S. States?

4. What is the influence or role of the environmental movement’s structure on policy development within each state?
Chapter 2

REVIEW OF THE LITERATURE

Introduction

A summary of the existing key literature enables the placement of this research within the context of existing knowledge. This begins with a summary of the literature about social and environmental movements. The dominant theories considered include Resource Mobilization Theory and Political Opportunity Structure Theory. These two theories are often used as competing models to explain different dimensions of social movements in various contexts. Factors associated with these theories and any theoretical anomalies may be more pronounced in the context of small states with limited populations from which to draw upon for resources. Environmental movements in small states may be heavily influenced by the nature of small state politics that are often more intimate, amplifying the role of political opportunities or in some cases eliminating them. In this context, movements may depend more heavily on focusing events that create a political opportunity for advocacy because they simply lack the collective resources to have measurable influence in setting agendas. They may be passive issue takers responding only to opportunities significantly limiting their role as agents of change.

It is important to note that these two theories are often used in a reductionist manner that aggregates variables from individual organizations and uses this to explain the broader environmental movements (Diana, 2013). While this approach has significantly enhanced our understanding of movements, it may have missed important
dimensions of how movements and collective actions occur and are sustained. To allow a deeper and more holistic understanding of state scale movements, consideration is given to some of the inter-organizational networks and coalitions. Considering the role of collaborations helps differentiate between individual efforts by organizations versus a coordinated movement for sustained change. Inter-organizational relationships may also either facilitate or constrain collective action of an environmental movement (Andrews and Edwards, 2004).

In addition to the mainstream theories evaluated as part of this study, the evolving contemporary theoretical perspectives on social movement theories that may challenge and/or complement the mainstream theories are discussed. These include newer theoretical perspectives such as cultural theories, new social movement theories, and theories of new media or internet communication technologies (Carty, 2015).

Individual organizations are frequently analyzed and their data aggregated within the mainstream social movement theory framework to evaluate and explain the broader movements. Key literature describes environmental groups by looking at how they develop social capital and identities and their evolution and development and considers and summarizes their context for taking action. It provides an understanding of environmental groups that come together to advocate for common purposes providing a foundation for an understanding of environmental movements.

As part of this review, various concepts associated with movements including social movement organizations, interest groups or organizations, collective action, and coalitions are reviewed. These terms are often used interchangeably in descriptions of social movement organizations, but describe very different phenomena with implications for influencing environmental policy. An effort is made to clarify each of
these concepts and define them within the context of this study of environmental
movements in small states in the United States. These concepts are extremely
important in that they set the boundaries for what is included or considered a “state
environmental movement”.

**Mainstream Social Movement Theories & Theoretical Perspectives**

Several mainstream social movement theories included as part of this research
on state environmental movements are considered in this section. These include the
dominant theoretical perspectives of resource mobilization and political opportunity
structure. Resource mobilization theory asserts that a prerequisite of social
movements is the ability to get control over the necessary resources for collective
action. Key resources for collective action are organization, knowledge, funding, and
support from some elites and the media. Political opportunity structure looks at the
context for action, particularly on focusing events or the vulnerability of authorities
that present opportunities to challenge and exploit the status quo.

Other theoretical perspectives that help explain some of the additional
mitigating factors of collective actions are also reviewed. These include cultural
theories and new social movement theories that help explain why movements emerge,
the reasons for participation, and the strategic choices made by groups.

Cultural theories of social movements focus on the framing and the forming of
a collective identity. They focus on the details of how collective actions occur instead
of why they occur. New social movements (NSM) do not appear to have a consensus
definition, but may provide alternatives to resource mobilization and political process
theory models (Carty, 2015). NSMs also appear to emphasize the more decentralized
nature of contemporary social movements and often concentrate on everyday life and culture with individual actions often being a symbolic form of resistance.

In order to set the stage for how organizational information can be utilized to help understand the structure and role of environmental movements, each of the theories that were used in the conceptual framework is briefly described. This theoretical background is necessary to understand its use in the proposed framework that aims to improve our understanding of state environmental movements.

Resource Mobilization Theory

Resource mobilization theory is important in understanding advocacy involvement by environmental organizations because it considers the resources necessary to allow for groups to collectively mobilize and take action (Jenkins, 1983; Zald & McCarthy, 1987; Mosley, 2010). Its focus is on organizational features and resources (Van Stekelenburg & Klandermans, 2009). Group organization is believed to be a primary factor in determining the potential for mobilization as well as the patterns of actions taken. Resource mobilization theory also argues that movements form due to more than just collective behavior concerning contentious issues (Tilly, 1978). Movements are extensions of collective actions that form due to long-term changes in group resources, organization, and opportunities (Jenkins, 1983; Jenkins & Perrow, 1977). Leadership is also an important factor to be considered in Resource Mobilization Theory.

Based on Resource Mobilization Theory, environmental organizations and their collective strength as a movement can be understood by the assessment of the available resources. More specifically, it is likely linked to their collective ability to achieve control over the required resources which is a prerequisite for collective
action. (Jenkins, 1983; Johnson, Agnone, & McCarthy, 2010; King, Kaiser, & Countouris, 1996). This theory also asserts that the emergence, sustainability, and descent of social movement organizations are determined by their ability to successfully mobilize resources (McCarthy & Zald, 1977; Shigetomi, 2009).

Resource mobilization theory holds that a movement’s ability to mobilize to influence policy is likely associated with the many resource dimensions of each organization. These dimensions include organizational size, professionalism, leadership, numbers of paid and volunteer staff, fiscal resources, the extent of collaboration with other groups, tactics and the synergy of tactics utilized, and, increasingly, the adoption and use of technology since it can help overcome barriers from limitations in other resources reducing costs (Johnson, et al., 2010; Bosso, 2005; Earl & Kimport, 2011). These factors combine to determine the extent to which the movement’s infrastructure depends more heavily on insider or outsider tactics (Johnson, Agnone, & McCarthy, 2010; Gitlan, 2000). Insider tactics are practiced by groups with more elite access and are rarely contentious. Outsider tactics are used more often by marginalized groups and include activities such as protests, grassroots campaign efforts, and other more contentious actions. Finally, the extent of inter-organizational networks and collaborations is considered because it has dimensions associated with resource mobilization as well as political opportunity structure. Networks are an important consideration for improving our understanding of social and environmental movements (Dianna, 2004).

Networks can be considered using a simple analysis of the frequencies of collaborations among organizations, a cluster analysis of which organizations work together most frequently, and on analysis of shared resources and other variables. It can also involve data-intensive analysis and detailed modeling of various relationship
factors such as the extent of shared memberships, social relationships between actors and leaders, and other factors when robust data are available.

Political Opportunity Structure Theory

Political Opportunity Structure (POS) theory argues that social movements are affected by political opportunities, and that these opportunities determine their level of success or failure. POS has been defined as the “dimensions of the political environment that provide incentives for people to undertake collective action by affecting their expectations of success or failure” (Tarrow, 1994, p. 85). The theory highlights the importance of context in policy development and advocacy actions. POS recognizes that activists do not choose their goals, timing, and strategies in a vacuum. Activist groups consider current conditions and the opportunities presented within the larger political environment (Meyers, 2004; Jenkins, 1983). This alignment of the political opportunity structure facilitates the advancement of policy agendas by advocacy groups and movements. Political opportunity is very dependent on the context for advocacy. Factors such as the level of tolerance, how sympathetic a government administration is to claims, the extent of political contention, the saliency of the issue, the local political ideology/political party dominance, and the extent of social capital defines the political opportunity for mobilization.

Social capital is a key dimension of political opportunity structure. It refers to “connections among individuals” or “social networks and the norms of reciprocity and trustworthiness that arise from them” (Putnam, 2000, p. 19). Social capital is what binds people together to achieve mutual aid, reciprocity, and common interests.

Networks of social capital have the power to influence public policy. They affect information flow and are a factor for bringing diverse individuals and groups
together for collective action. Through their collective power, networks can significantly affect and/or create the opportunities for affecting public policy. Social capital improves government performance by making it easier for the public to make policy demands (Putnam, 2000; Claibourn & Martin, 2007).

The extent and nature of social capital varies geographically. As such, it is a key baseline measure for understanding the willingness of communities to mobilize in various locations. It provides context that helps explain the capacity and readiness to engage in civil society for policy issues, including environmental issues.

**Resource Dependency**

Resource dependency is a particularly interesting dimension of Political Opportunity Structure Theory due to the close government linkages and public funding received by many environmental organizations. Resource dependence considers how external resources of organizations affect the behavior of the organization (Pfeffer & Salancik, 1978). It argues that organizations are hesitant to jeopardize their relationship with funders by advocating for policies outside the status quo, particularly contentious issues often associated with social movements and advocacy efforts (Mosley, 2010). Conversely, it is also possible that reliance on government funds may lead to increased advocacy on an issue, as the funding provides an additional incentive. However, this increase in advocacy may primarily be for organizational resources from the government with minimal influence on broader environmental policy. The level of co-option that results from a need to protect revenue streams may significantly limit advocacy and involvement in social movement activities.
Evolving Contemporary Theoretical Perspectives

Cultural Theories

Cultural theories attempt to address the mitigating factors that help explain the emergence of collective actions, the reasons people participate, and the strategic choices made by the actors. They focus on the cultural attributes of social movements such as collective identity and frame the issues to resonate with participants and potential recruits through the linking of grievances (Benford, 1993). To be effective, issue frames must persuade large numbers of people that the issues are urgent, that a better alternative exists, that the activist has worthiness, and that the constituency being mobilized can be effective (Tilly & Tarrow, 2007). In general, these theories build upon Resource Mobilization Theory and Political Opportunity Theory.

Institutional Isomorphism

The environmental movement has now matured. It is recognized as one of the most extensive, enduring, and influential social movements of modern times (Bruelle, 2000; Bosso, 2007; Castells, 1997; Roots, 2004.). Over its lifespan, aggregate organizations that comprise the movement have grown into an organizational field of nonprofit and voluntary environmental work. Like most recognized areas or fields of institutional life, this structuralization can be expected to be associated with attributes or bureaucratization that makes this disparate collection of organizations increasingly similar to each other (Giddens, 1979). DiMaggio and Powell (1983) found that this process of structuralization has four components: 1) increased interaction among organizations in the field; 2) the emergence of well-defined inter-organizational structures of domination and patterns of coalition; 3) an increase in the amount of information that organizations must handle; and 4) mutual awareness among the
organizations that they are involved in a common endeavor. All of this applies to the now mature environmental field that has not only grown, but has also become increasingly sophisticated and professionalized (Bosso, 2005).

This homogenization concept has been described as isomorphism (DeMaggio & Powell, 1983). Hawley (1968) described isomorphism as a process under which different organizations working under the same environmental context begin to resemble each other. It is a similarity of the processes or structure of one organization to those of another, be it the result of imitation or independent development under similar constraints. There are three main types of institutional isomorphism: normative, coercive, and mimetic (DeMaggio & Powell, 1983).

Normative isomorphism is typically associated with the level of professionalization of a field largely rooted in the establishment of a cognitive base and the legitimization of occupational autonomy (DeMaggio & Powell, 1983). As the environmental movement matured, many organizations transitioned from grassroots organizations to complex professional organizations with a considerable level of specialization of their staff (Bosso, 2005). The environmental movement’s professionalization was also driven by the technical nature of environmental work that is rooted in the natural sciences, likely creating a high need for specialized expertise.

Coercive isomorphism arises from inter-organizational pressure that is applied both formally and informally by interdependent entities that have developed cultural expectations of how they should function (DeMaggio & Powell, 1983). This can arise from institutional mandates such as nonprofit tax regulations, lobbying requirements, and other requirements. This type of isomorphism also arises due to resource dependency. Organizations that are heavily dependent on other organizations will tend to act and become much more similar. This may occur from environmental
organization to organization or between environmental groups and the government entities that they rely upon for resources.

The third type of isomorphism identified by DeMaggio & Powell (1983) is mimetic. The high level of uncertainty that often occurs in organizations is a very influential force that leads them to imitate other organizations perceived as being successful. This process has been found to be particularly important when organizational technologies are poorly understood, when organizational goals are ambiguous, and in conditions of symbolic uncertainty. The technical complexity of many environmental issues, the confusion of vision and goals often found in organizations, and the high level of symbolism in environmental action can be expected to increase the forces leading to mimetic isomorphism among the aggregation of environmental groups that comprise the movement.

New Social Movement Theories

New Social Movement Theories (NSM) is an emerging concept that opposes interpretations of collected behavior being rooted in class struggles. Although there is no real agreement in the social movement literature of what NSM Theory refers to, most scholars view it as a school of thought rather than a theory (Carty, 2015). What NSM Theories do have in common is they diverge from resource mobilization and political process theories, aligning more with cultural theories that emphasize micro level dynamics such as framing issues and establishing a sense of collective identity (Carty, 2015; Gamson, 1990; Hunt, Benford, and Snow, 1994). In addition, this perspective pays close attention to the recent forms of the more decentralized organizational structures (Carty, 2015). It considers the organizational features of many contemporary forms of collective action that include loose articulation,
decentralized organization, equity of participants, and pluralistic networks (Melucci, 1996).

Theories of New Media

New media theories and perspectives emphasize how internet communication technology is impacting social movements and mobilization efforts. It has been clearly established that the availability of resources is one of the most critical obstacles to successful collective action, and that it is a prerequisite for collective action (Jenkins, 1983; Zald & McCarthy, 1987; Mosley, 2010; Johnson, Agnone, & McCarthy, 2010). However, this long-standing perspective is based on organizational development that emerged from industrial society. These were more place-based and labor-intensive models based on the social and political context of the time. The effective use of technology can expand geographic reach and reduce the cost of the start-up and the sustaining of movements (Earl & Kimport, 2011; Shirky, 2008).

Our social and economic foundation of society has significantly changed as we rapidly transition to an information society (McNutt & Heoffer, 2016). As part of this transition, the effective use of technology may significantly reduce the required fiscal resources and provide an organizing tool with which to gain control over other resources including the mobilization of volunteers, the organization of protests, and the control of messaging with a “first strike” capacity that can reframe and redefine the agenda based on the community’s terms. Technology may also help create the policy spaces or political opportunities for an advocacy group to operate effectively by rapid information dissemination that can influence public opinion. Finally, new internet communication tools provide a cost-effective platform to directly disseminate detailed information to targeted audiences in a way that compliments, supplements,
and sometimes replaces reporting by established media outlets, whose historic prominence in influencing public opinion is changing in the face of digital technology (Karpf, 2012; Bimber, Flanagan, & Stohl, 2012).

While there is a long tradition, the methods and sophistication of civic engagement have changed over time. Civic engagement may now be rapidly evolving into new forms that are emerging due to new civic technologies that may reduce or change the central role of organizations (McNutt, J., Justice, J, Ahn, M, Siddiqui, S., Carter, D., & Kline, A., 2016; Bimber, Flanigan, & Stohl, 2012; Earl & Kimport, 2011; Shirky, 2008). Civic technology refers to a wide variety of interventions aimed at using technology to meet community needs and engender social change (McNutt, et. al., 2016). It is the use of digital technologies and social media for service provision, civic engagement, and data analysis that has transformational potential (Living Cities, 2012, p. 3). These new technologies may be helping to address concerns about the declining trend of organizational participation such as those articulated in Bowling Alone (Putman, 2000). It has been extensively reported that in postindustrial society, citizens have become increasingly disengaged from political participation (Scopol & Fiorina, 1999; Dalton, 2006). Civic technology has been identified as a tool that could rekindle political engagement by making once-impossible forms of group interaction possible (Shirky, 2008).

**Social and Environmental Movements**

Social movements are a key process through which collective groups and individuals can give voice to and express their grievances (Snow, Soule, & Kriesi, 2004, p. 11). They can collectively express concerns about rights, welfare, and well-being. Particularly in democratic societies, social movements provide a process to
articulate and press collective interests. In the U.S., it would be hard to think of any significant national issue that does not have some type of collective organizations or movements aligned on each side. While the precise definitions of social movements may differ, they all seem to be based on several factors including collective action, change-oriented goals and claims, some form of organization, and temporal continuity (Snow, Soule, & Kriesi, 2004, p. 11). Groups and individuals with common claims come together and form a sustained effort to press their collective interests. In the case of the environmental movement, the common glue is most simply a collective interest in some aspect of the environment.

Environmental Movements

The environmental movement has been one of the most extensive, enduring, and influential social movements of modern times (Bruelle, 2000; Bosso, 2005; Castells, 1997; Roots, 2004). It can be placed on a short list alongside the labor, women’s, antiwar and peace, religious, human rights, and revolutionary movements as one of the most significant general social movements (Snow, Soule, & Kriesi, 2004). Its long endurance and continued prominence may be due to its ability “to mobilize a wide variety of symbolic and material resources over a sustained period” (Bruelle, 2000, p. 101). The environmental movement clearly stands out as one of the new social movements that arose from postmaterial values and has survived the test of time. This movement continues to enjoy widespread public support, and the movements ideological values are embraced and deeply embedded in our social and political cultures. Environmental issues continue to invoke passion and reinvigorate mobilizations, protests, and popular support (Roots, 2004).
Understanding environmental movements is often challenging due to the various conceptions used in describing them. Movement descriptions range from the inclusion of a broad range of discourse to a conception restricted to agents of profound structural or social change in society (Roots, 2004). Environmental movements are a subset of the broader concept of social movements. It is simply that portion of social movements that focuses on environmental claims. The environmental movement also has an important characteristic that often sets it off from the other major movements: it has an intimate relationship with science and has offered a critique of industrial capitalism (Roots, 2004).

Due in part to the technical and scientific nature of many environmental issues, participation in the environmental movement has a high knowledge requirement for those mobilizing environmental advocacy actions. The environmental movement is framed in the natural sciences. This link to the natural sciences has likely led to a higher degree of professionalization of environmental organizations than that observed in organizations involved in other movements. This professionalization is often needed to ensure the expertise to develop the needed scientific information to influence policy and change. Bosso (2005) has pointed out that this professionalization and institutionalization may have turned the national environmental movement into an interest group. While institutionalization and bureaucratization are often considered the inevitable fate of social movements, the environmental movement appears to have resisted this fate (Roots, 2004). Perhaps this is due to the smaller, more localized collective actions that continue to emerge and flair up refreshing and reinvigorating parts of the broader movement.

The concept of movements often includes and interchangeably uses the terms “social movement organizations”, “interest groups or organizations”, “collective
action”, and “coalitions”. It is argued here that social movements are distinct from these various forms of political discourse, but they are still broadly defined. Also, these terms are not mutually exclusive, and social movements have a dimension that includes some interest groups along with less privileged groups (Berry & Wilcox, 2009). Collective action is clearly a part of both social movements and interest groups that seek to bring groups together to press for claims. Coalitions may be viewed as one form of collective action. The delineation is that the wide range of discourse formats helps to define the many variations in environmental movements.

To better understand the variation in environmental movements, it is important to understand the relationship between social movements and interest groups. The terms are theoretical constructs arising from the different disciplines of sociology and political science, respectively. Both constructs are deeply rooted in collective behavior theories (Cisar, 2005; Andrews & Edwards, 2005). On the far extreme, some have argued that there is “no theoretical justification for distinguishing between social movement’s organizations and interest groups” (Burnstein, 1999, p. 19). This approach reduces the difference to little more than a disciplinary preference.

Movements and Interest Groups

While there is considerable overlap between movements and interest groups, one important difference between these theoretical constructs that is particularly important in the context of small U.S. States is the extent of organizational and political access. Political interest groups usually are more organized, function largely as political insiders, are centrally located within the policy arena, are highly professionalized, work within formal rules, and engage in conventional lobbying activities (Cisar, 2005). In it broadest form, “interest group” has been defined as “an
organized body of individuals who share some goals and who try to influence public policy” (Berry, 1999, p. 4).

In comparison to interest groups, social movement organizations tend to be less organized and less institutionalized. They often include informal groups, emphasize grassroots organizations, and are often marginalized or excluded from routine politics (Cisar, 2005). As a result, they are more likely to be political outsiders that rely on collective action mobilization as a part of their tactics to influence policy. Social Movements not only tend to have much less privileged access than interest groups, but they also tend to be more inclined to partake in contentious politics and advocacy efforts.

Andrews and Edwards (2004) have pointed out that those studying social movements highlight the inequity of access to organizational resources that exist for citizens and citizen groups. They differ from the more pluralistic perspective of interest groups that generally have more resources, better political connections, and better organizational capacity for influencing policy. A logical differentiation may be that social movement organizations are more diverse than most interest groups and include considerably more emergent and less mature organizations (McAdams & Scott, 2005).

More institutionalized interest groups are likely included in an overlapping definition of social movements. According to Berry and Wilcox (2009), one difference between interest groups and movements is that “movements are broad, decentralized, and diverse and may include several competing interest groups that offer differing ideologies, agendas, and strategies” (Berry & Wilcox, 2009, p. 6). Movements include a much less organized collective. In small states, this would be expected to be more prominent due to the limited populations from which to mobilize.
resources leading to more restrictions on professionalization. As such, social movement organizations would be more embedded in social networks and at least make a claim to represent a broader constituency (Minkoff, 2008).

In this sense, movements may include both social movement organizations and some more organized and privileged interest groups. As Roots (2004) states, “it is by no means clear why an interest group community and an environmental movement should not coexist” (p. 611). The movement would then include that subset of groups that often works largely outside the mainstream political process under conditions of more marginalization that stimulates a more pronounced tendency to openly challenge the status quo. Movements are less likely to experience the normative pressures and need to abide by rules and traditions observed by interest groups that typically lead only to incremental changes reinforcing the status quo. In short, while the effectiveness of a movement at influencing policy may not be as high as those often associated with interest groups, movements are more inclined to challenge the status quo, often contentiously. As outsiders, they likely help to provide needed alternative concepts and demands needed for societal changes. Environmental movements are important challengers to the existing normative ideology and governance structure that resist significant changes in policy. As such, these movements can be defined as “collectivities acting with some degree of organization and continuity outside of institutional or organizational channels for the purpose of challenging or defending extant authority, whether it is institutionally or culturally based” (Snow, Soule, & Kriesi, 2004, p. 11).
Movements in the Digital Age

The use of new digital technology which is now such a common part of everyday life is significantly affecting social movements. As of 2013, 83.8 percent of U.S. households had a computer, and 74.4 percent had a subscription for internet access (U.S. Census, 2015). The ubiquitous distribution of these tools has allowed the rapid development of new uses of this technology. The trend of digital access is clearly depicted in Figure 1.

![Figure 1: U.S. Households With a Computer and Internet Use: 1984 to 2013](source: U.S. Census Bureau, Current Population Survey, Select Years)

- In 2007 and 2009 the Current Population Survey did not ask about computer ownership. The estimates presented here for those years reflect adjustments made based on the ratio of computer ownership to internet access in 2003 and 2010.
- In 1984, 1989, and 1993, respondents were not asked any questions about the Internet.
New media outlets can increase or impede political discussion and contention over issues. Internet communication technology now allows social movement actors access to innovated media outlets that can help them frame their issues and grievances, broadly disseminate this information, and mobilize online to collectively make demands.

The rapid emergence of digital communication tools and media beginning in the 1980s and growing to maturity in the 1990s has raised important questions about how these technologies are altering policy advocacy and the associated social ties that have long been a staple of collective action and advocacy (Bimber, Flanagin, & Stohl, 2012; Earl & Kimport, 2011; Shirky, 2008). While the important social ties for collective action have traditionally developed through face-to-face interaction, some authors argue that these important relationships can be developed online. In his book *Here Comes Everyone*, Clay Shirky (2008) represents those who believe that relevant social connections not only can be developed, but are being developed using internet technology. Other authors such as Marshal Ganz (2014), Malcolm Gladwell (2010), and Evgeny Morozov (2009) challenge the idea that strong enough social ties can be formed electronically despite the lack of research evidence rebutting the substantial literature on the successful development of online social capital.

A few collective action scholars have argued that digital ties are likely to produce only weak ties that are not strong enough to build high levels of interpersonal trust and strong social bonds. Tarrow (2011) argues that “loose mobilizing structures have defects in their virtues” (p.149). Much like Gantz, Tarrow concludes that social movements and organizing efforts still require a physical space and depend upon personal contact.
Tarrow (2011) concludes that social movements still require organizations that work out of an identifiable physical space because the internet can only produce weak, diffuse ties. It may be that digitally-enabled collective actions function more as transactional activism than as transformational actions (Bennett, 2005; Keck & Sikkink, 1998). Much of this research on transactional activism was focused on large geographic scales and broader movements rather than on local community based actions. These transactional activities emerging from new technology may create space and opportunities for more personalized transformational actions when integrated with traditional face-to-face advocacy that is well documented as producing the important ties of trust, credibility, loyalty, and mutual dependence on many scales (Bimber, Flanagin, and Shohl, 2012). Wellman (2002) argues that in the internet age, social relationships are based on the network ties of individuals and are no longer geographically place based. Recent research has indicated that digital technology can improve participation in civic organizations (Valenzuela, Park, & Kee, 2009). Earl and Kimport (2011) argue that “truly meaningful collaboration—the power of collective action—can be created and facilitated without copresence for protest (p. 126).”

Some authors have focused specifically on the need to integrate online and offline relationships as part of collective actions (Han, 2014; Earl & Kimport, 2011; Castells, 2012). It is well established that the internet is now “deeply embedded in group and organizational life in America,” with the Internet now being as important for holding groups together and keeping members informed of group activities as phone and in-person meetings (Raine, Purcell, & Smith, 2011, p. 1). For advocacy, the Internet is also an important tool for mobilization and recruitment. Digital technology, like social media, is now a prominent feature of political activity and civic
engagement (Raine, L., Smith, A, Schlotzman, K, Bardy, H. & Verba, S., 2012). However, the nuances of this social phenomenon, in particular the importance of integrating traditional face-to-face interaction versus using online activity alone, in building social ties, trust, and mutual dependence are not fully understood. Han (2014) points out that to be effective in achieving social change, organizations must go beyond just focusing on mobilizing people and also organize them for sustained action. This may require going beyond the mobilizing power of internet communication technologies and integrating significant face-to-face activities and actions.

This integration of online and off-line organizational and advocacy efforts provides opportunities for more diffuse and often emerging online advocacy groups to build legitimacy and grounding. It can also provide more agility to established organizations that, prior to the emergence of digital technology, have traditionally depended upon resource-intensive tools like; phone trees, flyers, posters, billboards or canvassing door-to-door. The effective use of technology can lower participation thresholds by significantly reducing the costs of the start-up and sustaining of advocacy efforts and movements (Earl & Kimport, 2011; Shirky, 2008; McNutt, 2008; Hick & McNutt, 2002; Garrett, 2006; Van Laer & Van Aelst, 2010).

Research indicates that online collective action relates closely to off-line collective action (Han, 2014; Postmes & Brunsing, 2002; Wojceiszak, 2009). While technology-enabled advocacy has been a considerable transition in advocacy practice, its use started from the influence of local groups and communities with problems and moved along its evolutionary path to its recent position as a well-respected method (Hick & McNutt, 2002; Han, 2014).
While our understanding is evolving along with the technology and its changing use in social movements, what is clear is that it is “changing the social movement terrain even more radically than previous technologies” (Carty, 2016, p. 9). While media like the printing press, radio, and television have all had profound impacts on power distribution and social change, the digital technology effect may be much more radical. Social change practice is profoundly changing due to the explosive rate of expansion in the use of digital technologies. Unlike past technological innovations like television, digital technology embodies radical individualistic and freelance formats encouraging self-expression (Carty, 2015). This may drastically change social movements from what we have known them to be throughout history.

**Environmental Groups**

Environmental groups are the foundational units that comprise the majority of those participating in environmental movements. When the public and scholars think about the environmental movement, they most often think about the large national environmental organizations (Kempton, Holland, & Howarth, et al., 2001; Bosso, 2005). The U.S. Environmental Movement has largely been attributed to a core of large nationally-organized groups such as the Sierra Club, the National Wildlife Federation, the Nature Conservancy, and others that are often identified as the primary players affecting government policy (Mitchell, Mertig, & Dunlop, 1991). Such attention is understandable because information on these groups is more readily available and easier to obtain than that of smaller local groups. Large national organizations with significant budgets and professional staff have significant influence on environmental action and policy; however, they are only part of the movement
(Bosso, 2005; Berry, 1999; Straughan & Pollack, 2008). The part these groups play may also be reduced due to national policy stagnation and increased attention on state policy arenas. Although often overlooked and understudied, local groups have also been found to play an important role (Kempton, Holland, & Howarth, et al., 2001; Straughan & Pollack, 2008). Focusing on the subnational level is needed to provide a correction to the long standing academic emphasis on studies of national organizations and activities. Without this broader focus, our understanding of environmental groups and their impacts will remain incomplete.

Studies of local environmental groups and their capacity to influence environmental actions have indicated that they are an important part of the broader environmental movement (Kempton, Holland, & Howarth, et al., 2001; Klyza, Isham, & Savage, 2006; Bosso, 2005; Straughan & Pollack, 2008). Local groups have been found to play an important role in expanding the structures for environmental actions and building of the social capital needed to promote environmental action. (Kempton, Holland, & Howarth, et al., 2001; Klyza, Isham, & Savage, 2006). These studies expand our understanding of environmental groups, but fall short of explaining their collective influence on state policy.

In a targeted study of environmental groups on a local scale, Kempton, Holland, Bunting-Howarth, and Payne (2001) quantified characteristics of local environmental groups in North Carolina and the Delmarva Peninsula through survey research. Their census approach reviewed various existing local lists of environmental groups. They also utilized national lists such as the 1993 National Wildlife Federation Conservation Directory. They continued their search for local groups as they interviewed environmental officials and group members and found this to be an important and valuable source of data for the census of environmental
organizations. Taking a census of local environmental groups greatly increased the understanding of the number and types of groups. In this census of groups, they found 566 local groups, which was 7 to 20 times greater than the number reported in the published directories, and documented that existing lists significantly misrepresented the extent and contribution of local groups to the environmental movement (Kempton, Holland, & Howarth, et al., 2001).

Of particular interest for environmental policy are the less understood structure and role of local environmental groups in the broader environmental movement. This has significant implications in the context of devolution that shifts policy development to these local arenas. Kempton, Holland, Bunting-Howarth, and Payne (2001) found that, in addition to being far more numerous than previously thought, over half of the local groups also engaged in political action as a primary activity. This policy engagement by local groups may be an even more important finding today than it was at the time of the original study because in the decade since their identification of the role of local groups, the United States has experienced an increased level of political partisanship among congressional members making it increasingly difficult to pass new environmental legislation or even to reauthorize current environmental laws at the national level. There has also been a trend toward devolution of policy, to the State and local level (Sapat, 2004). This trend has been identified as an increasingly important role local environmental organizations play due to policy devolution and the increasing importance of state and local level environmental policy development (Andrews & Edwards, 2005; Bromley-Trujillo, 2012).

Andrews, Edwards, Al-Turk, and Hunter (2016) summarized the literature and prepared a methodological strategy for examining populations of social movement organizations. While not specific to environmental organizations, it is largely based
on an evaluation of a detailed database of environmental organizations in North Carolina. The authors provided guidance on evaluating the extent to which a sample of the organizations is representative of the populations. They provided useful guidance for the development of sampling frames for social movement organizations in defined geographic areas. They found that commonly-used sources such as Associations Unlimited and GuideStar provided good representative samples, but often there were only a small number of cases and that placed limits on the studies. They also found that employing multiple lists that included those developed nationally and locally provides useful additions with a low level of bias. They suggested using a peak list strategy that targets larger lists to obtain a larger sample with a low level of bias. They did, however, note that this may not address problems with a bias for issue focus and demographic characteristics of the organizations.

Development of Social Capital and Group Identity

Understanding environmental groups requires an understanding of: their capacity development for influencing issues related to the environment; how they use this influence; and, how that influence interacts with their group’s identity and self-perception. These group dynamics include an understanding of how people collectively act and build social capital. The collective actions taken often lead to individual members reassessing their identity as part of a group leading to the formation of group identity with implications for future actions.

Klyza, Isham, and Savage (2006) found that local groups in Vermont have increased rapidly since 1985 and engage in significant social capital development through stewardship activities, education and communication, partnerships with other organizations, and alliances with public officials. They also point out that this finding
contradicts Putman’s (2000) thesis about the decline of social capital. The power of these local groups may be described by the influence Berry (1999) attributed to environmental groups who were found to play an important role in agenda setting and pushing forward quality-of-life issues in Congress.

Environmental groups have a wide range of goals and engage in a variety of actions and activities ranging from public education activities to radical environmental actions (Kempton, et al., 2001; Klyza et al., 2006). These actions directly influence environmental problems and contribute to the development of group identities. (Kitchel & Kempton, et al., 2000). While prior orientation of individuals is important, it is interrelated with the influence of group experiences. The consideration of theories of identity is important because it may be a better indicator of why people take environmental action than people’s attitudes, values, and knowledge about environmental issues. As individuals actively participate in environmental groups, they often go through reformulations of identity and participate in actions that allow them to overcome barriers to environmental actions. This indicates that face-to-face interactions in groups are an important part of member identity. Since local groups have members in much closer proximity who meet more often, they potentially play a more important part in the development of environmentalist identities than national organizations do. These findings apply both to pro-environmental groups and wise use groups that often oppose the actions of environmentalists. Actions are motivated less by what individual group members or groups collectively believe is environmentally important and motivated more by how they perceive themselves. Those who identify themselves as strong environmentalists are most likely to take the strongest actions.
Group Evolution & Development

Environmental groups have evolved considerably since the early emergence of the modern environmental movement that began in the 1960s. The national environmental organizations have not only survived over the decades, but have also experienced large growth in memberships (Mitchell, Mertig, & Dunlap, 1991). Many of them have grown from small grassroots organizations to large national organizations with significant political clout and professional staff to run them. These groups are no longer amateur environmentalists (Bosso, 2005).

Group evolution and the decision to engage in the policy arena present challenges. Policy engagement is not easily achieved. Environmental interest groups undergo changes and often must develop prerequisite capacities before they become politically active (King, Kaiser, & Countouris, 1996). Not all groups decide to engage politically on environmental issues and policy. Of those groups that do choose to engage not all of them are able to build the capacity to undertake and sustain these political actions.

The way groups deal with developmental changes may allow them to be classified into three groups (King, Kaiser, & Countouris, 1996). This classification includes formative, developing, and mature phases or groups. Formative groups include those that are just defining their goals and organizational purpose. As part of this formation, groups may decide to take an interest in government decision-making. When groups decide to undertake a political role, they evolve into a developing group that seeks to keep the group operational and relevant. If they are able to remain solvent and agree on goals that include a long-term political interest, they become a mature group. This model was derived from the study of a limited number of coastal and marine interest groups, but may have a broader application to the evolution of
environmental organizations that become politically active. Of particular importance is that all groups do not necessarily follow these steps in a linear fashion, nor even need to progress through them. However, this model of group evolution does indicate that there is an added challenge for groups to become politically active. To engage politically, groups need to overcome the challenges of maintaining the organizations before they will have resources for long-term political advocacy. This ability to have discretionary resources for sustained policy work indicates a level of organizational maturity. Sustained policy engagement is an organizational stage that is likely only to be achieved by a limited subset of environmental groups.

Many of the large national environmental organizations have matured to a level that permits their sustained engagement in national policy issues. However, this maturation has led to concerns about the national organizations leaving their grassroots origins and becoming estranged from their broader environmental purposes or their membership (Mitchell, Mertig, & Dunlap, 1991). Competition for funding to sustain these organizations may create friction and fragmentation rather than a unified movement that is capable of collective action. Concerns have also been expressed that as the major national environmental groups have matured, they are “turning tame, corporate and compromising” (Bosso, 2005, p. 4). But this assertion is not well supported. While many organizations have become professionalized, they have also built considerable social capital and developed expertise that they effectively apply to national environmental issues (Bosso, 2005; Berry, 1999; Mitchell, Mertig, & Dunlap, 1991). The challenge now may be for these national groups to expand or, in some cases, to redirect their resources back to the local level, particularly as devolution of policy increasingly shifts environmental policy actions away from the national arena to the state and local levels.
Group Leadership

Group leadership is an important factor in understanding environmental organizations and the actions they take to influence public policy. While some groups may be more mature and have developed highly-centralized and more bureaucratic organizational structures with the work being conducted by paid staff, many environmental groups choose their leaders and have far more shared and democratic decision-making processes (Andrews, Ganz, Baggetta, Han, & Lim, 2010; Wilson, 1973). In fact, some have argued that while political context and availability of resources are important, their effect is mediated by organizational and leadership factors (Andrews, Ganz, Baggetta, Han, & Lim, 2010). The role of leadership in selecting strategies can also be important in evaluating the consequences or outcomes of movement activities (Ganz, 2004; Martin, 2008). Clearly, leadership can either help or hinder movement efforts depending upon the characteristics of the leader such as their socio-political context, values, ethics, and other factors. Since leadership can often transcend organizational boundaries, it may be a key factor in understanding environmental movements. This may be particularly important in small state contexts where personal relationships may, at times, be far more important than available resources for advocacy efforts. Leadership may also cross state lines with some leaders and funding sources becoming intertwined with larger substantive and professional networks, especially in the case of state chapters of national organizations or regional organizations.

Some leaders are simply more skilled at making connections with others both inside and outside of an organization reducing the transaction costs of networking by adeptly identifying those relationships providing the most results with the least resource investment (Wilson, 1973). However, as new technology and
communications have emerged, the role of a highly-visible or charismatic leader may be less important than in the past, particularly since these technologies may serve to reduce transaction costs. In some ways, they may reduce the need and dependence upon effective movement leaders to build networks allowing for more distributed leadership to emerge.

Castell (2007) highlighted the role of new internet technology that was contributing to the “electronic grassrooting of civil society” (p. 239). New technologies, particularly internet communication technology,” have created a different or unique type of social movements which no longer relies on formal hierarchical organizations or leadership to provide a clear set of the demands of a collective action (Carty, 2015). This means that collective actions are much less dependent on professional leadership and expertise. Actions take place in a much more ad hoc and grassroots fashion that often crowdsources information and inspires participants to act. These changes have been made by the digital technologies that emerged in the early 1990s, and that are now becoming ubiquitous in their use (Bimber, Flanigan, and Stohl, 2012). While the full impact of new technology on leaders of social movements remains a point of debate, most believe that it has had a significant impact on how social movements operate in the digital age.

Context for Environmental Groups and Movement Structure

The social and political context for environmental discourse affects group formation and operation, as well as the collective movement structure of which they are largely comprised. Context affects the development of a group, the availability of resources, and the orientation of ideology. Varying contexts may lead to groups working on the same issues in different locations while having very different
perspectives and positions on the issues. The variability in policy orientation is likely to be higher among local groups than among national organizations. At the national level, issues are often generalized in a way that may suppress local variations in perspectives. Despite this concern about the incongruences of policy orientations among disparate local groups versus unified national efforts, state and local chapters with affiliations to larger national organizations may benefit considerably due to the increased visibility and continuity that the national groups provide to them (Andrews & Edwards, 2005; McCarthy & Scott, 2005). If leveraged effectively, the mutual benefits of this relationship has the potential to develop more consistent policy orientations within these organizations, but it remains less clear if these orientations can be integrated into the broader local movements or if the orientations are a good fit with the local policy context and issues.

A good example of very different approaches by environmental groups on similar issues can be seen through the comparison of two cases of local responses to offshore wind development. Offshore wind development was considered in both Massachusetts and Delaware. These included the Cape Wind proposal offshore of Massachusetts and the Bluewater Wind proposals offshore of Delaware. In both states, prevalent environmental groups and citizens mobilized leading to strong opposition in Massachusetts and strong support in Delaware. Because of the actions of these local environmental groups, these cases provide insights into the use and leveraging of social capital.

Cape Wind was met by strong opposition from the local advocacy group known as the Alliance to Protect Nantucket Sound. In this case, the group strongly opposed the offshore wind project with community support, at least in the early years. A major concern was that a large wind farm would degrade the ocean vista. Of
interest is that the opposition to the wind farm was well funded and had extensive ties to both local and national political elites with people such as Senator Ted Kennedy and CBS News anchor Walter Cronkite weighing in against the project (Williams & Witcomb, 2007). While the intentions of the Alliance to Protect Nantucket Sound were sincere, they were often based on inaccurate information about the project. For example, the group produced a map that exaggerated the wind farm’s footprint and proximity to the shoreline, wrongly made claims about the negative impact of the project on the patterns of sea life in the region, and described the project as an industrial project that misrepresented the actual conditions and nature of wind farms (Gemmel & Kirby, 2012).

Many of the lay public supporting the Alliance to protect Nantucket Sound were acting in a democratic fashion. However, much of the activity was more of a plutocracy (Williams & Witcomb, 2007). Nantucket Sound is one of the more glamorous and wealthy areas in the United States, and many of the Nation’s richest and most politically-influential people who lived in the area supported the opposition. Their influence can be considered to have hijacked the democratic process. The most effective social capital and influence was applied by powerful insiders. It was exerted both locally in the Nantucket Sound along the coast of Massachusetts as well as in the Nation’s capital. Their opposition eventually was overcome leading to approval of the offshore wind project. However, it may have had a lasting negative impact on the national efforts to promote renewable energy sources and leaves us with a cautionary tale of how environmental groups can be misguided.

The Delaware example is a stark contrast. The project emerged unexpectedly in response to a request for proposals for new electric generation in Delaware (Piero, 2010). It was fully expected that the bid would include a leading proposal for clean
coal technology or natural gas to replace an aging coal fired power plant at the Indian River Generating Station. A proposal for natural gas and clean-coal electric generation was submitted as well as an unexpected proposal for offshore wind development.

The response in Delaware was very different than that in Massachusetts. The offshore wind proposal received strong support from Delaware citizens and environmental groups. Groups like the Citizens for Clean Power quickly mobilized in a way that effectively enabled grassroots citizens or political outsiders to significantly influence the policy debate (Piero, 2010). Many were motivated by previous bad experiences with the pollution from an aging coal-burning power plant and a recent announcement of a cancer cluster in the area. However, despite the overwhelming public support for offshore wind development in Delaware and early approval of a long-term power purchase agreement, financial constraints have derailed the project. It now seems unlikely to be built.

These two cases demonstrate the importance of context on issues for environmental groups and actions. Both cases demonstrate how environmental groups can be very influential, whether they are supporting or opposing an issue. They also demonstrate how social capital is effectively used to influence public policy decisions differently in different contexts. Unfortunately, in the case of Nantucket “Sound, it also shows how misinformation can be effectively used as well as how money and influence can manipulate public policy discourse. Most importantly, they show that while the resources that are available to advocacy organizations are important, the political opportunity of the local context is also a major determinant of policy outcomes.
Environmental groups exhibit much broader characteristics and functions than most people realize. They work on many geographic scales, vary in the extent of expertise and professionalism, have a wide range of identities, and conduct many different actions. Understanding the actual impact of environmental groups is difficult, but a strong argument can be made that they have a significant impact on environmental issues on all geographic scales. Of interest for this study is the extent to which the collective efforts of environmental groups are specifically targeted at the state level, where focus is being placed on the development of many environmental policies.

The environmental movement and its organizations often emerged from local issues, formed organizations that grew, matured, and shifted their focus to national issues. Less understood has been the increasingly important role for local groups due to devolution of policy. Furthermore, we now face increasingly complex issues like climate change that are global issues often intertwined with national policy and local responses. These issues require implementing actions on the local scale most often at the level of state policy making in the United States. Addressing these emerging environmental problems will require an extensive integration of both policy making and action on different geographic and community scales. This must begin with a deeper understanding of the structures of state level environmental movements arising from a rigorous and deliberate study of their structures and roles in policy making.
Chapter 3
RESEARCH METHODS

Introduction

This research seeks to understand whether or not state-level environmental movements differ significantly among small U.S. States. It also analyzes the organizations, inclusively, for the five small states to provide a collective understanding of small state environmental movements. The research seeks to identify how well our mainstream social movement theories and models explain any similarities and differences in environmental movements, collective action, mobilization, and advocacy in the states included in this study as well as, cumulatively, among the small states. Are their common patterns associated with existing theory? Or, do we need new theoretical models to explain the phenomena? The research also aims to better understand the role these movements play in the policy-making process in their states. Finally, the study considers the consequences of these movement structures on state environmental policy.

As previously discussed, this research seeks to address several questions designed to evaluate key factors associated with Resource Mobilization Theory and Political Opportunity Structure Theory in order to determine the extent to which they explain small state movements in differing contexts. The first two research questions relate to the structure of state environmental movements. The third question relates to how state-level social and political contexts explain the movement structures, and the
final question is related to identifying the role of these movements in the policy-making process.

1. What are the structures of environmental movements in small U.S. States?
   a. Do these structures vary across the environmental movements seeking to influence state environmental policy-making in small U.S. States? If so:
   b. Do organizations that are comprised of state environmental communities in small Northeastern states vary in size, tactics used, and strategies used to influence environmental policy-making?

2. What factors account for the differences in size, tactics and goals among small Northeastern states in terms of their environmental communities?

3. How does state context explain the structure and variation of the environmental movements in the five small U.S. States?

4. What is the influence or role of the environmental movement’s structure on policy development within each state?

**Conceptual Framework**

This research utilizes a multimethod design which includes collecting and mixing both quantitative and qualitative data as part of the research process in order to understand a research problem more completely (Creswell & Maitta, 2002). This research collectively evaluates the small state environmental movements and seeks to comparatively analyze five state-specific environmental movements. This comparative approach “contributes to our knowledge of individual, group, organizational, social, political, and related phenomena” (Yin, 2009, p.5).

The rationale for this approach is that due to the nature of the social phenomena under study, the importance of the socio-political context, and the dynamic nature of advocacy movements, a strictly quantitative approach would be
inadequate. It would fail to convey and consider many of the important social
dynamics of the key dimensions influencing state environmental communities. When
used together, quantitative and qualitative methods complement each other allowing
for a more complete analysis (Green & Caracelli, 1997).

This research builds upon the extensive social movement and interest group
literature to examine the extent to which the often competing Resource Mobilization
Theory and Political Opportunity Structure Theory can be used to explain the
involvement and potential influence of environmental advocacy organizations on
policy in small U.S. States. Each of these theories is considered in the context of
small states in the Northeast Region of the U.S. to determine which best explains the
process of how environmental movements operate to influence state policy. The study
compares the fit of these competing social movement theories with the structure of the
environmental community or movement in a small state context.

It is important to recognize that the social movement theories of Resource
Mobilization and Political Opportunity Structure do not operate independently.
The environmental movement dimensions from each theory are not mutually
exclusive. As shown in Figure 2, they often overlap and work together. However,
different organization dimensions and contexts for movement activities determine the
extent to which each theory best explains the movement within its social and political
contexts. These differences are used to explain the variations of environmental
movements in the five small states to the extent possible. Alternative models or
theories are also considered to explain anomalies not well explained by the major
social movement theories.
Figure 2    Relationship of Social Movement Theories.

In addition to the overlap, the theoretical framework of resource mobilization holds that organizations must first acquire and control adequate resources before they can successfully mobilize collectively for policy advocacy (Jenkins, 1983; Zald & McCarthy, 1987; Mosley, 2010). Once resources are secured, political opportunity structure is used to explain how movement organizations utilize these resources. This focuses on resources that are available or secured and largely determines the organizational structure of the movement (Van Stekelenburg & Klandermans, 2009; Tilly, 1978). Based on this theoretical framework, it is necessary to first identify the
organizational categories of environmental groups in a movement based on resource mobilization dimensions such as theoretical dimensions.

Once these groupings based on organizational dimensions are established, the theoretical framework of political opportunity structure can be utilized to evaluate what these groups do with the resources they secure. As previously discussed, Political Opportunity Structure Theory argues that social movements are affected by political opportunities. It has been defined as the “dimensions of the political environment that provide incentives for people to undertake collective action by affecting their expectations of success or failure” (Tarrow, 1994, p. 85). The theory highlights the importance of context in policy development and advocacy actions. Political Opportunity Structure recognizes that activists do not choose their goals, timing, and strategies in a vacuum; they do it after considering conditions and the opportunities presented within the larger political environment (Meyers, 2004; Jenkins, 1983).

Several broad organizational categories for movement groups based on theoretical dimensions can be compared to more specific variables associated with the two dominant social movement theories. In this study organizations are grouped for analysis based on several categories including the state in which they work, their nonprofit status, whether their budget is greater or less than $50,000, their formal affiliation with a national environmental organization, and their professionalism. These organizational categories are used as dependent variables to evaluate small state environmental movements within these frameworks. These group characteristics allow a comparative analysis of how the broader groups in the environmental movement compare based on state geography, fiscal resources, staff professionalism, and linkage or affiliation to a national organization. These organizational categories
are then compared against the variables associated with the dimensions influencing state environmental movements.

In addition to the organizational categories that are used as dependent variables for comparative analysis and logistical regression, it is necessary to consider the various group and organization dimensions that influence collective action movement groups. These dimensions help guide the identification and operationalization of independent variables for the analysis.

Major Dimensions Influencing State Environmental Movements

In order to understand movements, there appear to be basic thematic dimensions that influence environmental group and movement activities in states. These include dimensions that determine: 1) the types, the quantity, and the density of environmental groups in the states; 2) the tactics these groups use in pursuing their goals and objectives; and 3) the role these groups play and the influence they have in the state policy system. These are all influenced by the resources these environmental communities can acquire and control.

These environmental communities are also affected by a host of economic, sociopolitical, cultural, legal, and geographic variables that vary from state-to-state, and determine much of the political opportunity structure in which they must operate. As a result, the environmental community and any collective environmental movements are likely unique in each state.

Based on the previously reviewed literature on Resource Mobilization Theory, political opportunity theory, and advocacy organizations, six key dimensions were identified that appear to be important in all states and are helpful for evaluating their environmental movements. They represent an understanding of environmental
movements both as an aggregation of environmental organizations and as networked collaborators of movements based on the synthesis of the literature on environmental groups and social movements. These dimensions are interrelated. They are not mutually exclusive, but will have varying influences on state environmental movements within the different state contexts. These dimensions are briefly described in the following table.

Table 1  Dimensions influencing the makeup of state environmental movements, the tactics they use, and the potential influence of state environmental policy

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
<th>Theoretical Basis</th>
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<tbody>
<tr>
<td><strong>Thematic Dimension 1:</strong> Resource Availability</td>
<td>As resources increase, the ability and power to influence decisions also increase. This includes: the total number and density of organizations; the types of organizations; the organizational revenues and their distribution; staff resources including professional staff and volunteers; membership sizes; and the level of professionalism.</td>
<td>Resource Mobilization</td>
</tr>
<tr>
<td><strong>Thematic Dimension 2:</strong> Level of Inter-organizational Collaboration</td>
<td>The frequency and extent to which environmental organizations work together allow for significant cumulative effects that increase influence. This includes working on common agendas and campaigns. It also includes the sharing of human resources such as staff, memberships, and volunteers.</td>
<td>Resource Mobilization</td>
</tr>
<tr>
<td>Dimension</td>
<td>Description</td>
<td>Theoretical Basis</td>
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<td><strong>Thematic Dimension 3: State Political Culture</strong></td>
<td>Political culture and ideology affect: the willingness to consider environmental policies; how they are ranked with competing authority; the most acceptable tactics for advocating for these policies; the type and form of lobbying laws; and the level of transparency. The receptiveness and level of tolerance of public officials to environmental claims significantly affects environmental movements by determining; the extent of access to policy-makers; the extent of resource support for many groups; and, at times, even state support to establish new environmental groups.</td>
<td>Political Opportunity</td>
</tr>
<tr>
<td><strong>Thematic Dimension 4: Level of Integration or Fragmentation of the Policy Process.</strong></td>
<td>The strength of political parties, the level of party competition, the strength of the governor, the extent and reach of cabinet appointees of state agencies, the number and authority of independent boards and commissions, and the extent of the home rule authority of local governments influence the options and tactics that are available to influence environmental policy. Fragmented state policy systems provide a broader range of options and tactics, while well integrated systems constrain the options.</td>
<td>Political Opportunity</td>
</tr>
<tr>
<td><strong>Thematic Dimension 5: Lobbying, FOIA, and Transparency Laws</strong></td>
<td>Lobbying laws, campaign finance, conflict of interest, and the extent of government transparency directly affect the influence and tactics of environmental movements. The greater government disclosure and openness are the more options there are available to environmental communities. Less open disclosure leads to increased marginalization of environmental groups. The less stringent the requirements are, the more states there are that may engage in “pay-to-play” scenarios that benefit business interests disproportionally more than environmental groups.</td>
<td>Political Opportunity</td>
</tr>
<tr>
<td><strong>Thematic Dimension 6: Social Capital</strong></td>
<td>Social networks have the power to influence public policy. They affect information flow and are a critical factor for bringing diverse individuals and groups together for collective action. They are what binds people together to achieve mutual aid or reciprocity. Social capital improves government performance by making it easier for the public to make policy demands. It varies geographically and is a key measure in helping to predict the willingness of communities to mobilize.</td>
<td>Political Opportunity</td>
</tr>
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</table>
These general dimensions were used to identify specific quantitative variables associated with both Resource Mobilization Theory and Political Opportunity Structure Theory. The identified variables that were operationalized for data collection are summarized for each of the theories in Table 2.

Additional variables were derived using exploratory factor analysis of the tactics utilized and the issues addressed. This analysis is discussed later in this chapter. Finally, descriptive variables of the context for state advocacy were also utilized and are described in Chapter 4.

The methods and techniques utilized in this research were selected based on the data that was collected and the secondary data that was available. Specific methods including: the selection of small states for inclusion in the study; the identification of environmental organizations that are the primary unit of analysis; data and information collection; and analytical results are described in detail in the following section.
<table>
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<th>Political Opportunity Structure</th>
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Specific Research Methods and Techniques for Analysis of the Structure of Environmental Movements in Small States

The structure of small state environmental movements is analyzed on several scales. It begins with the analysis of the collective movement groups from all five studied states as one movement and is followed by the consideration of the collective small state environmental movement structure based on a comparative analysis of several organizational categories; and, it ends with, the analysis of the geographic sets of environmental organizations that make up each state-specific environmental movement.

In addition, several models were utilized to further evaluate the explanatory power of Resource Mobilization Theory and the Political Opportunity Structure Theory for state environmental movements. Two types of statistical regression models were used including linear probability models and linear multiple regression models. Factor analysis was also used as part of the data reduction techniques to develop the independent variables from the large set of advocacy tactics based on the underlying constructs of the data.

A simplified diagram of the process for the analysis of the structure of state environmental movements is depicted in Figure 3. Detailed descriptions of the data collection, the data reduction, the analysis, and the modeling are also discussed below.

In order to provide an overall view of movements and the organizations that comprise them in small states, it was necessary to analyze data from among the collective of all environmental groups surveyed in all five states as one overall movement in small states. Descriptive statistics were prepared for the organizational characteristics of all groups comprising the movement; resource availability, strategies used, issues addressed, and other variables are presented. This allows for a
comprehensive look at small state environmental movement characteristics and structure. It also provides a broader comparison of similarities and differences to be considered after more detailed comparative analysis of how organizational categories of group and groups of movement organizations based on state geography are completed. The analysis of small state environmental movements on different scales addresses how the movement varies both as an inclusive sample of organizations that comprise small state movements and how it varies by state geography.

Group comparisons among this collective set of small state movements based on the organizational data and theoretical concepts help to better define and evaluate structures within the collective of small state movements. Several of these groupings based on organizational categories within the movement are considered. These include; a grouping based on nonprofit status; a grouping based on a budget of greater or less than $50,000; a grouping based on formal affiliation with a national environmental organization; and, a grouping based on organizations that are all-volunteer groups or groups with a combination of paid staff and volunteers.
Figure 3  Process for the Analysis of the Structure of State Environmental Movements
Establishment as an IRS tax-exempt nonprofit organization may be associated with professionalization. Increased professionalization may impact on the type and extent of policy advocacy. Formal groups may build resource capacity for sustained policy advocacy efforts, but may also be less inclined to use confrontational tactics. Informal organizations may include emerging groups that are more inclined to utilize a contentious repertoire of policy-influencing tactics, but may not have the resource capacity necessary to undertake and sustain longer term policy advocacy campaigns often associated with the state policy-making process.

Budget or fiscal resources are a key characteristic associated with Resource Mobilization Theory (Jenkins, 1983; Zald & McCarthy, 1987; Mosley, 2010). It is assumed that a minimum annual budget needed by nonprofits to sustain advocacy policy efforts, to hire a staff person, and to carry out other professional operations by nonprofits likely fall in the $50,000 range. This amount of annual funds is also the threshold level for nonprofits to be required to file the IRS 990 Tax Form (Internal Revenue Service, 2016).

Formal association with national organizations may impact the organizations and the activities they undertake at the state level. National affiliation may influence both policy issue selection and the framing of issues for advocacy by state and local movement organizations. Affiliation with a national organization may also provide the local organizations with additional resources, name recognition, legitimacy and credibility in local policy discourses. These benefits from national affiliation may help increase an affiliated local organization’s influence on local policy decisions. National affiliation may also influence the preference of strategies and tactics utilized
by these local organizations that may receive guidance or examples of practices from their national affiliate.

All-volunteer organizations are compared to organizations that utilize a combination of paid staff and volunteers. This comparison provides further evaluation of the level of professionalism, a characteristic found to be consequential for movement organizations (Oliver, 1983; Staggenbord, 1988). It has been argued that a reliance on paid staff can displace volunteers and lead to organizations focusing on self-maintenance over social and political changes. Alternatively, under some conditions, paid staff can be used to create programs and opportunities for volunteers that allow for much greater mobilization than occurs with all-volunteer organizations (Edwards & McCarthy, 2004). The comparison of categorical groups that operate with or without paid staff allows an evaluation of the impact of this organizational factor on movement structure.

It should be noted that only two of the organizations reported did not use volunteers, and these organizations were later found to be quasi for-profit organizations that were found on local lists of environmental organizations used during the development of the survey sample. Effectively, none of the nonprofit or informal groups participating in this survey utilized only paid staff in their work. This nearly-ubiquitous use of volunteers may be a response to nonprofit lobbying rules, in which grassroots volunteer work done by citizen volunteers can allow for more flexibility in lobbying if organizations choose to use the expenditure test rather than the substantial test by taking the IRS 501(H) Election. This is because under the expenditure tests the IRS only reviews how much money was spent on lobbying. Unpaid volunteer work is not counted in determining the amount of lobbying done by the organization. The IRS 501(H) Election is far less ambiguous than the
“substantial” part test under which the IRS looks at all organizational activities. According to the IRS, "no organization may qualify for section 501(c)(3) status if a substantial part of its activities is attempting to influence legislation (i.e. lobbying). A 501(c)(3) organization may engage in some lobbying, but too much lobbying activity risks loss of tax-exempt status" (IRS, 2016b, para 1). If an organization elects to use a 501(H) Election for tax purposes, the use of volunteers increases the base size of the organization’s advocacy work without being counted by the IRS. Section 501(c)(h) states, “Under the expenditure test, the extent of an organization’s lobbying activity will not jeopardize its tax-exempt status, provided its expenditures, related to such activity, do not normally exceed an amount specified in section 4911.” Section 4911 provides only fiscal tests typically set as a percent of organizational expenditures and limited to $1 million or less. Unpaid volunteer lobbying work would not be included since no fiscal resources are expended by the organization. Professionalization with paid staff may increase some types of advocacy, but reduce other types such as confrontational advocacy. It may also increase the potential for the organization to experience higher levels of resource dependency on funders that may influence their policy advocacy.

Finally, the groupings of movement organizations based on geography or based on the states in which they operate are compared. This allows the detailed comparative analysis of the impact of geographic context on small state movements. It also allows the comparison of state localism in the work of the collection of organizations that defines the environmental movement working in each of the five small states. The state-by-state comparisons of the differences in state movements based on the theoretical variables associated with both Resource Mobilization Theory
and Political Opportunity Structure Theory provides important insights into state environmental policy advocacy in small states.

Each of these structural groupings is compared to identify any similarities and differences between them in the variables that characterize organizations.

Finally, modeling efforts are conducted to determine the factors that contribute most to the various structures of the environmental movement. This includes logistical regressions for each of the structural groupings used in the comparative analysis representing the dependent variable along with a set of factors developed from the set of tactics used and issues addressed as independent variables.

The qualitative and quantitative methods and variables used are described in the following sections.

Qualitative Data and Analysis

Quantitative analyses are used where data supports it to provide statistical support for research findings and conclusions. In this case, we relied on numerical data. Variable measurements were isolated and used to statistically test propositions of how well the mainstream social movement theories explain the structure of small state environmental movements. Since much of the data on organizational resources from sources included: the internet based structured survey responses; the Internal Revenue Service Master Business File; the National Center for Charitable Statistics Core Files; social capital index data; and political ideology index data which are numeric; it lent itself to quantitative analysis. Some of the contextual information about policy advocacy in states also lent itself to quantitative analysis.

However, much of the contextual information related to state level socio-political dimensions and organizational leadership is qualitative and descriptive.
Qualitative data are largely used to more richly describe the contexts in which environmental communities operate and to supplement the quantitative analysis. The qualitative analysis supplements the more generalizable quantitative data adding additional insights about the policy advocacy context in which the state environmental movements operate. Much of this contextual qualitative analysis is presented in Chapter 4 prior to the discussion of the quantitative analysis in Chapter 5. Priority was given to the quantitative methods because they represent the major aspects of the research.

A variety of data collection techniques were used including a structured internet based survey, a document analysis, and a content analysis of existing textual documents.

The primary unit of analysis for this study was environmental organizations. Yet, it is important to understand that this work considered the nested hierarchy found in environmental movements. This was necessary due to the relationship between individuals, organizations, communities of organizations, and a state environmental movement’s structure and role. Each of these categories of policy advocacy falls under the umbrella of environmental movements. As depicted in Figure 4, these various organizational scales are related and often build upon each other in a loosely defined hierarchal structure.
Figure 4  Relationship between individuals, organizations, communities of organizations, and state level dimensions comprising an environmental movement

Selection of States

This study focuses on a subset of the ten small states that are included in the lowest U.S. State total population quintile. Five states located in the Northeast Region of the United States were selected for the study. As previously discussed, these states are of interest due to the unique challenges that may be presented by a smaller population from which to solicit resources and members for environmental movement.
organizations and the socio-political challenges unique to the more intimate nature of policy discourse in a small state. The ten U.S. States in the lowest quintile for total population are summarized in Figure 5.

Small less populated states that are included in the lowest quintile for total population are located in three distinct regions of the United States. The regions include the Northeast Region, the North Central Region, and Alaska. Each of these regions has unique socio-political contexts that were deemed to be beyond the scope of this research to address. As a result, a concentration of states in one of the regions was selected. The selected region was the Northeastern United States. Consideration will be given to additional studies in the other regions in the future building upon this initial research on state environmental movements.

Figure 5  U.S. States in Lowest Quintile for Total Population
The Northeast Region is geographically defined in a variety of ways (U.S. Census Bureau, 2004; U.S. Library of Congress, N.D.; Hobbs, 2009; Hrebnar, 1993). Hobbs (2009) and Hrebnar (1993) consider the cultural and political contexts of the region, leading to the inclusion of the New England and Mid-Atlantic States in the Northeast. Their regional definition is being used because political ideology and culture have a significant effect on policy advocacy approaches. For the purpose of this study, we define the Northeast as including the New England States of Maine, New Hampshire, Vermont, Massachusetts, Connecticut, and Rhode Island, plus the Mid-Atlantic states of New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, and West Virginia based on their previous identifications of cultural and political uniqueness which differs from the remainder of the U.S. (Hrebnar, 1993; Hobbs, 2009).

While the Northeast Region lacks a clear cultural identity making it difficult to define, it is the most densely populated, economically developed, and culturally diverse regions in the U.S. (Hobbs, 2009; Hrebnar, 1993). The Northeast states share many regional similarities in political culture and traditions that help control for some of the differences that may be found in states in other regions that are seen as having distinctive politics and ideologies (Hrebnar, 1993).

More recently, the Northeast has shifted politically from an area politically dominated by Republican politics to an area dominated by the Democratic Party. (Shelly, 1996). In fact, the Northeast Region now includes eight of the top ten most Democratic states, with all states ranked as strongly Democratic (Jones, 2009).

The primary factor used for the selection of states for inclusion was total state population. Additional criteria considered included: 1) regional similarity in political culture and traditions, 2) recognition of the common factor of being located in the
most densely-populated and economically-developed region of the U.S., 3) recognition that the Northeast represents the most culturally diverse region of the U.S. as compared to other regions, and 4) logistical accessibility to the states to conduct research.

Based on the 2010 census population of the Northeast states, the five smallest states of Delaware, Maine, New Hampshire, Rhode Island, and Vermont were selected. The geographic location, population and U.S. size ranking are depicted in Figure 6. These represent an absolute selection of the smallest states in the Northeast Region.

<table>
<thead>
<tr>
<th>State</th>
<th>Population</th>
<th>U.S. State Rank for Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vermont</td>
<td>626,011</td>
<td>49</td>
</tr>
<tr>
<td>Delaware</td>
<td>917,092</td>
<td>45</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>1,050,292</td>
<td>43</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>1,320,718</td>
<td>42</td>
</tr>
<tr>
<td>Maine</td>
<td>1,329,192</td>
<td>41</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau. July 2012

Figure 6 Selected States, Total Populations, and U.S. Rank
Data and Information

The data sources identified and collected for examining the research questions include:

1. A representative list of environmental groups in the five small states was selected for this study and developed from multiple sources (NCCS Master Business File, Encyclopedia of Associations, various Internet lists, contacts in environmental groups, etc.). The environmental groups were a primary unit of analysis.

2. Survey data of environmental groups in the states were selected for this study including data for variables associated with the major social movement theories to be evaluated (Internet-based survey data). This was the primary source of data for the quantitative data used to address research questions 1, 2, and 4 (see page 14).

3. Secondary data with elements useful for the development of selected resource mobilization characteristics or variables and political opportunity variables (NCCS data files, environmental quality index, social capital index datasets, government and citizen ideology indexes, etc.) were the primary source of data for the quantitative data used to address some aspects of research question 2 as well as question number 3 (see page 14).

4. Environmental lobbying clients associated with environmental issues in each of the selected states were obtained from each state’s lobbying registration agency or were obtained in a standard format from the web site of the National Institute on Money in State Politics (http://www.followthemoney.org/). This data was primarily used to answer question 1.b. (see page 14).

5. Data and descriptive information about state government size, budgets, organizational structure, legislative processes, lobbying rules and other dimensions that define the political structure and culture were included as well as information on state context for policy advocacy and were utilized to address questions number 3 and number 4 (see page 14).

Data collection occurred in phases. The first phase included the compilation of representative lists of environmental organizations in each state. This was followed by the implementation of the detailed online survey. Simultaneously, qualitative data were collected on state context. Data were also obtained to provide quantitative
indices of state government ideology, citizen ideology, and social capital from available secondary datasets.

**Identification of the Sample of Environmental Groups**

A vital step in this research process was the compilation of a representative list of environmental organizations in each of the selected states. Identifying the organizations presented a significant challenge as no comprehensive state directories of environmental groups existed. Several national directories, web searches, available rosters of environmental organizations, state lobbying registration lists, and consultations with environmental organization representatives in each state were utilized to compile this list.

The development of these lists of environmental organizations utilized a peak list strategy that was shown to be the optimal strategy to balance the problems of sample bias and costs (Andrews, Edwards, Al-Turk, & Hunter, 2016). By targeting the largest lists and utilizing both those generated nationally and locally, the strategy resulted in a list that approximates a more exhaustive enumeration of the entire population without requiring the same investment of resources. A complete list was previously developed for Delaware (Carter, 2011). This list was updated, and several large lists were obtained and used to develop lists for the states of Maine, New Hampshire, Rhode Island, and Vermont. The base list for each state was created from a query of the 2013 Master Business File (MBF) of tax-exempt organizations in the U.S. from the National Center for Charitable Statistics. The MBF was queried for the existing environmental nonprofits in the five Northeastern states and for the twenty-six (26) national taxonomy of exempt entities codes previously identified for U.S. environmental organizations (Straughn & Pollack, 2008).
This initial list of organizations was then supplemented with additional organizations identified in the Encyclopedia of Associations (EofA). This EofA was queried using the keyword search function for 29 keywords likely to be included in any descriptions of environmental organizations. Keywords used in the query included “air quality”, “agriculture”, “bird”, “climate change”, “conservation”, “contamination”, “deer”, “education”, “energy”, “environment”, “fish”, “forestry”, “global warming”, “law”, “marine biology”, “natural resources”, “nuclear weapons”, “paper”, “parks”, “politics”, “pollution”, “rangeland”, “toxic chemical”, “tree”, “water”, “wetlands”, “wildlife”, and “wood”.

A list of environmental organizations was also obtained from the Grey House Publishing’s Environmental Resource Handbook (2014). This publication includes a listing of environmental associations and organizations for each U.S. State. This resource was developed for environmental professionals seeking to disseminate information, host seminars, and promote various environmental studies (Greyhouse, 2014). It includes a total of 1,445 listings defined nationally and by each state.

A review of the list of lobbying clients found on these preliminary lists and the lobby registration in each state was also conducted. While it was useful for identifying an initial list of organizations likely to be most active on state policy advocacy, the differences in state definitions of lobbying gave us reason to believe that the numbers in some states are much higher or lower simply due to definitional differences in what is considered lobbying in different states.

All lists of environmental organizations were merged and duplicates were removed. As part of this merging of lists, source data documentation was retained as well as information on the frequency of occurrences on various lists for separate
analysis of the development of representative samples of organizations at the state and local level.

The major criteria for constructing the sampling frame or population of state environmental organizations was: 1) location: the group has a mailing address and/or documentation of activity in the specific state; 2) organizational structure, which includes subunits or chapters of organizations; 3) values: the actions are for public benefits in contrast to private interest claims such as those conducted by for-profit entities; 4) non-state actors or non-government organizations; or 5) have language in their mission or a specific project task that addresses a natural resource conservation or environmental protection objective. Applying these criteria significantly refined the initial lists of organizations for each state.

A web search was completed to identify any state environmental organizations on the Internet. A search was completed for each organization individually on the Internet to collect information about the organization’s mission and additional contact information, particularly email, phone numbers, and mailing addresses. Keywords from the organization’s name were used in Google searches, GuideStar searches, and Facebook searches.

As part of this process, many organizations were found to not meet the requirements of state environmental organizations. Of particular interest was the data collected as part of the IRS tax records from 990 processes since this data were readily available and extensively utilized in studies of organizations. For all states, a number of organizations with national taxonomy of exempt entities codes (NTEE) classification as an environmental organization were found not to be an environmental group. Many of these organizations had been misclassified as environmental organizations and assigned an environmental NTEE code. In most of these cases, the
organization had a word in the name that could be associated with environmental resources, such as “the woods” or “green tree”. A number of these were names of religious retreats, schools, and other types of organizations.

Additional reasons for the excluding of groups identified in the Master Business File from the survey sample or organizations included: documenting that the organization no longer existed; confirming that the organization was actually a quasi-government organization; or finding that the organization was incorporated in the state, but did not conduct any environmental work in that state. Incorporation in a state in which the organization did no work was particularly prevalent in Delaware, likely due to Delaware’s permissive incorporation laws. Table 3 provides a summary of the number of organizations identified from the Master Business File NTEE Codes, the number of organizations that were inaccurately coded, and the percent that met the sampling criteria for the study.

Table 3
Summary of Environmental Organizations Identified from IRS 990 Master Business File NTEE Codes and Percent Not Meeting Sample Criteria for Study

<table>
<thead>
<tr>
<th>State</th>
<th>Organizations Identified Based on MBF NTEE Code</th>
<th>Percent w/Inaccurate NTEE Code</th>
<th>Percent Meeting Sample Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>60</td>
<td>20.0 % (n=12)</td>
<td>50.0 % (n=30)</td>
</tr>
<tr>
<td>Maine</td>
<td>333</td>
<td>11.1 % (n=37)</td>
<td>66.1 % (n=220)</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>202</td>
<td>12.4 % (n=25)</td>
<td>69.8 % (n=141)</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>110</td>
<td>14.5 % (n=16)</td>
<td>71.8 % (n=79)</td>
</tr>
<tr>
<td>Vermont</td>
<td>205</td>
<td>11.2 % (n=23)</td>
<td>73.2 % (n=55)</td>
</tr>
</tbody>
</table>
The same screening analysis that was conducted to ensure the organizations identified through the Master Business File were representative was completed for all other lists of environmental groups. In all five states included in the study, using this peak list strategy to bolster the Master Business File data proved to be productive, significantly enlarging the sample sizes with percent increases ranging from 11.4% to 123.3%. These larger sample sizes provided a more representative sample of each state’s population of environmental organizations. Table 4 provides a summary of the organizations identified from the various lists and the number that met the screening requirements for the survey as well as the percent increase over the sample of organizations obtained from the Master Business File alone. A list of all organizations included in the survey is included in Appendix A.

Table 4  Organizations Identified from Combined Lists Utilized as Part of Peak List Strategy for Developing Representative Sample

<table>
<thead>
<tr>
<th>State</th>
<th>Number of Organizations Identified on All Lists Utilized</th>
<th>Percent of Organizations Meeting Criteria</th>
<th>Percent Increase from using Peak List Strategy over MBF List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>130</td>
<td>51.5 % (n=67)</td>
<td>123.3% (n=37)</td>
</tr>
<tr>
<td>Maine</td>
<td>405</td>
<td>60.5 % (n=245)</td>
<td>11.4% (n=25)</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>387</td>
<td>45.5 % (n=176)</td>
<td>24.8 % (n=35)</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>214</td>
<td>67.2 % (n=144)</td>
<td>82.3% (n=65)</td>
</tr>
<tr>
<td>Vermont</td>
<td>380</td>
<td>63.7 % (n=242)</td>
<td>61.3% (n=92)</td>
</tr>
</tbody>
</table>
Internet Survey Design

A fixed form survey was distributed to all environmental organizations identified in each state included in this study. This fixed form survey was developed based on the concepts and themes identified in the literature. In particular, a base set of questions on nonprofit organizations and advocacy were modified from a survey conducted as part of the Strengthening Nonprofit Advocacy Project and were tailored to environmental organizations (Bass, Arons, Guinane, & Carter, 2007). Additional questions were then developed for environmental organizations and policy. The questions and data collection formats were designed to collect data in the format needed for the proposed quantitative analysis methods. Although collection of data for quantitative models was the priority of the survey questions, additional background information as well as other context descriptor data for use in qualitative analysis was also included.

The survey was administered as an Internet-based survey using Qualtrics survey software. The Qualtrics survey tool is a full-featured, web-based tool for creating and conducting online surveys. The software offers an array of question types, a user-friendly survey development interface, fielding/survey promotion capabilities and a reporting engine. It includes a panel management features that can send individual links for tracking responses to allow better control of sample responses. Qualtrics software includes basic reporting capabilities for screening and analyzing data and a simple export function for SPSS files to allow easy conversion for statistical analysis in a more robust statistical software program.

The survey included 32 questions, including multiple choice questions, direct entry questions for open ended responses, and 8 matrix questions to collect
information on both the tactics utilized by organizations as well as the frequency of their use. The survey took respondents an average of 27.8 minutes to complete.

In addition to the online responses, some follow-up phone calls were made to survey recipients to clarify unclear answers and in several cases to discuss possible explanations for analytical results.

The survey was used to collect information about environmental organizations and the activities and actions they take to influence environmental policy. The survey included questions on general background information, environmental issues addressed, interaction with government agencies, collaborations with other groups, strategies used, and organizational capacity.

The survey instrument is included in Appendix A.

Secondary Data Acquisition

Secondary data analysis included: analysis of descriptive information about resources of environmental organizations, data related to social capital in states, data related to political ideology in the states, information on state environmental quality, and data related to voter political party registration and/or political party strength and competition in states.

A qualitative description of the social and political contexts for environmental policy advocacy in each of the five states included descriptions of each state’s geography and demographics, economic condition, government structure, legislative context, context for democratic participation, and ideologies. These data were qualitatively summarized and described in Chapter 4. Several of these state context variables with index values or data formats allowing statistical analysis were further explored as part of the quantitative analysis in Chapter 5.
Secondary data included the environmental quality index from the U.S. Environmental Protection Agency, the National Center for Charitable Statistics (NCCS) Master Business File, NCCS Core Files, the revised 1960-2013 citizen ideology series that are the updated measures of citizen and government ideology developed by William Berry, Evan Ringquist, Richard Fording, and Russell Hansen (1998), and the U.S. County-Level Social Capital Data, 1990-2005 available from the Northeast Regional Center for Rural Development (Rupansingha & Goetz, 2008).

The environmental quality data utilized is the U.S. Environmental Protection Agency’s (USEPA) Environmental Quality Index (EQI). This index was developed to calculate overall environmental quality in each of the 3,141 counties in the United States to provide a comprehensive set of data for researchers who study the environment (USEPA, September 2014). The EQI represents five environmental domains including air, water, land, built, and sociodemographic. This data are provided as an overall environmental quality index variable as well as a separate index value for each of the five domains. A comparison of the mean values of the county EQI in each state was utilized when comparing state environmental quality.

The Internal Revenue Service (IRS) Master Business File (MBF) for 2013 and Core Financial Files (Core) for 2011-2013 were obtained from the National Center for Charitable Trusts. The IRS MBF data files contain descriptive information for all active organizations that have registered for tax-exempt status with the IRS including names, addresses, NTEE Codes, and basic financial information. Core Files included about 60 financial variables from the Form 990s, Form 990-EZs or Form 990-PFs for all organizations that have filed with the IRS as required (NCCS, 2015). The Core Files provided a comprehensive database of organizations as well as information about revenues, assets, expenditures, staffing, mission, lobbying expenditures (subset
reported to IRS), and other information. The MBF was utilized to develop the initial list of environmental organizations in each state. The Core Files were used to provide supplemental financial information about IRS tax-exempt organizations, to validate some of the survey responses, and in several cases to supplement the survey responses by using data from the Core File to fill in missing data on total expenses (annual budget) and the type of IRS organization.

The measures or indexes of state citizen and government ideologies provided an important measure of the political context for environmental policy in each state. There is a strong correspondence between popular preferences, ideological preferences of elected officials, and government policies in the American Democratic System (Berry, Ringquist, Fording, & Hanson, 1998). Indicators of state citizen ideology or the liberal-conservative continuum of the electorate and the average position of elected public officials were weighted according to their power to influence public policy political ideology. The measure or index selected for use in this study was developed with data that addresses nine assumptions that have been well supported with the data. They also address the problem of the different meaning party affiliation has from state-to-state. Understanding the extent of these orientations is a critical contextual factor for environmental policy in each state and helps define the playing field for a state’s environmental movements.

Social capital is an important indicator of society’s readiness for collective action. Robert Putnam (1995) defined social capital as the “connections among individuals—social networks and the norms of reciprocity and trustworthiness that arise from them” (p. 19). In developing the social capital index used in this study, Rapuasignha, Goetz, and Freshwater (2006) emphasized that cooperation and information sharing are facilitated when individuals interact within organizations. The
repeated interaction that occurs in organizations including environmental organizations promotes trust and reciprocity.

To develop an updated and refined social capital index, Rupasingha & Goetz (2008) built upon Putman’s (1995) initial social capital index and utilized secondary data from the Bureau of the Census, County Business Patterns, U.S.A. Counties, the National Center for Charitable Statistics, and the Regional Economic Information System to develop a consistent measure of levels of social capital at the U.S. County level. These data were then utilized as a variable to help understand the context of environmental policy action in the states included in the study.

Each of these secondary datasets provides useful information for describing state environmental movement activities and their contexts.

**Data Reduction to Identify Patterns of Tactics Used and Issues Addressed**

Exploratory Factor Analysis was used to examine integral constructs underlying the issues addressed and the tactics used by the organizations surveyed. These underlying constructs theoretically show the patterns of activities and issues of interest to movement organizations. This pattern analysis and development of the independent variables utilized in the models is summarized below.

**Underlying Constructs of Variables for Issues Addressed**

Exploratory Factor Analysis was used to examine integral constructs underlying the issues addressed by organizations. Specifically, Principle Component Analysis was employed. The analysis produced a rotated pattern matrix for a three factor solution with a simple structure, meaning that all variables loaded only on one factor. The three factors and variables loaded for each are summarized in Table 5.
Table 5  Diversity of Issues Addressed by Organizations

<table>
<thead>
<tr>
<th>Factor (% Var. Explained)*</th>
<th>Variables with Appreciable Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat Conservation Orientation (28.79%)</td>
<td>Land Protection and Conservation, Land Use and Development, Outdoor Recreation, and Wildlife Preservation and Protection</td>
</tr>
<tr>
<td>Health and Environmental Protection Orientation (21.72%)</td>
<td>Environmental Health, Pollution Abatement and Control, and Environmental Justice</td>
</tr>
</tbody>
</table>

*Cumulative Variation Explained = 58.91 %

The factors provide the underlying constructs of the broader issue groups addressed by the organizations. The factor scores for these underlying constructs provide continuous variables that can be used for further analysis. As such, these factor scores are used in multivariable statistical analysis models to determine if the broader issue orientation of environmental groups is a good predictor of the types and extent of advocacy these groups conduct as part of a state environmental movement and provide evidence of the movement, or at least subgroups of the movement structure based on policy interest and orientation. These models are discussed later in this chapter. A more detailed description of the exploratory factor analysis is included in Appendix C.

Underlying Constructs for Variables of Tactics Utilized

Exploratory Factor Analysis was used to examine the integral constructs underlying the advocacy tactics and strategies utilized. Specifically, Principle Component Analysis was employed. The analysis produced a rotated pattern matrix...
for a six factor solution with a simple structure meaning that all variables loaded only on one factor. The six factors and variables loaded for each factor are summarized in Table 6.

The factors scores from these constructs are utilized in the multivariate statistical models discussed later in this chapter. A more detailed description of the exploratory factor analysis is included in Appendix C.

Table 6  Summary of Results of Exploratory Factor Analysis for Tactics

<table>
<thead>
<tr>
<th>Factor (% Var. Explained)*</th>
<th>Variables with Appreciable Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislative Action (28.42%)</td>
<td>Legislative Bill Tracking, Participation in Legislative Budget Hearings, Analysis of Legislative Proposals, Having a Registered Lobbyist, Testifying at Legislative Hearings, and Talking with Elected Officials</td>
</tr>
<tr>
<td>Research &amp; Information Sharing (8.18%)</td>
<td>Government Databases and Websites, Use of Non-Government Publications and Websites, Citizen Data Collection, Use of News Source Information, and Conducting Education Programs and Workshops</td>
</tr>
<tr>
<td>Grassroots Advocacy (6.39%)</td>
<td>Electronic Advocacy Alerts, Social Networking Site Use, Organizing Events in Support or Opposition to Legislation, promoting participation in protests, encouraging the public to contact policymakers, and conducting online advocacy campaigns</td>
</tr>
<tr>
<td>Science and Digital Information Sharing (5.03 %)</td>
<td>Infographics, Digital Storytelling, Microblogging, and release of research reports to the media and policymakers</td>
</tr>
<tr>
<td>Political Action (3.99%)</td>
<td>Supporting or Opposing Candidates for Office, Conducting Get Out the Vote Activities, Conducting Voter Registration Drives, Hosting Candidate Forums, and Utilizing Lobbying Expenditure Disclosure Reports</td>
</tr>
<tr>
<td>Accountability Demand (3.05%)</td>
<td>Freedom of Information Requests, Filing Legal Actions, and Working with Civic Minded Former Government Officials</td>
</tr>
</tbody>
</table>

*Cumulative Variation Explained = 55.06%
Summary of Variables Utilized for Various Analysis Approaches

A series of summary tables of the variables used in the various analysis conducted are included below.

Variables for the comparative analysis of the embedded unit of organizations grouped by organizational categories includes four dependent variables that were compared using independent sample analysis with thirteen independent variables for resource mobilization and ten independent variables for political opportunity structure, for a total of 23 independent variables. The variables utilized are listed in Table 7.
Table 7  Variables for Comparative Analysis of Embedded Unit of Organizations Grouped by Organizational Categories

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Independent Variables</th>
<th>Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRS Nonprofit Status vs. Informal</td>
<td>Budget Size</td>
<td>RM</td>
</tr>
<tr>
<td>Annual Budget &gt; $50K vs. &lt; 50K</td>
<td>Revenue Sources</td>
<td></td>
</tr>
<tr>
<td>National Affiliation vs. No Affiliation</td>
<td>Membership Dues</td>
<td>RM</td>
</tr>
<tr>
<td>Paid Staff vs. All Volunteer Organization</td>
<td>Individual Donors</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Government: Any Level</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Fund-raising Events</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Foundation Funding</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Client Service</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Corporate Contributions</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Sale of Merchandise</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Legal Settlements</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Other Sources</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Number of Paid Staff</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Number of Volunteers</td>
<td>RM</td>
</tr>
<tr>
<td>Organizational Activity Variables</td>
<td>Type of Organization (IRS Code)</td>
<td>POS</td>
</tr>
<tr>
<td></td>
<td>Diversity of Issues Addressed</td>
<td>POS</td>
</tr>
<tr>
<td></td>
<td>Diversity of Tactics Used</td>
<td>POS</td>
</tr>
<tr>
<td></td>
<td>Resource Effort for Advocacy</td>
<td>POS</td>
</tr>
<tr>
<td></td>
<td>Resource Effort for Services</td>
<td>POS</td>
</tr>
<tr>
<td></td>
<td>Collaboration with Other Organizations</td>
<td>POS</td>
</tr>
<tr>
<td>Organization Perception Variables</td>
<td>More or Less Policy Influence</td>
<td>POS</td>
</tr>
<tr>
<td></td>
<td>Government Attitudes toward organization views</td>
<td>POS</td>
</tr>
<tr>
<td></td>
<td>Information Availability/Transparency</td>
<td>POS</td>
</tr>
<tr>
<td></td>
<td>Government More Active on Policy</td>
<td>POS</td>
</tr>
</tbody>
</table>

RM = Resource Mobilization Theory
POS = Political Opportunity Structure
Note: Each Dependent Variable is tested for all Independent Variables
The comparative analysis of the embedded unit or organizations grouped by state of operation or state movement groups utilized the state as the dependent variable. It also utilized 13 independent variables for resource mobilization and 22 independent variables for political opportunity structure, including 10 related to the state context for advocacy. In total, 35 independent variables are considered as part of the analysis. The variables utilized are listed in Table 8.

Table 8  Variables for Comparative Analysis of Embedded Unit of Organizations Grouped by State

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Independent Variables</th>
<th>Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Budget Size</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Revenue Sources</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Membership Dues</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Individual Donors</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Government: Any Level</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Fund-raising Events</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Foundation Funding</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Client Service</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Corporate Contributions</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Sale of Merchandise</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Legal Settlements</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Other Sources</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Number of Paid Staff</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Number of Volunteers</td>
<td>RM</td>
</tr>
<tr>
<td></td>
<td>Organizational Activity Variables</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type of Organization (IRS Code)</td>
<td>POS</td>
</tr>
<tr>
<td></td>
<td>Diversity of Issues Addressed</td>
<td>POS</td>
</tr>
<tr>
<td></td>
<td>Diversity of Tactics Used</td>
<td>POS</td>
</tr>
<tr>
<td></td>
<td>Resource Effort for Advocacy</td>
<td>POS</td>
</tr>
<tr>
<td></td>
<td>Resource Effort for Services</td>
<td>POS</td>
</tr>
<tr>
<td></td>
<td>Collaboration with Other Organizations</td>
<td>POS</td>
</tr>
<tr>
<td></td>
<td>Organization Perception Variables</td>
<td>POS</td>
</tr>
<tr>
<td>Dependent Variables</td>
<td>Independent Variables</td>
<td>Theory</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>More or Less Policy Influence</td>
<td>Government Attitudes Toward Organization Views</td>
<td>POS</td>
</tr>
<tr>
<td>Government Attitudes Toward Organization Views</td>
<td>Information Availability/Transparency</td>
<td>POS</td>
</tr>
<tr>
<td>Information Availability/Transparency</td>
<td>Government More Active on Environmental Policy</td>
<td>POS</td>
</tr>
<tr>
<td>Government More Active on Environmental Policy</td>
<td>Context Variables</td>
<td>POS</td>
</tr>
<tr>
<td>Environmental Quality Index</td>
<td>Environmental Quality Index</td>
<td>POS</td>
</tr>
<tr>
<td>Air EQI</td>
<td>Water EQI</td>
<td>POS</td>
</tr>
<tr>
<td>Water EQI</td>
<td>Land EQI</td>
<td>POS</td>
</tr>
<tr>
<td>Land EQI</td>
<td>Sociodemographic EQI</td>
<td>POS</td>
</tr>
<tr>
<td>Sociodemographic EQI</td>
<td>Built EQI</td>
<td>POS</td>
</tr>
<tr>
<td>Built EQI</td>
<td>Overall EQI</td>
<td>POS</td>
</tr>
<tr>
<td>Overall EQI</td>
<td>Political Ideology</td>
<td>POS</td>
</tr>
<tr>
<td>Political Ideology</td>
<td>Citizen Ideology</td>
<td>POS</td>
</tr>
<tr>
<td>Citizen Ideology</td>
<td>Government Ideology</td>
<td>POS</td>
</tr>
<tr>
<td>Government Ideology</td>
<td>Social Capital</td>
<td>POS</td>
</tr>
<tr>
<td>Social Capital</td>
<td>Legislative Professionalism</td>
<td>POS</td>
</tr>
<tr>
<td>Legislative Professionalism</td>
<td>State Budget</td>
<td>POS</td>
</tr>
<tr>
<td>State Budget</td>
<td>Total State Budget</td>
<td>POS</td>
</tr>
<tr>
<td>Total State Budget</td>
<td>Natural Resource Budget</td>
<td>POS</td>
</tr>
</tbody>
</table>

**RM = Resource Mobilization Theory**  
**POS = Political Opportunity Structure**

The logistical regression model was utilized for four different dependent variables including each of the embedded unit of organizations grouped by organizations categories. The factors developed from the exploratory factor analysis for the tactics utilized and issues addressed were utilized as independent variables. The variables utilized are listed in Table 9.
Table 9  Variables Utilized for Logistical Regression

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Independent Variables</th>
<th>Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRS Nonprofit Status vs. Informal</td>
<td>Legislative Action Tactics</td>
<td>RM &amp; POS</td>
</tr>
<tr>
<td>Annual Budget $\geq$ $50K$ vs. &lt; $50K$</td>
<td>Research &amp; Information Sharing Tactics</td>
<td>RM &amp; POS</td>
</tr>
<tr>
<td>National Affiliation vs. No Affiliation</td>
<td>Grassroots Advocacy Tactics</td>
<td>RM &amp; POS</td>
</tr>
<tr>
<td>Paid Staff vs. All Volunteer Organization</td>
<td>Science and Digital Information Sharing Tactics</td>
<td>RM &amp; POS</td>
</tr>
<tr>
<td></td>
<td>Political/Electoral Action Tactics</td>
<td>RM &amp; POS</td>
</tr>
<tr>
<td></td>
<td>Accountability Demand Tactics</td>
<td>RM &amp; POS</td>
</tr>
<tr>
<td></td>
<td>Habitat Conservation Orientation</td>
<td>RM &amp; POS</td>
</tr>
<tr>
<td></td>
<td>Health and Environmental Protection Orientation</td>
<td>RM &amp; POS</td>
</tr>
<tr>
<td></td>
<td>Energy and Climate Change Orientation</td>
<td>RM &amp; POS</td>
</tr>
</tbody>
</table>

RM = Resource Mobilization Theory
POS = Political Opportunity Structure

Finally, the linear regression model was utilized to determine the factors contributing to the allocation of resources and services. As such, the model was used to test two different dependent variables for the percent of resources allocated to advocacy and the percent allocated to service. The factors developed from the exploratory factor analysis for the tactics utilized and issues addressed were utilized as independent variables. The variables utilized are listed in Table 10.
<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Independent Variables</th>
<th>Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources Allocated to Advocacy</td>
<td>Legislative Action Tactics</td>
<td>RM &amp; POS</td>
</tr>
<tr>
<td>Resources Allocated to Service</td>
<td>Research &amp; Information Sharing Tactics</td>
<td>RM &amp; POS</td>
</tr>
<tr>
<td></td>
<td>Grassroots Advocacy Tactics</td>
<td>RM &amp; POS</td>
</tr>
<tr>
<td></td>
<td>Science and Digital Information Sharing Tactics</td>
<td>RM &amp; POS</td>
</tr>
<tr>
<td></td>
<td>Political/Electoral Action Tactics</td>
<td>RM &amp; POS</td>
</tr>
<tr>
<td></td>
<td>Accountability Demand Tactics</td>
<td>RM &amp; POS</td>
</tr>
<tr>
<td></td>
<td>Habitat Conservation Orientation</td>
<td>RM &amp; POS</td>
</tr>
<tr>
<td></td>
<td>Health and Environmental Protection Orientation</td>
<td>RM &amp; POS</td>
</tr>
<tr>
<td></td>
<td>Energy and Climate Change Orientation</td>
<td>RM &amp; POS</td>
</tr>
</tbody>
</table>

RM = Resource Mobilization Theory  
POS = Political Opportunity Structure

Chapter 4 begins with a qualitative analysis of the varying contexts for environmental movements in the five states followed by a detailed quantitative analysis in Chapter 5.
Chapter 4
THE SOCIAL AND POLITICAL CONTEXTS OF FIVE SMALL NORTHEASTERN STATES

Introduction

The social and political contexts of states are an important consideration in understanding environmental movement structures and the activities these groups collectively undertake to influence environmental policies and programs. Key dimensions of context include geography, demographics, political culture, government structure, state legislative context, and state lobbying context (Marchetti, 2015; Gray, Hanson, & Cousser, 2013; Hrebnenar & Thomas, 1993). Political Mediation Theory holds that these external societal conditions can often influence: the structure of interest group communities or movements; the manner in which they operate; and the function they serve in public policy development systems (Gamson, 1990; Meyer & Minkoff, 2004). Resource constraints make advocacy organizations and the movements they comprise particularly sensitive to the social and political environments in which they work and the selection of the issues in which they choose to engage (Holyoke, Brown, & Henig, 2012; Meyers, 2004; Jenkins, 1983).

Some of the key dimensions for the states included in this study are analyzed by comparing and contrasting some of the contextual dimensions that have been found to be good indicators of the social and political contexts for influencing policy by groups. Understanding these state policy environments is vitally important today as the great recession has placed states in grim financial conditions leading to significant
changes and contraction of issues state governments can address. This situation is unlikely to change in the foreseeable future and is causing fundamental changes in state government policy contexts.

**Geography and Demographics**

The states of Delaware, Maine, New Hampshire, Rhode Island and Vermont demonstrate considerable differences in their geography and demographics despite all of them being less-populated states concentrated in the Northeastern United States. Most of their physical characteristics cannot be changed such as the states’ land areas and climates. Other key geographic characteristics that can affect a state are related to its natural resources, such as fertile land for agriculture or forestry, extractable resources, mountain terrain, or coastal resources. These dimensions can contribute to the type of economic activity in the state, can influence the demographic make-up of the population, and may influence the state’s political culture. States with abundant natural resources may depend heavily on primary economies that extract these resources heightening environmental concerns. Those with more limited natural resources develop secondary economies that depend more upon manufacturing or service industries. The geographic and demographic characteristics of the states and how they may impact the public policy context in these states is also considered.

Why is geographic size a factor for environmental organizations and movements at the state level? It affects the political style of policy advocacy. In smaller states, election districts are typically smaller, and the relationships between the citizens and elected officials are much more personal; while in larger states, the physical distance reduces the intimacy of policy advocacy (Gray, 2013).
There is some difference in the physical land areas of the states studied. Rhode Island and Delaware are physically the smallest states in the U.S. ranked 49th and 50th in geographic area. In each of these states, a policy advocate can easily travel to the state capitol in an hour or less allowing for more personalized face to face relationships with policymakers. Comparably, Vermont and New Hampshire are about 4 to 6 times larger, and Maine is about 14 to 22 times larger in size than Delaware and Rhode Island, respectively. The geographic size of these states may make it more challenging for those in outer reaches to interact with their policymakers in their state capitols or they may simply create offices or have representatives from these areas located in the state capitols.

Rural versus Urban Landscape

Another important consideration is the amount of rural and urban land. Political involvement, defined as attending public meetings on local issues, has been found to be more frequent in rural areas than in large cities (Putman, 2000; Oliver, 2000). This is an important consideration since citizen involvement is considered a key element in a healthy democracy (Verba, Brady, Scholzman & Lehman, 1995).

However, there is now a widening rural-urban divide in the United States that predominantly falls between conservative republican and more liberal democratic values. This divide has also grown beyond the traditional geographic fights over money for roads and schools to other value-laden issues like environmental regulations and gun control (Greenblatt, 2014). Regardless of the extent of rural or urban landscape, one characteristic of the Northeast Region is its characteristic small scale political participation that is often referred to as the town hall meeting.
A considerable amount of environmental advocacy concerns policy over the conservation of natural resources in rural areas as well as environmental issues that are important to urban residents despite the ideological division often associated with these landscapes. The U.S. Census Bureau (1994) defines urban as “all territory, population, and housing units located in urbanized areas and in places of 2,500 or more inhabitants” (p. 12-1). Urban, suburban, and rural classifications typically correlate with population densities, although the census delineated places add a geographic dimension that may distort the relationship between urbanization and density in some locations. This includes both urban areas that are built up to include 50,000 or more people as well as incorporated and unincorporated urban spaces with at least 2,500 inhabitants in a delineated boundary. The urban classifications capture areas typically considered cities and more-dispersed suburban locations. The geographic areas outside of these urban areas and urban spaces are classified as rural. The percentages of urban and rural area and populations in the five states included in this study are summarized in Table 11.
In our Northeastern States, Maine and Vermont are the most rural of the states in this study with about 61% of their population considered rural (U.S. Census Bureau, 2010). In Maine this reflects the remote areas and very large tracts of land that provide the base for the state’s agricultural and forestry economies and maritime trades, much of which continue today. In Vermont, this reflects the vast agricultural landscape that once dominated the state’s economy, although the state has been gradually transitioning away from this rural heritage. These states also boast the highest percentage of timberland in the U.S. In 1997, Maine’s land cover was 85.8% forested, and Vermont was 75.7% covered with forested timberland (USDA Forest Service, 1997). While slightly less rural, New Hampshire also has a high percentage of timberland that covered about 78.4% of its land (USDA Forest Service, 1997).

Rhode Island is the least rural with almost 91% of its population being considered urban (U.S. Census Bureau, 2010). It is also one of the most densely-populated states. Similarly, Delaware is largely an urban state with 83% of its

---

**Table 11  Urban and Rural Population by State, 2010**

<table>
<thead>
<tr>
<th>State</th>
<th>Rural Pop.</th>
<th>Percent Rural Pop.</th>
<th>Rural Area in Sq Miles</th>
<th>Percent of Total Rural Area</th>
<th>Urban Pop.</th>
<th>Percent Urban Pop.</th>
<th>Urban Area in Sq Miles</th>
<th>Percent of Total Urban Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>149,985</td>
<td>16.7</td>
<td>1,541.7</td>
<td>79.1</td>
<td>747,949</td>
<td>83.3</td>
<td>406.9</td>
<td>20.9</td>
</tr>
<tr>
<td>Maine</td>
<td>814,819</td>
<td>61.3</td>
<td>30,483.3</td>
<td>98.8</td>
<td>513,542</td>
<td>38.7</td>
<td>359.6</td>
<td>1.2</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>522,598</td>
<td>39.7</td>
<td>8,308.6</td>
<td>92.8</td>
<td>793,872</td>
<td>60.3</td>
<td>644.0</td>
<td>7.2</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>97,524</td>
<td>9.3</td>
<td>633.2</td>
<td>61.3</td>
<td>955,043</td>
<td>90.7</td>
<td>400.6</td>
<td>38.8</td>
</tr>
<tr>
<td>Vermont</td>
<td>382,356</td>
<td>61.1</td>
<td>9,060.5</td>
<td>98.3</td>
<td>243,385</td>
<td>38.9</td>
<td>156.1</td>
<td>1.7</td>
</tr>
</tbody>
</table>

http://www.census.gov/geo/www/ua/2010urbanruralclass.html
population being considered urban despite 79% of its land areas still considered rural and agriculture being one of the state’s largest industries (U.S. Census Bureau, 2010).

Even in Delaware’s rural areas, widely-dispersed pockets of suburban development lead to the classification of most of the area as an urban area.

In most of these states, there is a geographic separation between the rural and urban areas. This may, at times, be a basis for political divides on environmental and natural resources issues. For example, Delaware is divided into an urban North and a rural South with differences in both population densities and associated political cultures (Boyer & Ratledge, 2009). Rural areas tend to lean more towards conservatism and align with the Republican Party, while urban areas tend to lean more toward a liberal agenda and align with the Democrats. Urban areas typically have more complex issues and higher demands for government service, while rural areas have less need for government services affecting their perceptions on government’s role and appropriate size.

**Populations Size & Density**

A metric related to urban and rural development patterns is population density. Density can have a significant impact on access to policymakers. The higher the density, the more likely the election districts will to be compact. More compact districts increase the level of personalization of political campaigns and contact with elected officials. They also affect the economy of scale for delivery of public services that are typically more efficient and cost effective in higher population densities. This can mean the difference between friends’ and neighbors’ politics versus much more impersonal relationships with elected representatives.
Maine is the least densely-populated state in the Northeast, and Rhode Island is one of the most densely-populated at 43 and 1,038 persons per square mile, respectively (U.S. Census Bureau, 2010). Maine’s population density is not even across the state as about 40% of the state’s population is concentrated in the greater Portland Metropolitan Area. The state also has large uninhabited tracts in the remote part of Northern Maine that include much of the state’s extensive forest lands. Maine has a much larger land area than the other five states leading to some residents in remote areas likely to be far more disadvantaged in participating in face-to-face policy deliberations that take place in the state capital of Augusta.

The most densely populated state in this study is Rhode Island. Although there is a relatively high density statewide, there is still considerable variation in densities within the state with a pattern of higher density in the East along a band running from Providence to Woonsocket.

New Hampshire and Vermont are only slightly more densely populated than Maine with 147 and 68 persons per square mile, respectively (U.S. Census Bureau, 2015). As is the case in all five states, the density is not equally spread across these states (U.S. Census Bureau, 2015). New Hampshire has its center of population in Merrimack County, which is located in the Southern part of the state. This area has seen considerable growth in recent decades, in part, due to its commuting range to Boston and other cities in Massachusetts. Vermont’s center of population is in Washington County, although its population densities are more homogenous than the other states’ populations included in this study.

Delaware is around the midpoint of population densities for the states at 461 persons per square mile (U.S. Census Bureau, 2015). Delaware is divided between a more populous Northern county and the less densely-populated Southern counties.
About 60% of the state’s population resides in the Northern county of New Castle. The Northern county has historically been more industrialized, and the two Southern counties of Kent and Sussex are more agriculturally based.

The total population, total land area, and population density of each of the five states is compared in Table 12.

Table 12  
Total Population, Total Land Area, and Population Density, 2014

<table>
<thead>
<tr>
<th>State</th>
<th>Total Population</th>
<th>Total Area (Sq. Miles)</th>
<th>Persons per Square Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>897,936</td>
<td>1,949</td>
<td>461</td>
</tr>
<tr>
<td>Maine</td>
<td>1,328,361</td>
<td>30,843</td>
<td>43</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>1,316,466</td>
<td>8,953</td>
<td>147</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>1,052,931</td>
<td>1,034</td>
<td>1,018</td>
</tr>
<tr>
<td>Vermont</td>
<td>625,745</td>
<td>9,217</td>
<td>68</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau Community Survey, 2014

Economic Dimensions

The size and strength of a state’s economy may impact both the diversity of issues that make it onto the state policy agenda and the number of advocacy organizations supported in that state (Gray & Lowery, 1996; Marchetti, 2015). This can have an effect on the structure of a state’s environmental movement directly through enabling a larger number of organizations to exist as well as indirectly by influencing the strategies and tactics used. This can be evaluated in several ways. Gross State Product (GSP) provides an indicator of the overall amount of goods produced and services made available in a state. It provides a measure of the state’s
total economy which can directly affect the state’s revenue and the extent of
government services that are often a focus of advocacy. A second measure is the per
capita gross state product, which divides the total GSP by the state’s population. This
provides a general indication of individual wealth and is an indicator of the standard of
living or relative affluence. The standard of living may affect the public’s level of
support for environmental policy actions as well as provide indications regarding
willingness to provide support to groups involved in environmental movements.

**State Gross Domestic Product**

A higher State Gross Domestic Product (SGDP) usually indicates the potential
for more government revenue allowing more programs and policies to be considered.
More state programs and policy issues lead to both increases in environmental
organizations and oppositional groups. Increased competition between environmental
groups as well as between environmental groups and groups with opposing policy
agendas significantly impacts the context for policy advocacy.

As seen in Table 13, there is considerable variation between the states in terms
of their gross state domestic product. The most prosperous state in the study is New
Hampshire with a SGDP of $66,276 million, and the least prosperous state is Vermont
with a SGDP of $27,164 million. Delaware, Maine, and Rhode Island fall in a similar
range in the low to middle $50 million range.
Table 13  Real State Gross Domestic Product, 2012-2014

<table>
<thead>
<tr>
<th>Area</th>
<th>Millions of chained (2009) dollars</th>
<th>Percent change</th>
<th>2014 Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2013</td>
<td>2014</td>
</tr>
<tr>
<td>Delaware</td>
<td>55,593</td>
<td>56,004</td>
<td>56,652</td>
</tr>
<tr>
<td>Maine</td>
<td>50,634</td>
<td>50,889</td>
<td>50,979</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>63,876</td>
<td>64,793</td>
<td>66,276</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>49,016</td>
<td>49,943</td>
<td>50,544</td>
</tr>
<tr>
<td>Vermont</td>
<td>27,089</td>
<td>27,001</td>
<td>27,164</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Economic Analysis (www.bea.gov)

While the overall level of a state’s gross domestic product provides insights about the potential revenue of states and their potential to fund programs and services of interest to a broad range of advocacy groups, there are several additional metrics of importance. In particular, per capita SGDP may be an important indicator of citizen affluence a topic of interest due to the historic recognition of a tendency of the environmental movement to be comprised of more affluent elites (Morrison & Dunlop, 1986).

**Per Capita State Gross Domestic Product**

Per capita State Gross Domestic Product (SGDP) is a measure of the relative influence of state residents derived by dividing the total SGDP by the state’s population. This provides a general indication of individual wealth and is an indicator of the standard of living or relative affluence. Standard of living may affect the public’s level of support for environmental policy actions as well as provide indications regarding willingness to provide support to groups involved in environmental movements.

The relative contribution of industries to the total SGDP may provide insights about the support of some groups in society for environmental movement activities.
Some industries are known to have higher environmental impacts than others. Also, some industries or the lack of these industries may leave people out of the economy. For example, blue collar workers may feel disenfranchised if the industries in which they are most often employed are perceived as being negatively impacted by environmental actions. This is an important consideration due to the environmental movement’s long standing challenge to industrial capitalism (Roots, 2004).

Table 14 summarizes the considerable variation among the states for per capita GSP and the U.S. ranking for the five Northeastern states. Per capita, Delaware is much more affluent than the other states in the study with a 2014 per capita SGDP of $62,761, and Maine is the least affluent with a SGDP of $37,705. New Hampshire, Rhode Island, and Vermont fall in between with per capita SGDP levels in the $40,000 range.

Table 14  Per Capita Gross State Product, 2012-2014

<table>
<thead>
<tr>
<th>Area</th>
<th>Per Capita GSP (Dollars)</th>
<th>Percent Change</th>
<th>2014 Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2013</td>
<td>2014</td>
</tr>
<tr>
<td>Delaware</td>
<td>62,166</td>
<td>60,557</td>
<td>62,761</td>
</tr>
<tr>
<td>Maine</td>
<td>37,705</td>
<td>37,394</td>
<td>37,981</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>48,644</td>
<td>48,855</td>
<td>49,551</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>46,210</td>
<td>46,441</td>
<td>46,798</td>
</tr>
<tr>
<td>Vermont</td>
<td>43,045</td>
<td>42,778</td>
<td>42,903</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Economic Analysis (www.bea.gov)
State Gross Domestic Product Industrial Contributions

Several key industries that contribute to the SGPD are of interest due to the impacts of these industries on the environment. These include extractive use industry, manufacturing, and construction. Extractive use such as mining and logging can have landscape-scale environmental impacts. Agriculture is not only sometimes associated with habitat degradation of the cleared land, but it is also implicated in pollution due to fertilizer and pesticide use. Manufacturing often uses a variety of industrial processes that can add pollution to the environment. Finally, construction is often associated with land development that can displace natural habitat and green infrastructure contributing to a loss of environmental quality.

Maine and Vermont receive a higher percentage of their SGDP from agriculture, forestry, fishing, and hunting industries; however, these percentages comprise just over 1% of the states’ economies. All three of the other states are below 1% for industry in these sectors of the economy. However, mismanagement of these resources can have implications for other sectors of the economy like tourism elevating the policy concern despite the relatively small percentage of the economy they comprise.

Manufacturing is highest in New Hampshire and lowest in Delaware. Manufacturing industries can have higher pollution emissions and other impacts than other sectors of the economy like the service sector. In addition, low levels of manufacturing can impact environmental policy due to its potential link to the unemployment of skilled and nonskilled labor. This condition may create policy pressure for less environmental protection.

Finally, mining was evaluated and found to comprise less than 1% of the SGDP in the states. In fact, the percent contribution to the SGDP was less than 1/10%.
in four of the five states with Vermont being the exception. In Vermont, mining activities provided just less than 1% of the state’s SGDP. This percent appears to come from a higher number of operations extracting dimension stone and crushed stone in Vermont than in the other states. Vermont has a total of 56 mines or mineral extraction sites; about half of which are for dimension stone, and half of which are for sand and gravel operations (USGS, Mineral Management Service, 2016). These operations can have localized impacts, but, in all Northeastern states, no high environmental impact mining operations such as those associated with coal were in operation.

The key industrial contributions to the total state GSDP in 2014 are summarized in Table 15.

### Table 15 State Gross Domestic Product (SGDP) & Key Industry Contribution to Total GSDP in 2014

<table>
<thead>
<tr>
<th>State</th>
<th>GSP 2014 (x$1000)</th>
<th>Agriculture, forestry, fishing, &amp; hunting (x$1000)</th>
<th>Agriculture, forestry, fishing, &amp; hunting (%GSP)</th>
<th>Manufacturing (x $1000)</th>
<th>Manufacturing (%GSP)</th>
<th>Mining (x$1000)</th>
<th>Mining (%GSP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>56,652</td>
<td>478</td>
<td>0.84%</td>
<td>4006</td>
<td>7.07%</td>
<td>2</td>
<td>0.00%</td>
</tr>
<tr>
<td>Maine</td>
<td>50,979</td>
<td>640</td>
<td>1.26%</td>
<td>4998</td>
<td>9.80%</td>
<td>20</td>
<td>0.04%</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>66,276</td>
<td>188</td>
<td>0.28%</td>
<td>7538</td>
<td>11.37%</td>
<td>53</td>
<td>0.08%</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>50,544</td>
<td>71</td>
<td>0.14%</td>
<td>4092</td>
<td>8.10%</td>
<td>36</td>
<td>0.07%</td>
</tr>
<tr>
<td>Vermont</td>
<td>27,164</td>
<td>381</td>
<td>1.40%</td>
<td>2625</td>
<td>9.66%</td>
<td>229</td>
<td>0.84%</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Economic Analysis (www.bea.gov)
Location quotients were also compared for several North American Industry Classification System (NAICS) supersectors with data available at the state level of analysis. Location quotients are an analytical statistic that measures a state’s industrial specialization as compared to all states nationwide (U.S. Bureau of Labor Statistics, 2016). Essentially, it computes a specific industry’s share of the state’s total of all types of industries. The national level for an industry is standardized to 1.0, and numbers for a sector of a state’s economy above 1 reflect a greater concentration of this industry than the national average. Values below 1 reflect a lower concentration.

The Natural Resources and Mining supersector aggregate economic data for two extractive uses; forestry logging and mining activities. All five states have location quotients (LQ) below the national average. Maine has the highest LQ at 0.75, likely due to the extensive timber harvest that occurs in the remote North Woods Region of the state (U.S. Bureau of Labor Statistics, 2016). The four other states have LQs of 0.26 or lower.

Manufacturing has higher location quotients (LQs) in New Hampshire and Vermont with LQs of 1.19 and 1.15, respectively (U.S. Bureau of Labor Statistics, 2016). Delaware had the lowest LQ for manufacturing at 0.68.

All five states have a location quotient (LQ) for construction that is relatively close to the national average. Delaware and Vermont are slightly above the national average with LQs of 1.08 (U.S. Bureau of Labor Statistics, 2016). Rhode Island has the lowest LQ for construction activity with a quotient of 0.8.

A summary of the location quotients data, the number of employment facilities, and the number of people employed in these sectors obtained from the U.S. Bureau of Labor Statistics (2016) for each of the five states is included in Table 16.
Table 16  Location Quotients, Employment, and Number of Facilities for NAICS Supersectors with Disproportional Impacts on the Environment, 2014

<table>
<thead>
<tr>
<th>Industry</th>
<th>State</th>
<th>Number of Facilities</th>
<th>Number of People Employed</th>
<th>Location Quotient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resources and Mining</td>
<td>Delaware</td>
<td>171</td>
<td>1314</td>
<td>0.21</td>
</tr>
<tr>
<td></td>
<td>Maine</td>
<td>1217</td>
<td>6350</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>New Hampshire</td>
<td>353</td>
<td>2334</td>
<td>0.26</td>
</tr>
<tr>
<td></td>
<td>Rhode Island</td>
<td>185</td>
<td>968</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>Vermont</td>
<td>513</td>
<td>3556</td>
<td>0.08</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Delaware</td>
<td>771</td>
<td>25909</td>
<td>0.68</td>
</tr>
<tr>
<td></td>
<td>Maine</td>
<td>1778</td>
<td>51118</td>
<td>0.98</td>
</tr>
<tr>
<td></td>
<td>New Hampshire</td>
<td>2018</td>
<td>66989</td>
<td>1.19</td>
</tr>
<tr>
<td></td>
<td>Rhode Island</td>
<td>1643</td>
<td>41384</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Vermont</td>
<td>1058</td>
<td>31503</td>
<td>1.15</td>
</tr>
<tr>
<td>Construction</td>
<td>Delaware</td>
<td>2820</td>
<td>20751</td>
<td>1.08</td>
</tr>
<tr>
<td></td>
<td>Maine</td>
<td>5220</td>
<td>25829</td>
<td>0.98</td>
</tr>
<tr>
<td></td>
<td>New Hampshire</td>
<td>4144</td>
<td>23533</td>
<td>0.83</td>
</tr>
<tr>
<td></td>
<td>Rhode Island</td>
<td>3502</td>
<td>16821</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>Vermont</td>
<td>2761</td>
<td>14999</td>
<td>1.08</td>
</tr>
</tbody>
</table>


**Government Structures**

The power and authority of state government; exists in accordance with their state constitutions. Each state’s constitution describes the rights of state residents and prescribes the structure of the respective state government (Hanson, 2013). The government structures constitutionally described and established include each state’s legislative, executive, and judicial branch.

In each of the five states, a bicameral legislature is the primary legislative body. All senators and representatives in the five study states are elected for two-year
terms except for Delaware senators who serve four-year terms. Only Maine has term limits on legislators, which limit legislators to four two-year terms or eight years as a state representative or senator.

Maine differs from the other four states in that it does provide for direct democracy in the form of initiatives and referendums as mechanisms for passing legislation. Citizens can directly put forward legislation directly with signatures of 10% of the number of registered voters that had cast a vote for the governor in the most recent election.

The executive branch of each state is headed by the Governor. The Governor is often a highly visible leader and can have considerable influence over policy. The power of a governor is determined by a combination of his/her popularity with the voters as well as the formal powers of the office (Ferguson, 2013). The latter is more enduring and is often set by the constitution and statutes. These include dimensions such as term limits, power to appoint key officials or agency heads, budget authority, and veto powers. These often vary from state-to-state.

Finally, the structure of the judicial branch and the manner in which judges are selected can have an impact on policy. Courts often must decide on salient and high profile issues and, at times, this can bring public concerns about judicial activism or legislating from the bench. A key factor affecting views on the state courts is the selection of judges. In all five states included in this study, the judges are appointed, not elected. Most are appointed by the state’s governor, with the exception of Vermont where the Senate appoints the judges.
Legislative Context

State legislatures are the primary governmental institution for the passing of laws that ultimately determine or set the framework for most state policy. They are complex organizations largely due to the fact that they must reach consensus among a majority of members to be productive (Hamm & Mocrief, 2013). They are elected from representative districts that often have constituents with very different interests, ideologies, and demands. For example, rural districts may be highly motivated by policy issues that protect an agricultural way of life, while urban districts may be far more concerned with problems like traffic congestion, crime and the urban renewal of a deteriorating urban center. The way these legislatures are structured and organized affects how they operate and how interest groups work to influence them.

Size of Legislature

All five states included in this study are bicameral legislatures or have a senate and a house of representatives. However, the size of these representative bodies varies considerably. There is also considerable variation in the number of constituents represented by legislators in these states. The number of constituents represented can indicate the number of issues and demands. Districts with larger populations usually bring a broader diversity of perspectives and demands on elected officials.

The number of legislators and constituents represented in the five study states is summarized in Table 17. Of the five states, New Hampshire is a clear outlier, with a total of 424 elected members in their legislature, 400 of which are in their house of representatives (National Conference of State Legislatures, 2014). Delaware is on the low end with a total of 62 legislators. Differences in the total number of citizens represented vary among the five states, with the average Delaware legislator
representing the largest population at 14,483 and each of New Hampshire legislators representing an average of 3,105 citizens.

Table 17 Number of Legislators and Constituents Represented

<table>
<thead>
<tr>
<th>State</th>
<th>Senate Number</th>
<th>Citizens per Senator</th>
<th>House Number</th>
<th>Citizens per House Member</th>
<th>Total (House &amp; Senate)</th>
<th>Citizens Per Legislator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>21</td>
<td>42759</td>
<td>41</td>
<td>21901</td>
<td>62</td>
<td>14483</td>
</tr>
<tr>
<td>Maine</td>
<td>35</td>
<td>37953</td>
<td>151</td>
<td>8797</td>
<td>186</td>
<td>7142</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>24</td>
<td>54853</td>
<td>400</td>
<td>3291</td>
<td>424</td>
<td>3105</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>38</td>
<td>27709</td>
<td>75</td>
<td>14039</td>
<td>113</td>
<td>9318</td>
</tr>
<tr>
<td>Vermont</td>
<td>30</td>
<td>20858</td>
<td>150</td>
<td>4172</td>
<td>180</td>
<td>3476</td>
</tr>
</tbody>
</table>

U.S. Census Bureau Community Survey, 2014

In the five states, the size and representation by the upper house in each state is relatively similar ranging from a low of 21 senators to a high of 38 senators (National Conference of State Legislatures, 2014). Citizens represented by each state senate are also more similar in size than the variations found in the lower chambers of each of the state legislatures. The houses of representatives in the five study states represent the lowest number of constituents in New Hampshire (n=3,105) and the highest number of constituents in Delaware (n=14,483).

While the number of constituents represented is one indicator of the challenges faced while competing for attention on issues, it is not the only factor. The level of professionalism of a state legislature can have a significant impact with more professionalized legislatures spending more time working on legislative issues.
Level of Professionalism

State legislatures vary considerably in their institutional design as well as in the resources available to the legislators. To account for the influence of these factors on policy, scholars often measure legislative professionalism based on features such as length of time spent in legislative sessions, legislative salaries, and the number of full-time professional staff (Squire & Moncrief, 2010). In some cases the features associated with legislative professionalism are set or constrained by the state’s constitutions. For example, New Hampshire’s legislators receive a salary of $200 bi-annually as outlined in the state’s constitution. There are a variety of measures of legislative professionalism, and all of these measures attempt to discern "the enhancement of the capacity of the legislature to perform its role in the policymaking process with an expertise, seriousness, and effort comparable to that of other actors in the process" (Mooney, 1994, pp.70-71).

Several of these established measures of legislative professionalism are evaluated for the five states included in this study since they have been reported to impact the opportunities and constraints for policy advocacy in each state (Mooney 1994). These include legislator compensation, length of legislative session, legislative operations (number of legislative staff), and a less frequently utilized measure, the level of educational attainment.

Legislative Compensation

Compensation is assumed to be a good proxy for the time commitment required of legislators to do their jobs and determines whether they consider their legislative duties as a part-time activity or as a full-time career (Hamm & Moncrief, 2013). As seen in Table 18, by far, the best paid legislators in the states studied were
from Delaware. At a $42,720 base salary per year, Delaware legislators are paid about four times the amount paid in Maine and Rhode Island (National Conference of State Legislators, 2009). New Hampshire legislators are the lowest paid with a true citizen legislature in which members are paid only $200 bi-annually. Vermont legislative salaries are a bit more difficult to determine as they are paid $625.36 per week and $118 per day for special sessions. The Vermont legislative session has no time limit for the length of session, but typically meets for about four to five weeks in April and May. Based on an average five week session, the compensation paid to a Vermont legislator would be about $3,125, a compensation rate considerably lower than that paid in Delaware, Maine and Rhode Island, but higher than $100 per year compensation rate paid in New Hampshire.

Table 18 Legislative Compensation

<table>
<thead>
<tr>
<th>State</th>
<th>Base Salary (annual or daily rate)</th>
<th>Session Per Diem Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>$42,750/year</td>
<td>$7,334 expense allowance annually.</td>
</tr>
<tr>
<td>Maine</td>
<td>$13,526/year for first regular session; $9,874/year for second regular session.</td>
<td>$38/day housing, or mileage and tolls in lieu of housing (at rate of $0.44/mile up to $38/day) plus $32/day for meals. Per diem limits are set by statute.</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>$200/two-year term</td>
<td>No per diem is paid.</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>$13,089.44/year</td>
<td>No per diem is paid.</td>
</tr>
<tr>
<td>Vermont</td>
<td>$625.36/week during session $118 per day for special sessions or interim committee meetings</td>
<td>Federal per diem rate for Montpelier is $93/day for lodging and $54/day for meals for non-commuters; commuters receive $54/day for meals plus mileage.</td>
</tr>
</tbody>
</table>

Legislative Operations

Legislative operations are also an indication of the level of professionalism. The number of legislative staff is often used as a common measure of operations and varies by state. Table 19 shows that while the number of legislative staff has fluctuated over time, the current number is higher in all five states than it was several decades ago perhaps indicating an increasing level of professionalism (National Conference of State Legislators, 2015; Squire, 2007).

Table 19  Total Legislative Staff During Session

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>10</td>
<td>15</td>
<td>16</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>9</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Maine</td>
<td>15</td>
<td>18</td>
<td>18</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>14</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>2</td>
<td>9</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>22</td>
<td>23</td>
<td>22</td>
<td>45</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>2</td>
<td>8</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Vermont</td>
<td>65</td>
<td>71</td>
<td>58</td>
<td>82</td>
<td>86</td>
</tr>
</tbody>
</table>


What may also be of interest is the number of staff per legislator. Rhode Island has 3.9 staff per legislator, as compared to 2 and 1.3 staff per legislator in Delaware and Maine, respectively. Vermont and New Hampshire have the lowest ratio of staff per legislator at .47 and .42, respectively (National Conference of State Legislators, 2016).
Time in Legislative Session

The amount of time in session is also used to determine the level of professionalism of state legislatures. The summary information provided in Table 20 shows that sessions for the five states are relatively similar, ranging from about 4 months to 5.5 months per year. They do differ in their establishment, with one state having its session length limited constitutionally, one statutorily, one set indirectly by the legislature, and with two states having no session length limit.

Table 20 Length of State Legislative Sessions

<table>
<thead>
<tr>
<th>State</th>
<th>Convene</th>
<th>Adjourn</th>
<th>Months in Session</th>
<th>Current Session Length Limit</th>
<th>Method of Setting Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>Jan 14</td>
<td>30-Jun</td>
<td>5.5</td>
<td>30-Jun</td>
<td>Constitution</td>
</tr>
<tr>
<td>Maine</td>
<td>8-Jan</td>
<td>17-Apr</td>
<td>4.0</td>
<td>Odd Year -3rd Wed in June;Even-3rd Wed in Apr</td>
<td></td>
</tr>
<tr>
<td>New Hampshire</td>
<td>8-Jan</td>
<td>1-Jul</td>
<td>5.5</td>
<td>45 Legislative days or July 1</td>
<td></td>
</tr>
<tr>
<td>Rhode Island</td>
<td>21-Jun</td>
<td>21-Jun</td>
<td>5.5</td>
<td>None</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vermont</td>
<td>7-Jan</td>
<td>10-May</td>
<td>4.5</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>


Educational Attainment of Legislators

A dimension of professionalism not often reported is the educational level of state legislators. The limited use of this measure may be due to the tension and debate over whether legislators should reflect the educational level of those whom they
represent or be part of the educated elite (Smallwood & Richards, 2011). Despite this controversy, most professional careers require some level of higher education degree attainment as a minimum requirement for employment. A logical antecedent can be drawn that the level of professionalism of state legislators is, in part, measured by the level of higher educational attainment.

As society and our public policies become increasingly complex in a changing world, higher levels of educational attainment are increasingly important. As we have been transitioning from an industrial based society to an information-based society, we have learned that achieving higher education levels is critical (McNutt & Hoefer, 2016). Many in society who do not achieve a higher level of education are likely to be left behind, and unable to find employment or participate in the new economy. Our public policies must adapt to these new circumstances, and this continuing transition will require a more sophisticated understanding of the issues, problems, and solutions. The knowledge needed to develop these solutions and solve our contemporary problems is likely associated with the attainment of higher levels of education. For these reasons, the level of higher education is included as an additional proxy for legislative professionalism.

While there are a variety of ways to define most highly educated, “best educated” is defined for this study as the percentage of lawmakers with a bachelor’s degree and advanced degrees since this is a common educational qualification for most state government jobs in professional, administrative, or managerial tracts.

As shown in Table 21, Rhode Island and Vermont have the best educated state houses with 72.6% and 72.2%, respectively, of their legislators having a bachelor’s degree or a higher degree. Delaware, despite having the most highly paid legislators, has a lower percentage (59.7%) of legislators with a four-year degree. Maine has
58% and New Hampshire 53.4%, respectively. Also, Maine and Delaware have the highest percent of legislators with no college education.

Table 21 Percent of State Legislators with Various Levels of Education

<table>
<thead>
<tr>
<th>State</th>
<th>No College</th>
<th>Associates' Degree or Higher</th>
<th>Bachelor's Degree or Higher</th>
<th>Master's Degree or Higher</th>
<th>Doctoral Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>14.5</td>
<td>67.8</td>
<td>59.7</td>
<td>32.3</td>
<td>8.1</td>
</tr>
<tr>
<td>Maine</td>
<td>14.9</td>
<td>64.9</td>
<td>58</td>
<td>31.4</td>
<td>4.3</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>10.2</td>
<td>57</td>
<td>53.4</td>
<td>28.3</td>
<td>5.7</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>8.0</td>
<td>76.1</td>
<td>72.6</td>
<td>48.7</td>
<td>1.8</td>
</tr>
<tr>
<td>Vermont</td>
<td>8.9</td>
<td>79.4</td>
<td>72.2</td>
<td>38.9</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Source: Smallwood & Richards. (2011). How Educated are State Legislators?
Leadership Arrangements

Legislative chamber leadership arrangements show considerable similarity and a few more subtle differences. All exhibit a hierarchical structure of power. However, New Hampshire and Rhode Island have considerably more levels. This can be a factor in creating more specialization among legislative members and less floor debate on policies depending upon the legislative rules. The most common chamber leadership positions for the house and senate of state legislatures are found in Tables 22a 23.

Table 22  State Senate Leadership Positions

<table>
<thead>
<tr>
<th>Delaware</th>
<th>Maine</th>
<th>New Hampshire</th>
<th>Rhode Island</th>
<th>Vermont</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>President</td>
<td>President</td>
<td>President</td>
<td>President</td>
</tr>
<tr>
<td>President pro tem</td>
<td>President pro tem</td>
<td>President pro tem</td>
<td>President pro tem</td>
<td>President pro tem</td>
</tr>
<tr>
<td>Majority leader</td>
<td>Assistant majority leader</td>
<td>Vice president</td>
<td>Deputy president pro tem</td>
<td>Majority leader</td>
</tr>
<tr>
<td>Majority whip</td>
<td>Minority leader</td>
<td>Dean of the Senate</td>
<td>Majority leader</td>
<td>Assistant majority leader</td>
</tr>
<tr>
<td>Minority leader</td>
<td>Assistant minority leader</td>
<td>Majority leader</td>
<td>1st deputy majority leader</td>
<td>Minority leader</td>
</tr>
<tr>
<td>Minority whip</td>
<td>Deputy majority leaders</td>
<td>Assistant majority leader</td>
<td>Senior deputy majority leader</td>
<td>Assistant minority leader</td>
</tr>
<tr>
<td>Minority leader</td>
<td>Deputy majority whip</td>
<td>Majority whip</td>
<td>Deputy majority whip</td>
<td>Deputy minority leader</td>
</tr>
<tr>
<td>Minority whip</td>
<td>Minority leader</td>
<td>Minority leader</td>
<td>Minority leader</td>
<td>Minority leader</td>
</tr>
<tr>
<td>Assistant minority whip</td>
<td>Deputy majority whip</td>
<td>Minority leader</td>
<td>Deputy majority whip</td>
<td>Minority leader</td>
</tr>
</tbody>
</table>

Source: National Conference of State Legislatures, 2016
Table 23  House Leadership Positions

<table>
<thead>
<tr>
<th>Delaware</th>
<th>Maine</th>
<th>New Hampshire</th>
<th>Rhode Island</th>
<th>Vermont</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaker</td>
<td>Speaker</td>
<td>Speaker</td>
<td>Speaker</td>
<td>Speaker</td>
</tr>
<tr>
<td>Majority leader</td>
<td>Majority leader</td>
<td>Deputy Speaker</td>
<td>Deputy speaker</td>
<td>Majority leader</td>
</tr>
<tr>
<td>Majority whip</td>
<td>Assistant majority leader</td>
<td>Majority leader</td>
<td>Speaker pro tem</td>
<td>Assistant majority leader</td>
</tr>
<tr>
<td>Minority leader</td>
<td>Minority leader</td>
<td>Assistant majority leader</td>
<td>Deputy speaker pro tem</td>
<td>Minority leader</td>
</tr>
<tr>
<td>Minority whip</td>
<td>Assistant minority leader</td>
<td>Majority whip</td>
<td>Majority leader</td>
<td>Assistant minority leader</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant majority whip</td>
<td>Deputy whip</td>
<td>Minority leader</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Republican leader</td>
<td>Deputy majority whip</td>
<td>Minority leader</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minority leader</td>
<td>Deputy majority leader</td>
<td>Minority leader</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deputy minority leader</td>
<td>Minority leader</td>
<td>Deputy minority leader</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Senior assistant minority leader</td>
<td>Democratic whip</td>
<td>Minority leader</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant minority leader</td>
<td>Deputy minority whip</td>
<td>Minority leader</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Assistant minority whip</td>
<td>Minority leader</td>
</tr>
</tbody>
</table>

Source: National Conference of State Legislatures, 2016

Leaders are selected by the majority party caucuses leading to the most power being distributed to the party that holds a majority of legislative seats. In addition to the chamber leadership position listed above, committee assignments and chairmanship have a significant impact on policy. The ability of the majority party
leadership to appoint committee chairs is a major source of power (Jewell & Wicker, 1994). This is due to the necessity of managing the legislative workload through assigning it to committees that review, analyze, and rewrite legislation. These committees often determine what makes it on to the policy agenda and how the policy issue is framed and defined.

In the five Northeastern states included in this study, committee chairs are appointed by either the president of the senate or the speaker of the house. The exception is that in Delaware, Senate committee chairs are selected by the President Pro Tem.

**Governors and the Executive Branch**

The governor is typically the most visible elected official in a state. As the highest elected official of any state, governors have considerable power of persuasion and authority over policy in their states. The mark of their policy agenda is often seen throughout the executive branch agencies, defines state political discourse, and strongly influences any state legislative agenda. In all five states studied, the governors are popularly elected and serve as the chief executive officer of the state (National Governors Association, 2016, http://www.nga.org). Gubernatorial terms are four years in every state, commonwealth, and territory except in New Hampshire and Vermont, which have two year terms (National Governors Association, 2016, http://www.nga.org).

Governors also have varying levels of power based on the structure of the state executive branch. These include power over budget decisions, legislative veto, and government reorganizational power. Table 24 outlines some of these key powers in the five states. Based on these criteria, Delaware’s Governor appears to structurally be
afforded the most power of these states with full responsibility for budget making, item veto power, and authorization for reorganization through executive order. The Governors of New Hampshire and Vermont also have full responsibility for budget making, but they have less item veto power than Delaware. Maine and Rhode Island governors share budget making power with the state legislators.

In addition to the structural context of a Governor’s power, political aspects such as whether they have a same party legislature or a divided government, a level of popularity that provides a public mandate, and leadership skills are also important determinants of a governor’s power.

Finally, the power of a governor may be limited or enhanced by the level of professionalism of the state’s legislature. Generally speaking, the more professionalized the legislature, the more power is shared with the governor.
Table 24 Governors Powers

<table>
<thead>
<tr>
<th>State</th>
<th>Budget making power</th>
<th>Governor has item veto power on</th>
<th>Governor has item veto power on</th>
<th>Governor has no item</th>
<th>Item veto-power 2/3 legislators present or 3/5 elected</th>
<th>Item veto-power majority legislators elected to</th>
<th>Authorization for legislation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Delaware</td>
<td>Yes(^1)</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>Yes</td>
<td>*</td>
<td>es</td>
</tr>
<tr>
<td>Maine</td>
<td>*</td>
<td>Yes</td>
<td>*</td>
<td>*</td>
<td>Yes</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>Yes(^1)</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>Yes</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>*</td>
<td>Yes</td>
<td>*</td>
<td>*</td>
<td>Yes</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Vermont</td>
<td>Yes</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>Yes</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

* No; not applicable.
\(^1\) Full responsibility to propose; legislature adopts or revises and governor signs or vetoes.
Lobbying Context

While lobbying is only one of the tactics used by environmental groups to influence public policy, it is a key and direct action focused on state policymakers. While lobbying is an important factor, it is still difficult to compare lobbying activity from state to state due to the differences in legal and regulatory definitions. In fact, many environmental groups seeking to influence legislators and administrative staff may not need to register as lobbyists. As such, the use of the list of registered lobbyists in a state is a good indicator of policy advocacy activities, but it cannot be the sole basis for comparing efforts between states. To provide context and understand the differences between states, we first summarize the state lobbying requirements. We then discuss the specific cultures of the states that affect the activities of registered lobbyists.

Defining Lobbying

Each of the states studied defines lobbying differently. Like most states throughout the nation, all the states in this study, except Maine, required that all lobbyists register without a threshold. Maine sets an activity threshold that a lobbyist is someone who engages in lobbying work for eight hours per month.

Delaware defines a “lobbyist” as “any individual who acts to promote, advocate, influence or oppose any matter pending before the General Assembly by direct communication with the General Assembly or any matter pending before a state agency by direct communication with that state agency” (29 Delaware Code, §5831(a)(5)). The State requires registration by anyone who is authorized to represent another person regardless of whether any compensation is paid.
Maine defines lobbying as “to communicate directly with any official in the legislative branch or any official in the executive branch or with a constitutional officer for the purpose of influencing any legislative action or with the Governor or the Governor's cabinet and staff for the purpose of influencing the approval or veto of a legislative action” (3 Maine Code, Chapter 15). Maine does distinguish that a lobbyist is compensated for their activity.

Similar to Maine, lobbyists in New Hampshire and Rhode Island register if they are engaged in actions to influence legislation or other state policy. This registration is also linked to a requirement of compensation. New Hampshire exempts persons that are not compensated for their activity as well as a number of other types of communication with policymakers including written communications and communications in the course of a public proceeding (15 New Hampshire Code, Chapter 1). Rhode Island includes compensation as a condition for lobbyist registrations defined as “any remuneration received or to be received for services rendered as a lobbyist, whether in the form of a fee, salary, forbearance, forgiveness, reimbursement for expenses or any other form or recompense” and also exempts persons whose sole lobbying activity is testifying at public hearings of legislative committees or commissions on behalf of a nonprofit organization (Rhode Island General Laws 22-10-2, lobbying definitions).

Vermont has a broad and inclusive definition of lobbying that includes almost any effort to communicate or with a legislator or administrative office to influence legislation or administrative actions, including efforts to solicit others to do so. Vermont also has a specific threshold of compensation, requiring anyone who is entitled to receive $500.00 or more in monetary or in-kind compensation in a calendar year to register.
As a result, many environmental groups are not required to register in some states for many of the actions taken to directly influence legislation, particularly if they are not compensated or do it episodically for small periods of time. A summary of the states ‘definitions and key provisions governing lobbying in each of the five states is included in Appendix C.

Initiative and Referendums

Alternatives to direct lobbying are indirect lobbying and grass roots efforts. Perhaps the purest forms of grassroots citizen action are initiatives and referendums. Initiatives and referendums are a form of direct democracy in the United States. Some states allow citizens to draft legislation, and, if a required number of petition signatures are obtained from registered voters, the proposed law is then placed on the state’s ballot (Bowler & Donovan, 2013). These forms of direct democracy are known to significantly increase citizen involvement and the proliferation of interest group activities in the states (Gerber, 1998). Importantly, Gerber (1998) found that there appears to be a negative relationship between the amount of money provided by economic and business groups to support a ballot initiative and its likelihood of passage. This indicates that initiatives and referendums may help balance the influence of money.

Only one state included in this study has an initiative process. In Maine, a law can be introduced by the citizens through a petition process either to the legislature or directly to the voters (Maine Initiative and Referendum Amendment, 1908). Maine uses an indirect initiative process in which proposals are submitted to the state legislature. For an initiative to be sent to the Maine legislature, it must receive a certain total number of signatures by Maine registered voters. Specifically, a “direct
initiative of legislation shall require not less than 10% of the total vote for governor as cast in the last previous gubernatorial election” (Maine Constitution, Article IV, Part Third, Section 18). The Maine legislature then has an opportunity to act on the proposed legislation. If the legislature rejects, modifies, or takes no action on the proposed legislative initiative, the question will go on the ballot as a referendum. In addition to the indirect initiative, Maine citizens have the power to repeal legislation with a veto referendum.

Maine typically has 6-9 initiatives a year, several of which are environmentally related. These initiatives range from providing bond funds for environmental projects restricting bear and moose hunting. Maine voters also have a long history of involvement in energy issues with numerous initiatives proposing restrictions on nuclear power development and, more recently, increasing funding for renewable energy. The management of timbering activities and initiatives to limit cutting have also frequently been proposed. The citizens and environmental community of Maine are engaged and motivated to action by this uniquely direct democracy process.

Political Ideologies

The measures or indexes of state citizen and government ideology provide an important measure of the political context for environmental policy in each state. There is a strong correspondence between popular preferences, ideological preferences of elected officials, and government policies in the American Democratic System (Berry, Ringquist, Fording, & Hanson, 1998). Indicators of state citizen ideology or the liberal-conservative continuum of the electorate and the average position of elected public officials are weighted according to their power to influence public policy
political ideology. The measure or index selected for use in this study was developed with data that address nine assumptions about the political behavior of citizens and elites that influences the policy system (Berry, Ringquist, Fording, & Hanson, 1998).

These ideological measures also address the problem of the different meanings of party affiliation from state-to-state. Since the ideology associated with political parties can vary considerably from state to state, and even within states, controlling for this factor is important. It is just as important that these measures have been updated annually every year since the 1960s allowing some trend analysis on state ideology to be considered.

Understanding the extent of these ideological orientations is a critical contextual factor for environmental policy in each state and helps to define the playing field for a state’s environmental movements. A more detailed comparative analysis of the ideological data for each of the five states was conducted as part of the data analysis and is summarized later in Chapter 5.

**Social Capital**

Social Capital is an important indicator of society’s readiness for collective action. Robert Putnam (1995) defined “social capital” as the “connections among individuals—social networks and the norms of reciprocity and trustworthiness that arise from them” (p. 19). In developing the social capital index used in this study, Rapuasignha, Goetz, and Freshwater (2006) emphasized that cooperation and information sharing are facilitated when individuals interact within organizations. The repeated interaction that occurs in organizations including environmental organizations promotes trust and reciprocity.
To develop an updated and refined social capital index, Rupasingha and Goetz (2008), utilized secondary data from the Bureau of the Census, County Business Patterns, USA Counties, National Center for Charitable Statistics, and the Regional Economic Information System to develop a consistent measure of social capital at the U.S. county level. These data are then utilized as a variable to help understand the context of environmental policy action in the states included in this study. States with higher levels of social capital may have more active citizens and organizations, leading to differences in the way organizations act to influence policy. In fact, it may reflect differences in the public participation in states and the level of policy and advocacy free riders. Social bonds may help overcome some of the problems of collective action by helping to lower the transaction costs of individuals who are often more likely to engage in solidarity with others (Wilson, 1973; Olsen, 1968). A more detailed comparative analysis of the social capital data for each of the five states is conducted as part of the data analysis and summarized later in Chapter 5.

Summary

The environmental policy context in the five states in this study exhibits considerable variability in the social, political, and structural context for policymaking. While the states are all similar in population size and located in the Northeast Region, they have considerable differences in their land area, their mosaic of land uses (rural and urban), and their economies. They also exhibit differences in the structure and organization of their governments and their rules for public advocacy and lobbying. These dimensions can be expected to influence the policy process and the way in which environmental movements work to influence policy based on the resources and political opportunities that they present or constrain.
Chapter 5

ANALYSIS

Introduction

This chapter presents the evaluation of how Resource Mobilization and Political Opportunity Structure theories explain the structure of environmental movements in small, less populated states. The analysis is presented in two parts. It begins with the analysis identifying the characteristics of small state environmental movements and includes with the analysis of the full set of organization responses from all five states. This analysis addresses the first research question: What are the structures of environmental movements in small states? It also addresses the sub questions related to the extent of variation within these structures. The collective small state environmental movement structure is evaluated further based on a comparative analysis of several organizational categories (see page 61) and variables associated with the thematic dimensions previously described and included in Chapter 3, Table 1 (see pages 55-56.). The organizational categories include: nonprofit status; budget above and below the $50,000 threshold for IRS Form 990 reporting by nonprofit groups; formal affiliation or no affiliation with a national environmental organization; and staff professionalism. These analyses provide findings about the variations in the size, tactics and strategies used by state environmental movement organizations based on samples from five Northeast states.

The second research question is then considered: What factors account for the differences in size, tactics, and goals among small Northeastern states in terms of their
environmental communities? This is done by comparing the variables associated with each of the thematic dimensions with the geographic groupings of environmental organizations from each state. This comparative analysis describes the extent of the variations in the size, tactics, and strategies used to influence environmental policy in each of the state environmental movements.

As part of these analyses of state environmental movements, variables associated with state context are added to address my third research questions: How does state context explain the structure and variation of the environmental movements in the five small states? The secondary data variables associated with political opportunity structure are added to the analysis for each state. Comparative analysis between each of the five states is conducted using these state context variables on political ideologies, social capital, environmental quality, legislative professionalism, and economic variables. These data allow comparisons of several aspects of the social and political contexts for environmental advocacy and movements in each state building upon the more qualitative descriptions of state social and political context previously discussed in Chapter 4 with additional quantitative data and analysis.

On all three scales of the small state environmental movement analysis - collective of all organizations surveyed, groups of organizations based on organizational categories, and groups based on state geography - a set of variables is included to provide analytical insights into my final research question: What is the influence or role of the environmental movement’s structure on policy development within each state? This includes analysis of several perceptions, survey responses, and a summary of the level of effort and actions that directly influence policymakers. Survey response variables associated with perceived influence, perceived governmental receptiveness to environmental claims, perception of governmental
transparency, and perceptions of governmental action on environmental issues are used to indicate the perceived influence of the movement groups. These perception variables are not a direct measurement of policy influence. However, they provide an indicator of the organizations’ and the collective movement is belief in their potential to influence policy. They also provide an indirect indicator of their motivation to act. Both have been found to be indicators of a collective capacity to mobilize movements (Tarrow, 1994; Meyer, 2004).

The extent to which organizations utilize tactics to directly and indirectly influence policymakers as a measure of influence is also considered. While actions taken may not be a direct cause for policy action, it is widely accepted that environmental advocacy has a significant impact (Roots, 2004; Bosso, 2005; Newmark & Grady, 2005). In fact, the role of advocacy by these groups is likely to be more important at the state policy level where elected officials are more reliant on information from constituents and activists. It is believed that at the state level, policymakers are more reliant on constituted opinion information from interest groups than at the federal level where they hear from constituents more often and often have access to polling information (Nownes & Newmark, 2016).

Finally, several statistical models are utilized to further evaluate the explanatory power of Resource Mobilization Theory and Political Opportunity Structure Theory for state environmental movements. This entails first identifying patterns in the advocacy repertoire of tactics utilized and in the issues addressed by organization that comprise the state environmental movements. The underlying constructs or patterns identified are then further explored in several multivariate models.
The analysis first looks for patterns of advocacy strategies and tactics utilized by movement groups. It seeks to identify whether there are distinct typologies of advocacy tactics utilized by movement groups and/or substructures of state environmental movements. A similar pattern search is used for the issues addressed by these movements and substructures. Exploratory factor analysis is conducted to find these potential patterns. A summary of the analysis conducted to determine the factor scores of the underlying construct variables used in this analysis is presented in this summary of the analysis. The more detailed analysis is included in Appendix G.

The multivariate analysis models are utilized to further explore the relationships among the pattern variables for tactics used and issues addressed. The factor scores of the underlying constructs for tactics used and issues addressed are used as independent variables. The models further evaluate the explanatory power of Resource Mobilization Theory and Political Opportunity Structure Theory for state environmental movements. They are intended to better identify potential factors influencing the structure of environmental movements in the small states included in this study. Specifically, the models are utilized to explore the extent that advocacy tactics utilized and issues addressed by movement organizations predict membership in structural groups found in the state environmental movement.

Descriptive statistics are presented for all variables, comparative analysis, and models. These analyses identify the similarities and differences among all organizations surveyed as a collective movement, between organizational category groupings, and between organizations working in each of their respective states.

Prior to presenting these analyses, the survey data collected characterizing the environmental community and the secondary data relating to the social and political context in which they operate are summarized. The survey data describes the
operational capacities, areas of interest, level of engagement in environmental policy advocacy, the tactics used by the organizations, and the perceived sociopolitical context for state level environmental advocacy. The social and political contexts data provide insights into the conditions in which they operate in their respective states including state environmental quality, ideology, social capital, legislative professionalism, and state budgets.

**Survey Data Collection**

Survey Respondents and Adjusted Response Rate

Every effort was made to reach each of the organizations that met the survey requirements. This was initially done through Qualtrics internet survey software with four reminders spaced about two weeks apart. The Qualtrics messaging was followed by a direct email using Microsoft Outlook mail merge for all non-responders to the Qualtrics survey mailing and reminders. A final reminder postcard was also sent to non-responders via the U.S. Postal Service. The original Qualtrics internet survey was sent to 748 email addresses. Perhaps due to the transient nature of many local environmental groups, 50 email messages bounced and were not delivered through the Qualtrics survey software, 71 email messages were returned with delivery failures, and an additional 20 postcards were returned as undeliverable. In total, 141 questionnaires were returned without an identifiable alternative contact or forwarding address. In addition, 30 recipients responded via email or phone call that they were not an environmental group and should not be included in the survey. This resulted in a total of 576 survey recipients in my sample and an adjusted response rate of 50.7% (n=289). This included 280 complete responses.
Post Processing of Survey Data

As is often the case in surveys, some responses were incomplete. In this survey, there was no pattern to the missing data, and the missing data for any individual survey question were small. Because missing data can create problems for analyzing data, two strategies are utilized to improve the data for analysis.

The first strategy utilized was to use secondary sources of information known to be reliable data sources to replace missing data. This primarily entailed the use of the Internal Revenue Service (IRS) Master Business Files and the IRS Core Files obtained from the Urban Institute’s National Center for Charitable Statistics to complete a small number of missing responses for the organization type or IRS nonprofit classification and annual budget level, both of which are reported to IRS as part of nonprofit establishment and annual reporting. Supplemental data were available since organizations with revenues exceeding $50,000 must file tax Form 990s with the IRS, and some organizations below this threshold voluntarily complete the Form 990s that provide this data. Data were also obtained through Guidestar databases of IRS records and filings by nonprofit organizations. This practice was utilized to address missing data in several variables including organization type, year of establishment, and annual budget. The organization type variable field was completed with supplemental data for 1.7% of the responses (n=5) with data from the IRS Master Business Files. For an organization’s establishment year, 2.7% of the responses (n=8) were completed by entering data from Guidestar records for the date in which the IRS granted the organization tax-exempt status. Annual budget data were supplemented for 3.1% of the responses (n=9) by using the average of total expenses reported to the IRS for the two most recently available years.
A second strategy utilized to avoid the pitfalls involved with listwise deletion of cases that have missing values was data imputation. Due to the random nature of missing data, failure to impute the values could lead to considerable reductions in the responses used in analysis since just a few missing question responses on a subset of variables can quickly reduce the effective number of cases (Allison, 2002). Since the analysis of the survey data requires utilizing numerous variables and the SPPS statistical packages discard any case that has a missing value, imputation was utilized. Imputation preserved most of the cases for analysis by replacing missing data with an estimated value based on other available information.

There were 54 responses related to the types of tactics, strategies, and actions utilized by environmental organizations that were imputed. All imputed variables were ordinal data from likert-like scale questions or response matrices. The number of response cases imputed for any individual response question ranged from 2.4% (n=7) to 12.1% (n=35). Imputed values were randomly assigned to missing cases based on a percent response of unimputed survey values for each category to preserve the data frequency distribution for each state. Appendix B includes a table summarizing the specific response and the extent to which each response was imputed.
Characteristics and Description of the Collective of Environmental Movement Groups from all Five States

In this section, the analysis and preliminary findings of the analysis of the collective group of all environmental groups surveyed in all five states as one overall movement in small states is summarized. The descriptive statistics for the organizational characteristics of all groups comprising the movement: resource availability, strategies used, issues addressed, and other variables are presented.

Organization Types

Organizational types are an important descriptor and variable associated with resources. In the framework of this study, they provide variables associated with thematic dimension 1, Resource Availability (see pages 55-56).

Formal and Informal Organizations

The environmental groups are overwhelmingly comprised of formal, IRS tax-exempt nonprofit organizations. At 77% (n=221), the vast majority of the groups are IRS 501(c)(3) charitable organizations. Additional groups include 501(c)(4) Civic Leagues or Social Welfare Organizations that comprise 4.5% (n=13). One percent is from 501(c)(7) Social and Recreation Clubs (n=3), a 501(c)(6) Chamber of Commerce (n=1) and a 501(c)(5) Agricultural Organization (n=1). Fifteen Percent (n=44) are informal organizations that do not have IRS not-for-profit status. There were 15 groups that responded that they did not know their organizational type. Thirteen of these organizations were found in a search of either the National Center for Charitable Statistics’ IRS Master Business file or the GuideStar USA, Inc. database to be IRS 501(c)(3) nonprofit organizations. The remaining two that were not found are
assumed to be informal groups, which increased the total number to 48 informal organizations. The types of organizations are summarized in Table 25.

Table 25  Types of Environmental Organizations; IRS Designation, Informal/Private, and Others.

<table>
<thead>
<tr>
<th>Type of Organization</th>
<th>Number of Organizations</th>
<th>Percent of Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal (No IRS Tax-exempt Status)</td>
<td>48</td>
<td>16.6</td>
</tr>
<tr>
<td>IRS 501(c)(3) — Charitable</td>
<td>221</td>
<td>76.5</td>
</tr>
<tr>
<td>IRS 501(c)(4) — Civic Leagues or Social Welfare</td>
<td>13</td>
<td>4.5</td>
</tr>
<tr>
<td>IRS 501(c)(5) — Agricultural and Horticultural</td>
<td>1</td>
<td>.3</td>
</tr>
<tr>
<td>IRS 501(c)(6) — Business League, Chambers of Commerce</td>
<td>1</td>
<td>.3</td>
</tr>
<tr>
<td>IRS 501(c)(7) — Social and Recreational Clubs</td>
<td>3</td>
<td>1.0</td>
</tr>
<tr>
<td>For-Profit</td>
<td>1</td>
<td>.3</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>289</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Informal or unincorporated organizations are of interest in that they may include emerging groups more inclined to utilize a contentious repertoire of policy-influencing tactics. These groups may, at times, provide healthy tension and fresh ideas to the movement since they are less encumbered by resource dependencies or normative pressures of the environmental advocacy community. However, they may also lack the resources necessary to undertake and sustain longer policy efforts usually associated with the state policy making process. This may make them far less effective at proactive efforts to promote new policy ideas. They likely are far more
effective at reactionary efforts aimed at blocking proposed policy actions. However, their role and integration into the broader movements may be important to the long term success of a movement due to the new innovations, and energy they bring to the established network. Informal groups have less to lose and may be more inclined to take risks, try new approaches to policy advocacy, and be more willing to challenge the status quo.

**National Affiliation**

Twenty percent (n=62) of the organizations are local chapters or affiliated with a national organization. This may have strong implications for the selection of policy issues and the framing of issues locally that could be influenced by the national priorities of the national organizations, particularly for those organizations that are owned by a national nonprofit organization that provide specific guidance. However, this affiliation may also provide the local organizations with additional resources and credibility in local policy discourse increasing their influence on local policy decisions.

**Organization Resources**

Organizational resources are another key variable associated with thematic dimension 1 and resource mobilization capacity (see pages 55-56). Environmental organizations from the five states collectively report a wide range of fiscal resources and human resources. Fiscal and staff resources have long been considered an important factor and a prerequisite for engagement in advocacy and other efforts to influence public policy (Jenkins, 1983; Zald & McCarthy, 1987). Analysis of the
resources available can provide insights about the various capacities within state environmental movements.

**Fiscal Resources**

A summary of organization budget levels are summarized in Table 26. Collectively in the five states, 32% (n=91) reported annual operating budgets of $100,000 or higher. Fifty seven percent (n=166) of the organizations reported budgets below the IRS threshold level requirement of $50,000 or more in gross receipts to be required to file a Form 990 – Return of Organizations Exempt from Income Tax or a Form 990 EZ – Short Form tax report for federally tax-exempt organizations. The number and percent of organizations in the eight budget ranges are summarized in the table below.

**Table 26  Annual Budget Response Scale**

<table>
<thead>
<tr>
<th>Response Code</th>
<th>Budget Range</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No annual budget</td>
<td>14</td>
<td>4.8</td>
</tr>
<tr>
<td>2</td>
<td>$1 - $5,000</td>
<td>51</td>
<td>17.6</td>
</tr>
<tr>
<td>3</td>
<td>$5,001 - $25,000</td>
<td>71</td>
<td>24.6</td>
</tr>
<tr>
<td>4</td>
<td>$25,001 - $50,000</td>
<td>30</td>
<td>10.4</td>
</tr>
<tr>
<td>5</td>
<td>$50,001 - $100,000</td>
<td>32</td>
<td>11.1</td>
</tr>
<tr>
<td>6</td>
<td>$100,001 - $1,000,000</td>
<td>63</td>
<td>21.8</td>
</tr>
<tr>
<td>7</td>
<td>$1,000,000 - $5,000,000</td>
<td>25</td>
<td>8.7</td>
</tr>
<tr>
<td>8</td>
<td>Greater than $5,000,000</td>
<td>3</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>289</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Staff Resources**

The number of paid professional staff reported by organizations varies considerably from no staff to a high of 50. The average number of professional staff is
just under 3 per organization (M=2.84, SD=6.21). Similarly, organizations report slightly over 2 paid support staff on average (M=2.37, SD=15.185). The number of volunteers reported range from 0 to 3,500 with an average of just under 90 volunteers per organization (M=89.2, SD=253.9).

**Issues Addressed by Organizations**

The collective group of all small state environmental organizations works on a diverse set of environmental issues. Table 27 summarizes the issues addressed and the number of organizations that responded that work on each issue.

<table>
<thead>
<tr>
<th>Issue Addressed by Organization</th>
<th>Number of Organizations (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Protection &amp; Conservation</td>
<td>241</td>
</tr>
<tr>
<td>Wildlife Preservation or Protection (Biodiversity)</td>
<td>219</td>
</tr>
<tr>
<td>Outdoor Recreation</td>
<td>210</td>
</tr>
<tr>
<td>Land Use and Development</td>
<td>200</td>
</tr>
<tr>
<td>Pollution Abatement &amp; Control</td>
<td>154</td>
</tr>
<tr>
<td>Global Warming/Climate Change</td>
<td>143</td>
</tr>
<tr>
<td>Environmental Health</td>
<td>103</td>
</tr>
<tr>
<td>Energy</td>
<td>98</td>
</tr>
<tr>
<td>Oceans and Marine Life</td>
<td>91</td>
</tr>
<tr>
<td>Other Issue¹</td>
<td>88</td>
</tr>
<tr>
<td>Environmental Justice</td>
<td>79</td>
</tr>
</tbody>
</table>

¹Other issues reported included more specific subsets of the listed issues, such as environmental education, invasive species control, land protect of specific site, sustainable agriculture, water quality sampling, beautification projects, bird protection, and shoreline protection.
The issues addressed are determined by thematic dimension 3, the state political culture, and the specific geographic context such as natural resource availability or economic conditions that influence environmental problems and issues (see pages 55-56).

As seen in Figure 7, the majority of the organizations work on multiple issues. Fifty seven percent (n=165) of the organizations that responded to the survey (N=289) work on 6 or more issues, while only 4.5% (n=13) report being single-issue organizations (M=6.01, SD=2.50).
Diversity of Tactics

Similar to the issues addressed, the total sample of organizations from all five states reports the utilization of a high diversity of strategies and tactics in influencing environmental policy (M=19.53, SD=7.88). The tactics used are a key indicator of the political opportunity structure and are influenced by a broad range of variables associated with state political structure, the policy process they work in, and government transparency. They are variables associated with thematic dimensions 3: State Political Culture, 4: Level of Integration or Fragmentation of the Policy Process, and 5: Lobbying and Transparency (see pages 55-56). All three of these factors are associated with Political Opportunity Structure Theory.

The distribution of organizations using various numbers of tactics is seen in Figure 8. Nearly one-half (45.7%) of the organizations (n=132) report using 20 or more of the 45 tactics included for selection in the survey. Organizations’ reports range widely in the number of tactics utilized; from a low of 4 of the listed tactics utilized (n=3) to a high of 43 of the tactics utilized (n=1).
The tactics or strategies most often utilized by the organizations include calling government officials, using various data and information collecting strategies, tracking legislation, using social media, encouraging others to contact policymakers, sending electronic action alerts, talking to elected officials, serving on government advisory committees, and testifying at legislative budget hearings. These provide a summary of the broad range of efforts undertaken to improve the environment and to change or maintain environmental policies. Considering the types of information of most use to policymakers in different contexts, many of these variables provide a measurement of the influence the collective movement has on policy making. A list of the survey
responses to the 45 tactics and strategies of policy influence used and the percent of organizations responding that they utilize them are listed in Tables 28-32. These categories correspond to the manner in which they were grouped in the survey.

Table 28  Information Acquisition Tactics & Strategy Use by Organizations

<table>
<thead>
<tr>
<th>Tactic/Strategy</th>
<th>Percent of Organizations</th>
<th>Number of Organizations</th>
<th>Md</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>News Media Tracking</td>
<td>92%</td>
<td>266</td>
<td>4.00</td>
<td>4</td>
</tr>
<tr>
<td>Calling Government Officials</td>
<td>88%</td>
<td>253</td>
<td>3.00</td>
<td>4</td>
</tr>
<tr>
<td>Government Website Tracking</td>
<td>86%</td>
<td>248</td>
<td>3.00</td>
<td>4</td>
</tr>
<tr>
<td>Data Collected by Citizens Utilization</td>
<td>84%</td>
<td>243</td>
<td>2.00</td>
<td>4</td>
</tr>
<tr>
<td>Government Databases Utilization</td>
<td>81%</td>
<td>234</td>
<td>3.00</td>
<td>4</td>
</tr>
<tr>
<td>Nongovernmental Publications or Services Utilization</td>
<td>81%</td>
<td>234</td>
<td>3.00</td>
<td>4</td>
</tr>
<tr>
<td>Nongovernmental Websites Utilization</td>
<td>80%</td>
<td>232</td>
<td>3.00</td>
<td>4</td>
</tr>
<tr>
<td>Peer Review Scientific Studies &amp; Data Utilization</td>
<td>78%</td>
<td>225</td>
<td>2.00</td>
<td>4</td>
</tr>
<tr>
<td>Legislative Bill Tracking Website Utilization</td>
<td>70%</td>
<td>203</td>
<td>2.00</td>
<td>4</td>
</tr>
<tr>
<td>Legislative Budget Hearing</td>
<td>54%</td>
<td>157</td>
<td>2.00</td>
<td>4</td>
</tr>
<tr>
<td>Civic Minded Former Government Employees</td>
<td>54%</td>
<td>156</td>
<td>2.00</td>
<td>4</td>
</tr>
<tr>
<td>Freedom of Information Act Requests</td>
<td>18%</td>
<td>52</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Legal Discovery</td>
<td>15%</td>
<td>44</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Lobbying Expenditure Disclosure Records</td>
<td>14%</td>
<td>40</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Campaign Finance Reports</td>
<td>13%</td>
<td>37</td>
<td>1.00</td>
<td>4</td>
</tr>
</tbody>
</table>
### Table 29  Direct Policy Influence Tactic & Strategy Use by Organizations

<table>
<thead>
<tr>
<th>Tactic/Strategy</th>
<th>Percent of Organizations</th>
<th>Number of Organizations</th>
<th>Md</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talk to elected public officials</td>
<td>90%</td>
<td>259</td>
<td>3.00</td>
<td>4</td>
</tr>
<tr>
<td>Tracking legislation</td>
<td>70%</td>
<td>202</td>
<td>2.00</td>
<td>4</td>
</tr>
<tr>
<td>Serve on Government Committees</td>
<td>65%</td>
<td>188</td>
<td>2.00</td>
<td>4</td>
</tr>
<tr>
<td>Release research reports</td>
<td>53%</td>
<td>153</td>
<td>2.00</td>
<td>4</td>
</tr>
<tr>
<td>Testify at legislative or administrative hearings</td>
<td>52%</td>
<td>149</td>
<td>2.00</td>
<td>4</td>
</tr>
<tr>
<td>Provide analysis of legislative or regulatory proposals</td>
<td>51%</td>
<td>148</td>
<td>2.00</td>
<td>4</td>
</tr>
<tr>
<td>Draft &amp; propose environmental legislation</td>
<td>29%</td>
<td>83</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Having a registered lobbyist</td>
<td>14%</td>
<td>41</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>File a law suit or a friend of the court brief</td>
<td>13%</td>
<td>37</td>
<td>1.00</td>
<td>4</td>
</tr>
</tbody>
</table>

### Table 30  Grassroots Policy Influence Tactic & Strategy Use by Organizations

<table>
<thead>
<tr>
<th>Tactic/Strategy</th>
<th>Percent of Organizations</th>
<th>Number of Organizations</th>
<th>Md</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct educational programs, workshops, or conferences.</td>
<td>86%</td>
<td>249</td>
<td>2.00</td>
<td>4</td>
</tr>
<tr>
<td>Encourage the public to call, write, or email policymakers</td>
<td>68%</td>
<td>197</td>
<td>2.00</td>
<td>4</td>
</tr>
<tr>
<td>Organize events in support or opposition to policies.</td>
<td>31%</td>
<td>91</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Hold, attend, or promote participation in public protests</td>
<td>28%</td>
<td>82</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Conduct on-line Advocacy Campaigns</td>
<td>24%</td>
<td>69</td>
<td>1.00</td>
<td>4</td>
</tr>
</tbody>
</table>
### Table 31  Electoral Policy Influence Tactic & Strategy Use by Organizations

<table>
<thead>
<tr>
<th>Tactic/Strategy</th>
<th>Percent of Organizations</th>
<th>Number of Organizations</th>
<th>Md</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host candidate forums or candidate scorecards</td>
<td>11%</td>
<td>31</td>
<td>1.00</td>
<td>2</td>
</tr>
<tr>
<td>Support or oppose candidates for office</td>
<td>7%</td>
<td>20</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Conduct get out the voter activities</td>
<td>2%</td>
<td>7</td>
<td>1.00</td>
<td>3</td>
</tr>
</tbody>
</table>

### Table 32  Technology Enabled Policy Influence Tactic & Strategy Use by Organizations

<table>
<thead>
<tr>
<th>Tactic/Strategy</th>
<th>Percent of Organizations</th>
<th>Number of Organizations</th>
<th>Md</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Networking Site (like Facebook, Instagram, etc.)</td>
<td>69%</td>
<td>200</td>
<td>3.00</td>
<td>4</td>
</tr>
<tr>
<td>Email Blast</td>
<td>66%</td>
<td>192</td>
<td>2.00</td>
<td>4</td>
</tr>
<tr>
<td>Electronic Action Alerts</td>
<td>49%</td>
<td>142</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Videosharing (like YouTube, Vimeo)</td>
<td>29%</td>
<td>83</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Discussion Group</td>
<td>26%</td>
<td>74</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>On-line Mapping Software</td>
<td>24%</td>
<td>70</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Micro-Blog (like Twitter, Plurk, Tumblr, etc.)</td>
<td>22%</td>
<td>63</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Blog</td>
<td>20%</td>
<td>57</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>On-line Petitions</td>
<td>14%</td>
<td>40</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Digital Storytelling</td>
<td>13%</td>
<td>39</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Infographics</td>
<td>13%</td>
<td>38</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Comprehensive Advocacy Software</td>
<td>2%</td>
<td>7</td>
<td>1.00</td>
<td>4</td>
</tr>
</tbody>
</table>
Resources Allocation by Organizations

The allocation of resources is related to the tactics utilized. Organizations report allocating most of their resources to providing services with much less being allocated to advocacy efforts. This finding is potentially contrary to the reported tactics of the organizations that indicate a high level of advocacy activities. However, it may be that the advocacy activities such as calling government and elected officials do not require significant expenditure or resources.

While most organizations participate in advocacy efforts to influence policy, the resources expended by them are only a small part of what they have available. Seventy three percent (73%) of the organizations (n=175) report allocating less than 15% of their resources to advocacy and 21% of the organizations (n=50) report spending no resources on advocacy efforts. Only a very small 1.7% of the organizations (n=5) report spending all of their resources on advocacy.

The distribution of organizations allocating various percentages of their resources to advocacy is shown in Figure 9. Note that resource allocation for advocacy is considerably skewed to low amounts of resources.
Organizations collectively spent much more on services. Nearly three quarters of the organizations (n=178) report spending 50% or more of their available resources providing environmental services. Fifteen percent (n=41) report spending all of their resources on services, while only 3.5% of the organizations (n=10) report spending no resources on services.

The distribution of organizations allocating various percentages of their resources to providing services is shown in Figure 10. This allocation is more normally distributed than that of allocations for advocacy, but slightly skewed to higher percentages of allocation of resources to provide services.
Collaboration Among Organizations

The frequency and extent of collaboration between movement organizations are factors directly associated with Resource Mobilization Theory. The extent of collaboration is a variable associated with thematic dimension 2: Level of Inter-organizational Collaboration (see pages 55-56). Collectively, the environmental organizations from all five states report high levels of collaboration with other organizations. As seen in Table 33, an overwhelming majority, 86% of the organizations (n=248) report that they are involved in some form of collaboration, whether they are formal or informal. In addition, 55% of the organizations report they are involved in collaborative efforts in which resources are exchanged.
Table 33  Level of Organization Collaboration

<table>
<thead>
<tr>
<th>Collaboration Type</th>
<th>Number of Organizations (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not involved in any collaborations or informal networks</td>
<td>40 (13.9%)</td>
</tr>
<tr>
<td>Yes, involved in one or more informal networks (cooperation, coordination, working</td>
<td>89 (30.9%)</td>
</tr>
<tr>
<td>together) with other organizations</td>
<td></td>
</tr>
<tr>
<td>Yes, involved in one or more formal collaborations (legal, fiscal, administrative,</td>
<td>63 (21.9%)</td>
</tr>
<tr>
<td>or programmatic exchanges) with other organizations</td>
<td></td>
</tr>
<tr>
<td>Yes, involved in both formal collaborations and informal networks</td>
<td>96 (33.3%)</td>
</tr>
<tr>
<td>Don't Know</td>
<td>1 (0.3%)</td>
</tr>
</tbody>
</table>

Organizational Perceptions of State Political and Social Context

Several survey questions collected responses on the state context for environmental advocacy. These included questions on: the perceived influence of organizations, the perceived receptiveness of policymakers towards organization views, whether organization representatives believed their state government was more or less active in environmental protection in the past five years, and the perceptions of the availability of public information. These variables associated with thematic dimension 4: Integration or Fragmentation of the Policy Process, are used to provide insights into the influence and role of the movement as framed by research question 4. Each of these response variables is summarized below.
Perceived Change in Influence on State Environmental Policy

The survey recipients were directly asked if they believed their organization had more or less influence on environmental issues in their state during the past five years. Collectively, only 41% of all of the responding organizations (n=136, Md=2.0) report that they have more influence, 32% of the organizations (n=89) report they have the same influence, and 18% of the organizations (n=89) report having less influence. Eleven organizations respond that they do not know. Maine differs from the other states in having a slightly higher rating (Md=3).

Receptiveness of Governmental Policymakers to Organizational Views

The survey recipients were asked about the receptiveness of government officials to their views on environmental policy issues in their state. Forty percent of all of the responding organizations (n=113, Md=4) report government officials are interested in their views and actively work with them to achieve a common goal, 26.8% of the organizations (n=75) report government is interested in their views, and 22.5% of the organizations (n=62) report government is not really interested or interested only sometimes. Six percent of the organizations (n=17) respond that they do not work with government officials. Organizations in Vermont and Road Island have slightly higher perceptions of government responsiveness (Md=4) than the states of Delaware, Maine, and New Hampshire do (Md=3).

Perceptions on Government Activity on Environmental Issues

The survey recipients were asked their perceptions of whether their state government had been taking a more active role in addressing environmental issues during the past five years. Among the states, these responses were analyzed for those organizations that responded along the ordinal scale. Forty-eight percent of all of the
responding organizations (n=133, Md=3) agree or strongly agree that government officials are taking a more active role, 29.7% of the organizations (n=81) disagree or strongly disagree that officials are taking a strong role, and 22.3% (n=61) neither agree nor disagree. Delaware (Md=4), Rhode Island (Md=4), and Vermont (Md=4) report slightly higher perceptions about government action on environmental issues, and Maine (Md=2) reported lower perceptions.

**Perceptions on Availability of Government Information/Transparency**

The survey recipients were asked their views on the availability of state government information as an indicator of government transparency in their state. This question was of interest since information about government agencies is a valuable resource for movement organizations that often target these government agencies with their policy demands. Sixty-two percent of the organizations (n=178, Md=4) respond that government information was made available most of the time or always, 31.5% of the organizations (n=91) report information was sometimes made available, and 6.9% (n=20) reported that information was rarely or never made available. New Hampshire, Rhode Island, and Vermont report higher median scores for government transparency, each has a median value of four.

**Comparisons among Environmental Movement Groupings Based on Organizational Categories**

The comparative analysis summary for groups derived from the collective of organizations from all five states based on organizational categories is presented in the following pages. The categories include nonprofit IRS tax-exempt status, budget of greater or less than $50,000, formal affiliation with a national environmental
organization, and professionalism. These organizational categories help define the structure of state environmental movements.

Several organizational categories for movement groups based on resource factors can be compared to theoretical factors associated with Political Opportunity Structure. These include aspects of thematic dimension 3: State Political Culture, 4: Level of Integration or Fragmentation of the Policy Process, 5: Lobbying and Transparency, and 6: Social Capital (see pages 55-56).

The analysis compared independent groups for each of the categories of movement structures. The groups were selected from the sample of all of the organizations from all five states and provide insights on how these organizational structures and variables associated with the six thematic dimensions affect the small state environmental movement. Specific independent variables included annual budget, revenue sources, staff and volunteer resources, issues addressed, diversity of advocacy strategies and tactics used, allocation of resources for advocacy, allocation of resources for service provisions, intraorganizational collaboration, and the five perception variables.

Only the summaries of these analyses are presented here. The detailed statistical analysis of the individual groups and factors can be found in Appendix E.

Summary of Differences for Environmental Groupings Based on Organizational Categories

The statistical findings from the aggregated individual group comparisons allow for a more complete picture of the various movement structures. Each of the movement structures evaluated is presented with the collection of variables indicative of Resource Mobilization Theory and Political Opportunity Structure Theory. This
allows a more holistic look at the variables used to evaluate the similarities and differences of the organizational structures of the state environmental movements. This holistic presentation of the summary data is intended to allow for consideration of the multidimensional nature of the many factors likely to influence the movement structure. Due to the many nuances of movement organizations, even this presentation of data is likely to present only a part of what determines the movement structure.

The most prominent feature of this comparative analysis is the considerable amount of similarity found across the various categorical groupings of organizations that helps to define the structure of the state environmental movements. The data suggest that there is a considerable amount of uniformity within the small state environmental movement. There are more similarities among the organizations than differences with regard to the efforts they deploy to influence policy. Yet, there are a few differences that deserve consideration noting that, in some cases, these statistically-significant differences are rather small and/or have small effect sizes.

Comparison of Resource Mobilization Theory Variables Between IRS Tax Exempt and Informal Environmental Organization

A comparison of incorporated and informal environmental organizations from all five states shows a number of differences associated with Resource Mobilization. Groups that have been incorporated as an IRS tax-exempt nonprofit organization have larger budgets, more staff, and more volunteers. Of the ten sources of revenue reviewed, incorporated groups collectively show a higher statistical difference for sources of revenue when compared to informal groups for three revenue sources. Incorporated groups get more revenue from foundations, corporate sources, and client services than informal groups collect from these same revenue sources.
These results indicate that there is much in common between these two groups, despite some key differences. The most notable differences are in the total budget sizes for IRS tax-exempt nonprofits and more reliance on corporate and foundation contributions. These differences may have implications for resource dependency by nonprofits and a potential tendency to support the status quo over change. These findings are summarized in Table 34.
Table 34  Summary of Statistically significant differences for key Resource Mobilization Theory variables between IRS tax-exempt nonprofit organizations and informal organizations.

<table>
<thead>
<tr>
<th>Variable</th>
<th>p-value</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>IRS Tax-exempt Nonprofit</td>
</tr>
<tr>
<td>Budget Size</td>
<td>0.001</td>
<td>+</td>
</tr>
<tr>
<td>Revenue Sources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Membership Dues</td>
<td>0.397</td>
<td>NS</td>
</tr>
<tr>
<td>Individual Donors</td>
<td>0.099</td>
<td>NS</td>
</tr>
<tr>
<td>Government: Any Level</td>
<td>0.844</td>
<td>NS</td>
</tr>
<tr>
<td>Fund-raising Events</td>
<td>0.658</td>
<td>NS</td>
</tr>
<tr>
<td>Foundation Funding</td>
<td>0.026</td>
<td>+</td>
</tr>
<tr>
<td>Client Service</td>
<td>0.048</td>
<td>+</td>
</tr>
<tr>
<td>Corporate Contributions</td>
<td>0.001</td>
<td>+</td>
</tr>
<tr>
<td>Sale of Merchandise</td>
<td>0.202</td>
<td>NS</td>
</tr>
<tr>
<td>Legal Settlements</td>
<td>0.183</td>
<td>NS</td>
</tr>
<tr>
<td>Other Sources</td>
<td>0.274</td>
<td>NS</td>
</tr>
<tr>
<td>Number of Paid Staff</td>
<td>0.004</td>
<td>+</td>
</tr>
<tr>
<td>Number of Volunteers</td>
<td>0.002</td>
<td>+</td>
</tr>
</tbody>
</table>

Differences are depicted with a (+) or (-) for the direction of the relations, and a NS for those comparisons that were not significant.

+ = Significantly Different and Higher Median Value
- = Significantly Different and Lower Median Value
Comparison of Resource Mobilization Theory Variables Between Organizations with Annual Budgets of Less than $50,000 and Those with Budgets of $50,000 or Greater

An additional comparison of a potential structural group based on organizations with budgets split at $50K was also conducted. This was chosen since the IRS sets a 990 filing requirement at $50,000. Generally, organizations with budgets at $50,000 have more staff and volunteers than groups of organizations with smaller annual budgets and get higher percentages of their revenue from diverse revenue sources. The one exception is that the organizations with budgets below $50,000 collect a higher percentage of their annual budget from membership dues.

These results indicate that there are differences in the structures of environmental movements in the combined five states based on resources available to the two groups. Small organizations are much more dependent upon membership dues which may have implications for grass roots advocacy efforts. Resource restrictions likely reduce their involvement in more professionalized, political insider oriented, advocacy work. The findings are summarized in the table below.
Table 35  Summary of Statistically significant differences for key Resource Mobilization Theory variables between organizations with annual budgets of less the $50,000 and those with budgets of $50,000 or greater.

<table>
<thead>
<tr>
<th>Variable</th>
<th>p-value</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mobileization Theory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Organization with Budget &lt; $50,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Organization with Budget ≥ $50,000</td>
</tr>
<tr>
<td>Budget Size</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Revenue Sources</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Membership Dues</td>
<td>0.001</td>
<td>+</td>
</tr>
<tr>
<td>Individual Donors</td>
<td>0.188</td>
<td>NS</td>
</tr>
<tr>
<td>Government: Any Level</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Fund-raising Events</td>
<td>0.303</td>
<td>NS</td>
</tr>
<tr>
<td>Foundation Funding</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Client Service</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Corporate Contributions</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Sale of Merchandise</td>
<td>0.247</td>
<td>NS</td>
</tr>
<tr>
<td>Legal Settlements</td>
<td>0.572</td>
<td>NS</td>
</tr>
<tr>
<td>Other Sources</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Number of Paid Staff</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Number of Volunteers</td>
<td>0.001</td>
<td>-</td>
</tr>
</tbody>
</table>

Differences are depicted with a (+) or (-) for the direction of the relations, and a NS for those comparisons that were not significant.

+ = Significantly Different and Higher Median Value
- = Significantly Different and Lower Median Value
Comparison of Resource Mobilization Theory Variables Between Organizations With and Without an Affiliation with a National Organization

Structural groupings of organizations from all five states were compared using variables associated with Resource Mobilization Theory show extensive similarities. No significant differences were found in the budget sizes, number of staff, or number of volunteers between organizations with or without a national affiliation. This trend of no significant differences also holds for 9 of the 10 sources of revenue considered. The only revenue source that different is that groups with a national affiliation tend to rely upon fund raising events as a percent of their revenue more than the group of organizations without any national affiliation do.

These results indicate that affiliation with a national environmental organization has a limited influence on the amount of resources of organizations. The findings are summarized in Table 36.
Table 36  Summary of Statistically significant differences for key Resource Mobilization Theory variables between organizations with and without an affiliation with a national organization.

<table>
<thead>
<tr>
<th>Variable</th>
<th>p-value</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Affiliated with National Org.</td>
</tr>
<tr>
<td>Budget Size</td>
<td>0.27</td>
<td>NS</td>
</tr>
<tr>
<td>Revenue Sources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Membership Dues</td>
<td>0.252</td>
<td>NS</td>
</tr>
<tr>
<td>Individual Donors</td>
<td>0.396</td>
<td>NS</td>
</tr>
<tr>
<td>Government: Any Level</td>
<td>0.059</td>
<td>NS</td>
</tr>
<tr>
<td>Fund-raising Events</td>
<td>0.001</td>
<td>+</td>
</tr>
<tr>
<td>Foundation Funding</td>
<td>0.266</td>
<td>NS</td>
</tr>
<tr>
<td>Client Service</td>
<td>0.563</td>
<td>NS</td>
</tr>
<tr>
<td>Corporate Contributions</td>
<td>0.491</td>
<td>NS</td>
</tr>
<tr>
<td>Sale of Merchandise</td>
<td>0.867</td>
<td>NS</td>
</tr>
<tr>
<td>Legal Settlements</td>
<td>0.435</td>
<td>NS</td>
</tr>
<tr>
<td>Other Sources</td>
<td>0.337</td>
<td>NS</td>
</tr>
<tr>
<td>Number of Paid Staff</td>
<td>0.247</td>
<td>NS</td>
</tr>
<tr>
<td>Number of Volunteers</td>
<td>0.566</td>
<td>NS</td>
</tr>
</tbody>
</table>

Differences are depicted with a (+) or (-) for the direction of the relations, and a NS for those comparisons that were not significant.

+ = Significantly Different and Higher Median Value
- = Significantly Different and Lower Median Value

**Comparison of Resource Mobilization Theory Variables Between All-Volunteer Organizations and Organizations with a Combination of Paid Staff and Volunteers.**

An evaluation of movement structure based on organizations with and without paid staff was conducted. This analysis show a trend similar to the comparison of
organizations based on budgets split at $50,000. This is not surprising as the ability to hire a paid staff person is dependent upon budget size which requires a minimum annual budget in the range of $50,000. Both higher resources and paid staff are associated with the professionalization of organizations. Generally, organizations with a combination of paid staff and volunteers have larger annual budgets, more staff and more volunteers than groups of organizations with smaller annual budgets do. They also secure a higher percentage of their revenue from individual donors, government, foundations, client services, corporate donations, and other sources than the all-volunteer groups of organizations do. Similar to organizations with smaller annual budgets below $50,000, all volunteer organizations depend upon membership dues as a higher percent of their budget than organizations with paid staff do.

These results indicate that there is a difference in the structure of environmental movements in the five states based on those organizations having paid staffs versus those that are all volunteer organizations. The findings are summarized in the Table 37.
Table 37  Summary of Statistically significant differences for key Resource Mobilization Theory variables between all-volunteer organizations and organizations with a combination of paid staff and volunteers.

<table>
<thead>
<tr>
<th>Variable</th>
<th>p-value</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>All-volunteer Org.</td>
</tr>
<tr>
<td>Budget Size</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Revenue Sources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Membership Dues</td>
<td>0.001</td>
<td>+</td>
</tr>
<tr>
<td>Individual Donors</td>
<td>0.011</td>
<td>-</td>
</tr>
<tr>
<td>Government: Any Level</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Fund-raising Events</td>
<td>0.504</td>
<td>NS</td>
</tr>
<tr>
<td>Foundation Funding</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Client Service</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Corporate Contributions</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Sale of Merchandise</td>
<td>0.525</td>
<td>NS</td>
</tr>
<tr>
<td>Legal Settlements</td>
<td>0.751</td>
<td>NS</td>
</tr>
<tr>
<td>Other Sources</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Number of Paid Staff</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Number of Volunteers</td>
<td>0.001</td>
<td>-</td>
</tr>
</tbody>
</table>

Differences are depicted with a (+) or (-) for the direction of the relations, and a NS for those comparisons that were not significant.

+ = Significantly Different and Higher Median Value
- = Significantly Different and Lower Median Value

**Comparison of Political Opportunity Structure Theory Variables Between Incorporated and Informal Environmental Organizations**

A comparison of incorporated and informal environmental organizations from all five states show no statistical differences associated with Political Opportunity Structure. The data depict a striking level of similarity. No significant differences were found in any of the organizational activity variables measured, including tactics.
used, issues addressed, resources allocated for service or advocacy, other groups collaborated with, or organization having been incorporated. Organization perceptions about state government also showed no significant differences.

These results indicate that being a formal nonprofit incorporation versus being an informal group does not appear to be impacted by political opportunity structure. The findings are summarized in the table below.

Table 38  Summary of Statistically significant differences for key Political Opportunity Structure Theory variables between IRS tax-exempt nonprofit organizations and informal organizations.

<table>
<thead>
<tr>
<th>Variable</th>
<th>p-value</th>
<th>IRS Tax-exempt Nonprofit</th>
<th>Informal Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Activity Variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of Organization (IRS Code)</td>
<td>0.39</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Diversity of Issues Addressed</td>
<td>0.615</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Diversity of Tactics Used</td>
<td>0.146</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Resource Effort for Advocacy</td>
<td>0.668</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Resource Effort for Services</td>
<td>0.327</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Collaboration with Other Organizations</td>
<td>0.229</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Organization Perception Variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More or Less Policy Influence</td>
<td>0.981</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Government Attitudes toward organization views</td>
<td>0.782</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Information Availability /Transparency</td>
<td>0.183</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Government More Active on Environmental Policy</td>
<td>0.74</td>
<td>NS</td>
<td>NS</td>
</tr>
</tbody>
</table>

Differences are depicted with a (+) or (-) for the direction of the relations, and a NS for those comparisons that were not significant.
+ = Significantly Different and Higher Median Value
- = Significantly Different and Lower Median Value
Comparison of Political Opportunity Structure Theory Variables Between Organizations with Annual Budgets of Less than $50,000 and Those with Budgets of $50,000 or Greater

Structural groups with annual budgets of less than $50,000 and those with budgets of $50,000 or greater for variables were compared using variables associated with Political Opportunity Structure. This analysis provides mixed results. No differences were observed for the diversity of issues addressed, extent of resources allocated to advocacy, and resources allocated to providing services. Differences were found for several variables including the diversity of tactics used, and the extent of collaboration with other organizations, both of which were higher for organizations with more funds available perhaps indicating that additional resources allow for more options.

Also of interest are several differences in the variables associated with organizational perceptions about state and local government. Organizations in the groups with higher annual budgets perceive government attitudes toward their views more positively than organizations with fewer resources do. This may be a factor related to increased legitimacy that comes with professionalization. Another difference is that the group with fewer resources perceives that their government makes information more available and that their government is being more active on environmental issues than organizations with more resources do. The findings are summarized in the table below.
Table 39 Summary of Statistically significant differences for key Political Opportunity Structure Theory variables between organizations with annual budgets of less the $50,000 and those with budgets of $50,000 or greater.

<table>
<thead>
<tr>
<th>Variable</th>
<th>p-value</th>
<th>Organization with Budget &lt;$50,000</th>
<th>Organization with Budget &gt;$50,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Activity Variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of Organization (IRS Code)</td>
<td>0.180</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Diversity of Issues Addressed</td>
<td>0.396</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Diversity of Tactics Used</td>
<td>0.001</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Resource Effort for Advocacy</td>
<td>0.440</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Resource Effort for Services</td>
<td>0.101</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Collaboration with Other Organizations</td>
<td>0.001</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Organization Perception Variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More or Less Policy Influence</td>
<td>0.987</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Government Attitudes toward organization views</td>
<td>0.037</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Information Availability/Transparency</td>
<td>0.004</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Government More Active on Environmental Policy</td>
<td>0.009</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

Differences are depicted with a (+) or (-) for the direction of the relations, and a NS for those comparisons that were not significant.

+ = Significantly Different and Higher Median Value
- = Significantly Different and Lower Median Value
Comparison of Political Opportunity Structure Theory Variables Between Organizations With and Without an Affiliation with a National Organization

Comparison of groups with a national affiliation and those without any affiliation show no differences for the majority of the variables tested. Despite this similarity between the groups, the groups with an affiliation with a national organization did show a difference on three variables worth noting. Groups that are affiliated with a national organization seek to address a higher diversity of issues, use a larger repertoire of tactics to influence policy, and devote a higher percent of their resources to advocacy than groups with no national affiliation do. These limited differences may indicate that the historic dominance of environmental action at the national level is being shared with state affiliates who consider both the national issues of their parent organization and local issues. It appears these similarities are more a result of close collaboration and mimicking of ideas than due to resources. Previously reported analysis showed there was no significant difference in the budget size between groups that have and do not have national affiliate organizations. The findings are summarized in the table below.
Table 40  Summary of Statistically significant differences for key Political Opportunity Structure Theory variables between organizations with and without an affiliation with a national organization.

<table>
<thead>
<tr>
<th>Variable</th>
<th>p-value</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Affiliated with National Org.</td>
</tr>
<tr>
<td>Organizational Activity Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of Organization (IRS Code)</td>
<td>0.81</td>
<td>NS</td>
</tr>
<tr>
<td>Diversity of Issues Addressed</td>
<td>0.004</td>
<td>+</td>
</tr>
<tr>
<td>Diversity of Tactics Used</td>
<td>0.012</td>
<td>+</td>
</tr>
<tr>
<td>Resource Effort for Advocacy</td>
<td>0.005</td>
<td>+</td>
</tr>
<tr>
<td>Resource Effort for Services</td>
<td>0.433</td>
<td>NS</td>
</tr>
<tr>
<td>Collaboration with Other Organizations</td>
<td>0.712</td>
<td>NS</td>
</tr>
<tr>
<td>Organization Perception Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More or Less Policy Influence</td>
<td>0.779</td>
<td>NS</td>
</tr>
<tr>
<td>Government Attitudes toward organization views</td>
<td>0.996</td>
<td>NS</td>
</tr>
<tr>
<td>Information Availability /Transparency</td>
<td>0.197</td>
<td>NS</td>
</tr>
<tr>
<td>Government More Active on Environmental Policy</td>
<td>0.388</td>
<td>NS</td>
</tr>
</tbody>
</table>

Differences are depicted with a (+) or (-) for the direction of the relations, and a NS for those comparisons that were not significant.
+ = Significantly Different and Higher Median Value
- = Significantly Different and Lower Median Value
Comparison of Political Opportunity Structure Theory Variables Between All-Volunteer Organizations and Organizations with a Combination of Paid Staff and Volunteers.

Structural groups of the movement comprised of organizations with all-volunteer staff and those with paid staff and volunteers were compared using variables associated with Political Opportunity Structure. No differences were found for variables including organization type, resources allocated to advocacy, and all of the organizations’ perceptions. Differences were found for several variables measuring the activities of organizations. The group of all-volunteer organizations report addressing a higher diversity of issues than the groups with paid staff. This may reflect the more democratic nature of all volunteer groups that seek to be inclusive of concerns from the broad base of people who donate their time to its causes. Conversely, organizations with paid staff report using a larger repertoire of tactics to influence environmental policies. All volunteer organizations also report expending a higher percent of their budgets on providing environmental service than on advocating for environmental policies. These findings are likely linked to factors associated with the higher level of professionalization that accompanies paid staff.

The findings are summarized in Table 41.
Table 41  Summary of Statistically significant differences for key Political Opportunity Structure Theory variables all-volunteer organizations and organizations with a combination of paid staff and volunteers.

<table>
<thead>
<tr>
<th>Variable</th>
<th>p-value</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>All-volunteer Org.</td>
</tr>
<tr>
<td>Organizational Activity Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of Organization (IRS Code)</td>
<td>0.06</td>
<td>NS</td>
</tr>
<tr>
<td>Diversity of Issues Addressed</td>
<td>0.004</td>
<td>+</td>
</tr>
<tr>
<td>Diversity of Tactics Used</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Resource Effort for Advocacy</td>
<td>0.136</td>
<td>NS</td>
</tr>
<tr>
<td>Resource Effort for Services</td>
<td>0.033</td>
<td>+</td>
</tr>
<tr>
<td>Collaboration with Other Organizations</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Organization Perception Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More or Less Policy Influence</td>
<td>0.805</td>
<td>NS</td>
</tr>
<tr>
<td>Government Attitudes toward organization views</td>
<td>0.430</td>
<td>NS</td>
</tr>
<tr>
<td>Information Availability/Transparency</td>
<td>0.071</td>
<td>NS</td>
</tr>
<tr>
<td>Government More Active on Environmental Policy</td>
<td>0.068</td>
<td>NS</td>
</tr>
</tbody>
</table>

Differences are depicted with a (+) or (-) for the direction of the relations, and a NS for those comparisons that were not significant.
+ = Significantly Different and Higher Median Value
- = Significantly Different and Lower Median Value
Comparisons Between the Five State Environmental Movements

A comparison of organization variables was conducted to evaluate potential differences among the five states included in this study. This evaluation directly addresses research questions 2 and 3, both of which relate to the differences in state environmental movement structures and how the state context affects these structures.

Comparative analysis is conducted for several organizational category groupings, organization characteristic variables, perception of influence variables, and a range of state context variables between states.

Summary of Group Differences for Variables Potentially Influencing the Structure of State Environmental Movements

Summaries of the findings that compare state environmental movements and various movement structures evaluated for the five less populated states in the Northeast are provided. The statistical findings from the individual group comparisons are aggregated in tables that allow for a more comprehensive consideration of the various movement structures in each state. Each of the movement structures evaluated is presented with the collection of variables indicative of Resource Mobilization Theory and Political Opportunity Structure Theory. This allows a more comprehensive look at the variables used to evaluate the similarities and differences of the organizational structures of the state environmental movements.

A summary of the comparisons of state environmental movement structures in their respective state are compared using organizational formalization with IRS recognition, affiliation with a national organization, and staff professionalization for differences in variables associated with Resource Mobilization and political opportunity structure is presented. Several social and political context variables are also considered including an environmental quality index, citizen and government
ideology indices, social capital index, legislative professionalism, total state budget level, and state natural resource budgets. Each of these variables is compared between states. Only the summary results are included here. However, the detailed comparative analysis is included in Appendix F.

The most prominent feature of this comparative analysis is the considerable uniformity across the various categorical groupings of organizations that helps to define the structure of the state environmental movements for both Resource Mobilization variables and political opportunity structure variables. This suggests there is very little difference between each of the five state environmental movements. There was one difference that should be noted; it is the statistical difference between the states with regard to whether or not they believed that they had more or less influence in the past five years.

There are mixed results for the context variables. However, they did provide some indications of differences between the social and political environments for environmental policy advocacy in the five states.

Comparison of Resource Mobilization Theory Variables Between States

A comparison of the state movements comprised of the collection of organizations in each state using variables associated with Resource Mobilization Theory shows a remarkable amount of similarity. No significant differences were found in the budget size of organizations among states. Similarly, the organizations comprising the environmental movements in each state were found to exhibit similar numbers of staff, numbers of volunteers, ratios of incorporated and unincorporated groups, and ratios of organizations with or without a national affiliation. Limited differences were only found in two of the ten sources of revenue for organizations
among state movements; revenue from government was higher in Rhode Island and foundation funding was marginally higher in Maine. In Rhode Island, the difference in government funding may be due to the state’s quasi-government support for land trusts and the extensive success of voter support for bond referendums that provide government funding for land protection.

These results show a remarkable similarity between state environmental movements in the five states with regard to key variables associated with Resource Mobilization Theory. The findings are summarized in the table below.
Table 42  Summary of Statistically significant differences for key Resource Mobilization Theory variables between the five states.

<table>
<thead>
<tr>
<th>Variable</th>
<th>State Comparison</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>p-value</td>
<td>DE</td>
</tr>
<tr>
<td>Budget Size</td>
<td>0.459</td>
<td>NS</td>
</tr>
<tr>
<td>Revenue Sources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Membership Dues</td>
<td>0.141</td>
<td>NS</td>
</tr>
<tr>
<td>Individual Donors</td>
<td>0.077</td>
<td>NS</td>
</tr>
<tr>
<td>Government: Any Level</td>
<td>0.007</td>
<td>-</td>
</tr>
<tr>
<td>Fund-raising Events</td>
<td>0.384</td>
<td>NS</td>
</tr>
<tr>
<td>Foundation Funding</td>
<td>0.049</td>
<td>-</td>
</tr>
<tr>
<td>Client Service</td>
<td>0.122</td>
<td>NS</td>
</tr>
<tr>
<td>Corporate Contributions</td>
<td>0.437</td>
<td>NS</td>
</tr>
<tr>
<td>Sale of Merchandise</td>
<td>0.299</td>
<td>NS</td>
</tr>
<tr>
<td>Legal Settlements</td>
<td>0.306</td>
<td>NS</td>
</tr>
<tr>
<td>Other Sources</td>
<td>0.534</td>
<td>NS</td>
</tr>
<tr>
<td>Number of Paid Staff</td>
<td>0.159</td>
<td>NS</td>
</tr>
<tr>
<td>Number of Volunteers</td>
<td>0.283</td>
<td>NS</td>
</tr>
<tr>
<td>Tax-exempt Organization (IRS)</td>
<td>0.390</td>
<td>NS</td>
</tr>
<tr>
<td>National Chapter or Affiliate</td>
<td>0.810</td>
<td>NS</td>
</tr>
</tbody>
</table>

Differences are depicted with a (+) or (-) for the direction of the relations, and a NS for those comparisons that were not significant.

+ = Significantly Different and Higher Median Value
- = Significantly Different and Lower Median Value
Comparison of Political Opportunity Structure Theory Variables Between States

Similar to the findings for Resource Mobilization, a comparison of the state movements comprised of the collection of organizations in each state using variables associated with Political Opportunity Structure Theory again show a remarkable amount of similarity. No significant differences were found in any of the organizational activity variables measured including tactics used, issues addressed, resource allocated for service or advocacy, other groups collaborated with, or organizations having been incorporated. Organization perceptions about their respective state governments also show little significant difference with the exception of whether the organizations comprising their respective state movement collectively feel they have more or less influence. Maine and Delaware report having less influence, while the other three states report having slightly more. In Maine, this appears to be directly related to the new governor who has openly expressed strong disdain for environmental efforts (Schaffer, 2016). Delaware’s perceptions of having less influence may be related to the dominance of economic considerations over environmental protection issues resulting from the recent loss of several large manufacturing industries, leading to a pro-business and anti-environmental constraint political environment (Boyer & Ratledge, 2016).

These results show a remarkable similarity between state environmental movements in the five states with regard to key variables associated with Political Opportunity Structure Theory. The findings are summarized in the table below.
Table 43  Summary of Statistically significant differences for key political opportunity theory variables between the five states.

<table>
<thead>
<tr>
<th>Variable</th>
<th>State Comparison</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>p-value</td>
<td>DE</td>
</tr>
<tr>
<td>Organizational Activity Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of Organization (IRS Code)</td>
<td>0.207</td>
<td>NS</td>
</tr>
<tr>
<td>Diversity of Issues Addressed</td>
<td>0.297</td>
<td>NS</td>
</tr>
<tr>
<td>Diversity of Tactics Used</td>
<td>0.264</td>
<td>NS</td>
</tr>
<tr>
<td>Resource Effort for Advocacy</td>
<td>0.318</td>
<td>NS</td>
</tr>
<tr>
<td>Resource Effort for Services</td>
<td>0.054</td>
<td>NS</td>
</tr>
<tr>
<td>Collaboration with Other Organizations</td>
<td>0.219</td>
<td>NS</td>
</tr>
<tr>
<td>Organization Perception Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More or Less Policy Influence</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Government Attitudes toward organization views</td>
<td>0.782</td>
<td>NS</td>
</tr>
<tr>
<td>Information Availability/Transparency</td>
<td>0.183</td>
<td>NS</td>
</tr>
<tr>
<td>Government More Active on Environmental Policy</td>
<td>0.740</td>
<td>NS</td>
</tr>
</tbody>
</table>

Differences are depicted with a (+) or (-) for the direction of the relations, and a NS for those comparisons that were not significant.
+ = Significantly Different and Higher Median Value
- = Significantly Different and Lower Median Value
Comparison of Socio-Political Context Variables Between States

A summary of the state differences for state context variables closely associated with Political Opportunity Structure, particularly the state sociopolitical context, are included in the table below.

These variables provide mixed results indicating some significant differences between the social and political environments for environmental policy advocacy in the five states. Analysis shows some statistical differences between the states for environmental measures, political ideologies, legislative professionalism, and the size of state budgets. Several of these differences were strong such as the significantly higher level of legislative professionalism in Delaware, the larger size of the natural resources budget in Maine, and, the lower level of the natural resources budget in Rhode Island.

These results for the state context variables appear to vary more than the results found for comparisons of state environmental movements for the other variables associated with Resource Mobilization and Political Opportunity Structure. The findings are summarized in the table below.
Table 44 Summary of Statistically significant differences for selected state context variables between the five states.

<table>
<thead>
<tr>
<th>Variable</th>
<th>DE</th>
<th>ME</th>
<th>NH</th>
<th>RI</th>
<th>VT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Env. Quality Index</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air EQI</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Water EQI</td>
<td>NS</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Land EQI</td>
<td>NS</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>NS</td>
</tr>
<tr>
<td>Sociodemographic EQI</td>
<td>NS</td>
<td>+</td>
<td>NS</td>
<td>-</td>
<td>NS</td>
</tr>
<tr>
<td>Built EQI</td>
<td>-</td>
<td>NS</td>
<td>NS</td>
<td>+</td>
<td>NS</td>
</tr>
<tr>
<td>Overall EQI</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Political Ideology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citizen Ideology</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Government Ideology</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Social Capital</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Legislative Professionalism</td>
<td>++</td>
<td>-</td>
<td>--</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>State Budget</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total State Budget</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Natural Resource Budget</td>
<td>+</td>
<td>++</td>
<td>-</td>
<td>--</td>
<td>+</td>
</tr>
</tbody>
</table>

Differences are depicted with a (+) or (-) for the direction of the relations, and a NS for those comparisons that were not significant.

+ = Significantly Different and Higher Median Value
- = Significantly Different and Lower Median Value

Modelling

Several models are utilized to evaluate the explanatory power of Resource Mobilization Theory and Political Opportunity Structure Theory for state environmental movements. Two types of statistical regression models are used including linear probability models and linear multiple regression models. Factor analysis is also used as part of the data reduction techniques to develop the
independent variables from the large set of advocacy tactics based on the underlying constructs of the data.

These models are utilized to explore the extent to which patterns of strategies and tactics utilized and patterns of issues addressed predict membership of structural groups found in the state environmental movements. These independent variables of patterns of activities are developed using exploratory factor analysis to identify the underlying constructs of the extensive set of survey responses associated with the issues addressed and the tactics utilized.

A linear probability model or logistic regression, is used to evaluate the grouping variables of movement structure from theoretical assumption utilized to develop the organizational categories of state environmental movement groups. The linear probability models are utilized due to the dependent group variables being categorical data. These models analyze the expected probability of group membership. They are simply the application of ordinary least squares (OLS) to binary and multinomial outcomes instead of continuous outcomes. Linear probability models allow the testing of models to predict categorical outcome. For the dependent variable, organizations are grouped based on key variables associated with Resource Mobilization. These structural groupings include organization formalization (IRS nonprofit status), human resource composition (professional staffing or all-volunteer), affiliation with a national organization, and organizational budget levels (above and below $50K). These groupings include 1) formal IRS nonprofit organizations and informal groups, 2) organizations affiliated or not affiliated with a national environmental organization, 3) all-volunteer organizations or organizations with a combination of paid staff and volunteers, and 4) grouping of organizations with budgets above and below $50,000.
Linear multiple regression models are utilized to explore the relationship of two dependent variables, the percent of effort utilized for policy advocacy and the percent of effort utilized providing environmental services to explain the tactics and strategies utilized as well as the effect of issues addressed. As such, the linear regression analysis is utilized to explore how well the independent variables explain the percent of advocacy or service effort utilized by environmental organizations.

**Linear Probability Models**

A generalized linear model is utilized to assess the impact of patterns of activity and interests of organizations on the likelihood that the varying categories of state environmental movement groups would be assigned to these groups. The groups analyzed include those with and without IRS recognition as a nonprofit organization, those with and without a formal affiliation with a national nonprofit organization, and organizations that are all-volunteer or those with a combination of paid staff and volunteers. Each of these groups is used as the dependent variable in separate models.

For each of the three different dependent variable groupings, a separate direct logistic regression is performed to evaluate the impact of the tactics utilized by the groups and the issues of interest or priority for their work. Each model contains nine independent variables of activity and interest patterns comprised of the factor analysis components from the analysis of the tactics used and the issues addressed by organizations (Legislative Action, Research & Information Sharing, Grassroots Advocacy, Science and Digital Information Sharing, Political Action, Accountability Demand, Habitat Conservation Orientation, Health and Environmental Protection Orientation, and Energy and Climate Change Orientation).
The logistic model equation utilized is presented below.

\[ \text{logit}(p_{\text{groups}}) = \beta_0 + \beta_1 \text{legis} + \beta_2 \text{research} + \beta_3 \text{grassroots} + \beta_4 \text{sharing} + \beta_5 \text{political} \\
+ \beta_6 \text{accountability} + \beta_7 \text{conserv} + \beta_8 \text{protect} + \beta_9 \text{climate} + \epsilon \]

Impact of Tactics and Issues Factors on Movement Structures Based on Formal vs. Informal Organizations

The first groups analyzed are the groups of organizations with and without IRS tax exempt status. The dependent variable is organization incorporation, or whether the group is one of those with IRS recognition as an incorporated nonprofit organization or an unincorporated informal organization. The full model containing all predictors was not statistically significant, \( \chi^2 (9, \ N = 219) = 11.933, p = .217 \), indicating that the model could not distinguish between the IRS tax-exempt nonprofits and the informal groups based on the tactics used or the issue orientation of the organizations.

Impact of Tactics and Issues Factors on Movement Structures Based on Affiliation with National Organization

Analysis of the dependent variable grouping by affiliation with a national organization is significant, \( \chi^2 (9, \ N = 221) = 21.978, p = .009 \), indicating that the model could distinguish between the two groups. The model as a whole explains between 9.5% (Cox and Snell R square) and 15.1% (Nagelkerke R squared) of the variance in groups and correctly classifies 81.4 % of cases.

As shown in Table 45, only three of the independent variables make a unique statistically significant contribution to the model (legislative action tactics, research and information-sharing tactics, and energy and climate issue orientation). The strongest predictor of being in a group with a formal affiliation to a national
organization is using tactics associated with legislative action tactics, recording an odds ratio of 1.76. This indicates that those in the group of organizations with a national affiliation are almost twice as likely to use legislative action tactics as those that have no national affiliate, controlling for all other factors in the model. The predictor for the use of research and information sharing tactics indicates that those using these tactics are .56 times less likely to be affiliated with a national organization. Also, organizations with a national affiliate are 1.54 times more likely to be oriented toward issues related to climate and energy.

Table 45  Logistic Regression Predicting Likelihood of belonging to Environmental Movement Group with an affiliation to a national environmental organization

<table>
<thead>
<tr>
<th>tactic</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Sig.</th>
<th>Odds Ratio</th>
<th>95.0% C.I. for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislative Action Tactics</td>
<td>.567</td>
<td>.234</td>
<td>5.892</td>
<td>.015</td>
<td>1.763</td>
<td>1.115, 2.787</td>
</tr>
<tr>
<td>Research &amp; Information Sharing Tactics</td>
<td>-.586</td>
<td>.228</td>
<td>6.610</td>
<td>.010</td>
<td>.557</td>
<td>.356, .870</td>
</tr>
<tr>
<td>Grassroots Advocacy Tactics</td>
<td>-.016</td>
<td>.225</td>
<td>.005</td>
<td>.944</td>
<td>.984</td>
<td>.633, 1.530</td>
</tr>
<tr>
<td>Science and Digital Information Sharing Tacs</td>
<td>-.013</td>
<td>.227</td>
<td>.003</td>
<td>.955</td>
<td>.987</td>
<td>.632, 1.541</td>
</tr>
<tr>
<td>Political/Electoral Action Tactics</td>
<td>.212</td>
<td>.202</td>
<td>1.106</td>
<td>.293</td>
<td>1.236</td>
<td>.833, 1.835</td>
</tr>
<tr>
<td>Accountability Demand Tactics</td>
<td>-.275</td>
<td>.225</td>
<td>1.495</td>
<td>.221</td>
<td>.760</td>
<td>.489, 1.180</td>
</tr>
<tr>
<td>Habitat Conservation Orientation</td>
<td>.292</td>
<td>.234</td>
<td>1.551</td>
<td>.213</td>
<td>1.339</td>
<td>.846, 2.120</td>
</tr>
<tr>
<td>Health and Environmental Protection Orientation</td>
<td>-.145</td>
<td>.194</td>
<td>.557</td>
<td>.456</td>
<td>.865</td>
<td>.591, 1.266</td>
</tr>
<tr>
<td>Energy and Climate Change Orientation</td>
<td>.432</td>
<td>.205</td>
<td>4.433</td>
<td>.035</td>
<td>1.540</td>
<td>1.030, 2.303</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.608</td>
<td>.198</td>
<td>65.840</td>
<td>.000</td>
<td>1.200</td>
<td></td>
</tr>
</tbody>
</table>

χ² (9, N = 221) = 21.978, p = .009

177
Impact of Tactics and Issues Factors on Movement Structures Based on Human Resources

The dependent variable groups of all-volunteer organizations and organizations with a combination of paid staff and volunteers are also explored using logistic regression. The full model containing all predictors is statistically significant, $\chi^2 (9, N = 218) = 58.72$, $p < .001$, indicating that the model was able to distinguish between the all-volunteer staff group of organizations and the organizations with a combination of paid staff and volunteers. The model as a whole explained between 23.6% (Cox and Snell R square) and 31.5% (Nagelkerke R squared) of the variance in groups, and correctly classified 72% of cases.

As shown in Table 46, only three of the independent variables make a unique statistically significant contribution to the model (research and information sharing, science and digital information sharing, and conservation oriented organization). The strongest predictor of being in the groups or organizations with a combination of paid staff and volunteers is using the strategies for research and information sharing, recording an odds ratio of 1.97. This indicates that those in the group of organization with paid staff are twice as likely to use these tactics as all-volunteer organizations. The predictor for using strategies for science and digital information sharing tactics is almost as strong and indicates that those using these tactics are 1.58 times more likely to be in the group with a combination of paid staff and volunteers. Additionally, organizations oriented toward habitat conservation issues are 1.70 times as likely to be in the group with paid staff as they are to be in the all-volunteer organization group.
Table 46  Logistic Regression Predicting Likelihood of belonging to Environmental Movement Group with both Paid Staff & Volunteers

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Odds Ratio</th>
<th>95.0% C.I. for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>Legislative Action Tactics</td>
<td>.163</td>
<td>.220</td>
<td>.546</td>
<td>1</td>
<td>.460</td>
<td>1.177</td>
<td>.764</td>
</tr>
<tr>
<td>Research &amp; Information Sharing Tactics</td>
<td>.686</td>
<td>.192</td>
<td>12.784</td>
<td>1</td>
<td>.000</td>
<td>1.986</td>
<td>1.363</td>
</tr>
<tr>
<td>Grassroots Advocacy Tactics</td>
<td>-.231</td>
<td>.205</td>
<td>1.264</td>
<td>1</td>
<td>.261</td>
<td>.794</td>
<td>.531</td>
</tr>
<tr>
<td>Science and Digital Information Sharing Tactics</td>
<td>.455</td>
<td>.203</td>
<td>5.008</td>
<td>1</td>
<td>.025</td>
<td>1.576</td>
<td>1.058</td>
</tr>
<tr>
<td>Political/Electoral Action Tactics</td>
<td>.001</td>
<td>.216</td>
<td>.000</td>
<td>1</td>
<td>.997</td>
<td>1.001</td>
<td>.655</td>
</tr>
<tr>
<td>Accountability Demand Tactics</td>
<td>-.197</td>
<td>.175</td>
<td>1.265</td>
<td>1</td>
<td>.261</td>
<td>.822</td>
<td>.583</td>
</tr>
<tr>
<td>Habitat Conservation Orientation</td>
<td>.527</td>
<td>.201</td>
<td>6.877</td>
<td>1</td>
<td>.009</td>
<td>1.694</td>
<td>1.142</td>
</tr>
<tr>
<td>Health and Environmental Protection Orientation</td>
<td>-.095</td>
<td>.162</td>
<td>.345</td>
<td>1</td>
<td>.557</td>
<td>.909</td>
<td>.662</td>
</tr>
<tr>
<td>Energy and Climate Change Orientation</td>
<td>-.042</td>
<td>.161</td>
<td>.069</td>
<td>1</td>
<td>.793</td>
<td>.959</td>
<td>.699</td>
</tr>
<tr>
<td>Constant</td>
<td>.190</td>
<td>.159</td>
<td>1.417</td>
<td>1</td>
<td>.234</td>
<td>1.209</td>
<td></td>
</tr>
</tbody>
</table>

$\chi^2 (9, N = 218) = 58.72, p < .001$

Impact of Tactics and Issues Factors on Movement Structures Based on Annual Budgets Above and Below $50,000

Finally, the dependent variable groups of organizations with annual budgets less than $50,000 and those with $50,000 or greater are analyzed. The full model containing all predictors is statistically significant, $\chi^2 (9, N = 221) = 64.621, p < .001$, indicating that the model was able to distinguish between the grouping of budgets above and below $50,000. The model as a whole explained between 25.4% (Cox and Snell R square) and 33.9% (Nagelkerke R squared) of the variance in groups and correctly classifies 71% of cases.
As shown in Table 47, only three of the independent variables make a unique statistically significant contribution to the model (research and information sharing, science and digital information sharing, and health and environmental organization). The research and information sharing and the science and digital information sharing variables indicate that for every additional use of these strategies the organization is almost twice as likely to have a budget of $50,000 or more (Odds Ratio 1.98 and 1.86 respectively). However, those organizations working on issues associated with health and environmental protection are .688 times less likely to have a budget of $50,000 or more.

Table 47  Logistic Regression Predicting Likelihood of Belonging to Environmental Movement Group with Annual Budget of $50,000 or Greater

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Odds Ratio</th>
<th>95.0% C.I. for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislative Action Tactics</td>
<td>.235</td>
<td>.222</td>
<td>1.119</td>
<td>1</td>
<td>.290</td>
<td>1.265</td>
<td>.235 .222</td>
</tr>
<tr>
<td>Research &amp; Information Sharing Tactics</td>
<td>.682</td>
<td>.193</td>
<td>12.532</td>
<td>1</td>
<td>.000</td>
<td>1.979</td>
<td>.682 .193</td>
</tr>
<tr>
<td>Grassroots Advocacy Tactics</td>
<td>-.157</td>
<td>.225</td>
<td>.485</td>
<td>1</td>
<td>.486</td>
<td>.855</td>
<td>-.157 .225</td>
</tr>
<tr>
<td>Science and Digital Information Sharing</td>
<td>.634</td>
<td>.214</td>
<td>8.776</td>
<td>1</td>
<td>.003</td>
<td>1.885</td>
<td>.634 .214</td>
</tr>
<tr>
<td>Political/Electoral Action Tactics</td>
<td>-.273</td>
<td>.180</td>
<td>2.310</td>
<td>1</td>
<td>.129</td>
<td>.761</td>
<td>-.273 .180</td>
</tr>
<tr>
<td>Accountability Demand Tactics</td>
<td>-.131</td>
<td>.182</td>
<td>.521</td>
<td>1</td>
<td>.470</td>
<td>.877</td>
<td>-.131 .182</td>
</tr>
<tr>
<td>Habitat Conservation Orientation</td>
<td>.294</td>
<td>.204</td>
<td>2.073</td>
<td>1</td>
<td>.150</td>
<td>1.341</td>
<td>.294 .204</td>
</tr>
<tr>
<td>Health and Environmental Protection</td>
<td>-.374</td>
<td>.166</td>
<td>5.085</td>
<td>1</td>
<td>.024</td>
<td>.688</td>
<td>-.374 .166</td>
</tr>
<tr>
<td>Orientation</td>
<td>.042</td>
<td>.161</td>
<td>.069</td>
<td>1</td>
<td>.793</td>
<td>1.043</td>
<td>.761 1.430</td>
</tr>
<tr>
<td>Energy and Climate Change Orientation</td>
<td>-.190</td>
<td>.159</td>
<td>1.417</td>
<td>1</td>
<td>.234</td>
<td>.827</td>
<td></td>
</tr>
</tbody>
</table>

$\chi^2 (9, N = 221) = 64.621, p < .001$
Linear Regression Models

Data were analyzed using a direct-entry (standard) multiple regression analysis (MRA). Factor Scores for Legislative Action, Research and Information Sharing, Grassroots Advocacy, Science and Digital Information Sharing, Political Action, and Accountability served as predictors. Survey response variables for each organizations percent of effort spent advocating for environmental policy and each organizations percent of effort spent providing environmental services are each used as criterion in different models.

Advocacy Effort Model for Tactics and Issue Predictors

A direct-entry (standard) multiple regression analysis (MRA) was used to analyze how well tactics utilized and issues addressed predict the reported percent of organizational resources expended on policy advocacy. Preliminary analysis was conducted to ensure there was no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity.

Advocacy Effort = \( \beta_0 + \beta_1\text{legis} + \beta_2\text{research} + \beta_3\text{grassroots} + \beta_4\text{sharing} + \beta_5\text{political} + \beta_6\text{accountability} + \beta_7\text{conserv} + \beta_8\text{protect} + \beta_9\text{climate} + \varepsilon \)

The overall association was statistically significant, \( F (9, 179) = 12.187, p = .001 \). This has a large effect size of .65. As shown in Table 49, only factors for grassroots advocacy and accountability demand make statistically significant contributions to the percent of resources allocated to advocacy (\( p=.003 \) & \( p=.001 \) respectively). Results showed that accountability demand make the largest unique contribution (\( b=7.01 \)) and that its predictive ability is over twice that of grassroots advocacy strategies (i.e. \( .074/.033 = 2.24 \)). Effect sizes are calculated for the two predictors using Cohens (1998) \( f^2 \), where values of .02 represent a small effect, values of .15 equal a medium effect, and values of .35 denote a large effect. Results show that
accountability demand has a medium to large effect size ($f^2 = .19$) in predicting the percent of resources spent on advocacy, and that grassroots strategies that were used had a small to medium effect size ($f^2 = .08$).

Table 48  Means, Standard Deviation, and Bivariate Correlations for Advocacy Effort and the Predictors

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advocacy Effort</td>
<td>15.46</td>
<td>24.79</td>
<td>.43</td>
<td>.16</td>
<td>.47</td>
<td>.26</td>
<td>.28</td>
<td>.49</td>
<td>.40</td>
<td>-.16</td>
<td>.08</td>
</tr>
<tr>
<td>1. Legislative Action</td>
<td>0.10</td>
<td>1.04</td>
<td>.39</td>
<td>.45</td>
<td>.45</td>
<td>.42</td>
<td>.39</td>
<td>.45</td>
<td>-.09</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>2. Research &amp; Information Sharing</td>
<td>0.08</td>
<td>0.98</td>
<td>.24</td>
<td>.32</td>
<td>.06</td>
<td>.10</td>
<td>.44</td>
<td>-.09</td>
<td>.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Grassroots Advocacy</td>
<td>0.04</td>
<td>1.06</td>
<td>.48</td>
<td>.28</td>
<td>.32</td>
<td>.49</td>
<td>-.15</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Science and Digital Information Sharing</td>
<td>0.05</td>
<td>1.01</td>
<td>.16</td>
<td>.17</td>
<td>.37</td>
<td>-.07</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Political Action</td>
<td>0.03</td>
<td>1.09</td>
<td>.26</td>
<td>.23</td>
<td>-.16</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Accountability Demand</td>
<td>0.04</td>
<td>1.07</td>
<td>.32</td>
<td>-.08</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Conservation Oriented</td>
<td>0.06</td>
<td>0.96</td>
<td>-.05</td>
<td>.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Environmental Protection Oriented</td>
<td>-0.06</td>
<td>0.97</td>
<td></td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Energy &amp; Climate Oriented</td>
<td>0.08</td>
<td>0.98</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: M = mean, SD = standard deviation, N = 179.
Table 49  Regression Analysis Summary for Variables Predicting Percent of Effort on Advocacy

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>b</th>
<th>sr2</th>
<th>f2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Legislative Action</td>
<td>3.69</td>
<td>1.97</td>
<td>0.15</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>2. Research &amp; Information Sharing</td>
<td>-1.56</td>
<td>1.81</td>
<td>-0.06</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>3. Grassroots Advocacy</td>
<td>5.49</td>
<td>1.81</td>
<td>0.23*</td>
<td>0.05</td>
<td>0.08</td>
</tr>
<tr>
<td>4. Science and Digital Information</td>
<td>-0.42</td>
<td>1.79</td>
<td>-0.02</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Sharing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Political Action</td>
<td>0.77</td>
<td>1.55</td>
<td>0.03</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>6. Accountability Demand</td>
<td>7.07</td>
<td>1.56</td>
<td>0.31**</td>
<td>0.11</td>
<td>0.19</td>
</tr>
<tr>
<td>7. Conservation Oriented</td>
<td>3.50</td>
<td>2.01</td>
<td>0.14</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>8. Environmental Protection Oriented</td>
<td>-2.23</td>
<td>1.58</td>
<td>-0.09</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>9. Energy &amp; Climate Oriented</td>
<td>0.95</td>
<td>1.58</td>
<td>0.04</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Constant</td>
<td>14.31</td>
<td>1.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: $R^2 = .231$ (N = 380, p = .001), sr2 = squared semi-partial coefficient, f2 = Cohen’s (1988) effect size statistic for multiple regression analyses. * p = .05, ** p = .01, *** p = .001.

Service Provision Effort Model for Tactics and Issue Predictors

Similar to the analysis of advocacy effort, a direct-entry (standard) multiple regression analysis (MRA) was used to analyze how well tactics utilized and issues addressed predict the reported percent of organizational resources expended on providing environmental services. Preliminary analysis was conducted to ensure there was no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity.

Service Effort = $\beta_0 + \beta_1\text{legis} + \beta_2\text{research} + \beta_3\text{grassroots} + \beta_4\text{sharing} + \beta_5\text{political} + \beta_6\text{accountability} + \beta_7\text{conserv} + \beta_8\text{protect} + \beta_9\text{climate} + \epsilon$

The overall association was statistically significant, $F (9, 195) = 5.866, p = .001$. This has a medium-large effect size of .29. As seen in Table 51, only factors for
grassroots advocacy, accountability demand, and environmental protection issue orientation made statistically significant contributions to the allocation of resources to providing services (p=.031, p=.017, & p=.001 respectively). Results showed that being an environmental protection issue oriented organization had the largest unique contribution (b=9.622). Significant contributions were also made by use of grassroots tactics (b=-6.16) and accountability demand (b=-6.96). The predictive ability of environmental protection orientation was three and a half time that of grassroots advocacy strategies (i.e. .069/.020 = 3.45) and almost four times that of accountability demand strategies (.069/.025 = 3.76). Effect sizes were calculated for the three predictors using Cohens (1998) $f^2$, where values of .02 represent a small effect, values of .15 equal a medium effect, and values of .35 denote a large effect. Results showed that accountability demand had a medium to large effect size ($f^2 = .032$) in predicting the percent of resources spent providing environmental services and that grassroots strategies used had a medium to effect size ($f^2 = .025$). Having an issue orientation of health and environmental protection had a large effect size ($f^2=.088$).
Table 50  Means, Standard Deviation, and Bivariate Correlations for Effort Providing Environmental Services and the Predictors

| Variable                        | M    | SD   | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |
|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Service Effort                  | 61.62| 35.04| -26  | .07  | .31  | .16  | .16  | .29  | .20  | .30  | -.08 |      |
| 1. Legislative Action           | 0.02 | 1.01 | .45  | .46  | .41  | .42  | .38  | .48  | -.10 | .05  |      |      |
| 2. Research & Information Sharing | 0.05 | 1.01 | .25  | .32  | .07  | .11  | .44  | -.09 | .17  |      |      |      |
| 3. Grassroots Advocacy         | 0.04 | 1.04 | .48  | .29  | .30  | .46  | -.12 | .00  |      |      |      |      |
| 4. Science and Digital Information Sharing | 0.06 | 1.03 | .14  | .15  | .34  | -.03 | .09  |      |      |      |      |      |
| 5. Political Action            | 0.02 | 1.05 | .25  | .20  | -.16 | .04  |      |      |      |      |      |      |
| 6. Accountability Demand       | -0.01| 1.03 | .32  | -.08 | .04  |      |      |      |      |      |      |      |
| 7. Conservation Oriented       | -0.02| 0.99 | -.01 | .20  |      |      |      |      |      |      |      |      |
| 8. Environmental Protection Oriented | -0.02| 0.98 |      |      | .00  |      |      |      |      |      |      |      |
| 9. Energy & Climate Oriented   | 0.08 | 0.96 |      |      |      |      |      |      |      |      |      |      |

Note: M = mean, SD = standard deviation, N = 195.
Table 51  Regression Analysis Summary for Variables Predicting Percent of Effort Providing Environmental Services

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>b</th>
<th>sr2</th>
<th>f2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Legislative Action</td>
<td>-4.07</td>
<td>3.17</td>
<td>-0.12</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>2. Research &amp; Information Sharing</td>
<td>3.46</td>
<td>2.73</td>
<td>0.10</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>3. Grassroots Advocacy</td>
<td>-6.16</td>
<td>2.83</td>
<td>-0.18</td>
<td>0.02</td>
<td>0.03</td>
</tr>
<tr>
<td>4. Science and Digital Information Sharing</td>
<td>-0.35</td>
<td>2.65</td>
<td>-0.01</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>5. Political Action</td>
<td>1.29</td>
<td>2.46</td>
<td>0.04</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>6. Accountability Demand</td>
<td>-5.96</td>
<td>2.47</td>
<td>-0.18</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>7. Conservation Oriented</td>
<td>-1.27</td>
<td>2.95</td>
<td>-0.04</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>8. Environmental Protection Oriented</td>
<td>9.62</td>
<td>2.37</td>
<td>0.27</td>
<td>0.08</td>
<td>0.08</td>
</tr>
<tr>
<td>9. Energy &amp; Climate Oriented</td>
<td>-2.88</td>
<td>2.46</td>
<td>-0.08</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Constant</td>
<td>62.16</td>
<td>2.28</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: R2 = .231 (N = 380, p = .001), sr2 = squared semi-partial coefficient, f2 = Cohen’s (1988) effect size statistic for multiple regression analyses. * p = .05, ** p = .01, *** p = .001.

In order to explore how effort is influenced by resources, data were analyzed using a direct-entry (standard) multiple regression analysis (MRA). Annual budget, number of total staff, having paid staff or being an all-volunteer organization, collaboration, affiliation with a national organization, and IRS nonprofit status served as predictors. Survey response variables for each organization’s percent of effort spent advocating for environmental policy and the organization’s percent of effort spent providing environmental services are each used as criterion in different models.
Advocacy Effort Model for Resource Predictors

A direct-entry (standard) multiple regression analysis (MRA) was used to analyze how well the resource and formalization variables predict the reported percent of organizational resources expended on policy advocacy. Preliminary analysis was conducted to ensure there was no violation of assumptions of normality, linearity, multicollinearity and homoscedasticity.

Advocacy Effort = \beta_0 + \beta_1 \text{budget} + \beta_2 \text{totalstaff} + \beta_3 \text{paid-volunteer} + \beta_4 \text{nonprofit}
+ \beta_5 \text{collaboration} + \beta_6 \text{national-aff} + \epsilon

The overall association was not significant, \( F (6, 236) = 1.256, p = .279 \). The model did not show that advocacy effort could be predicted by the resource variables.

Service Provision Effort Model for Resource Predictors

Similar to the analysis of advocacy effort, a direct-entry (standard) multiple regression analysis (MRA) was used to analyze how well the resource variables predict the reported percent of organizational resources expended on providing environmental services. Preliminary analysis was conducted to ensure there was no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity.

Service Effort = \beta_0 + \beta_1 \text{budget} + \beta_2 \text{totalstaff} + \beta_3 \text{paid-volunteer} + \beta_4 \text{nonprofit}
+ \beta_5 \text{collaboration} + \beta_6 \text{national-aff} + \epsilon

The overall association was not significant, \( F (6, 257) = .733, p = .623 \). The model did not show that the percent of effort spent providing services could be predicted by the resource variables.
Summary

In this chapter, data presented indicate that there is considerable variability among the environmental organizations that collectively make up the environmental movements in the five states selected for this study. We also explore the similarity and differences between organizations working in the states and various institutional groupings of the structure of environmental movements. While differences are observed, there is also a great deal of similarity. In fact, the high level of similarity is of interest, as it may indicate a limited potential for Resource Mobilization or Political Opportunity Structure theories to provide strong explanations of the structure of environmental organization in small states. This potential limitation was also indicated by the regression analysis.

Chapter 6 includes these results described above and what they may say about the structure of environmental organizations, as well as the implications for public policy.
Chapter 6

DISCUSSION

Introduction

The U.S. Environmental Movement has been recognized as including a variety of environmental organizations, ideologies, and approaches (Goettlieb, 1997; Silvera 2001; Bosso, 2005). One of the most intriguing characteristics of the environmental movement has been its diversity of structure. The enduring nature of the environmental movement has been attributed to its diversity of groups and organizations that has allowed for a broad and changing penetration into different socioeconomic and cultural groups, increasing system reliability with redundancy and adaptability due to its diversity of purpose (Roots, 1999; Shutkin, 2000). The organizational diversity that has been associated with the national environmental movement also appears in the collective environmental organizations from the five states included in this study. These structures were theoretically expected to be influenced and explained by the mainstream social movement theories of Resource Mobilization and Political Opportunity Structure. However, the extent to which the structures are explained by these social movement theories in this study was limited.

Resource Mobilization Theory is well established as a model for understanding advocacy involvement by environmental organizations based on their ability to gain control of the resources necessary to allow groups to collectively mobilize and take action (Jenkins, 1983; Zald & McCarthy, 1987; Mosley, 2010). The theory’s focus is on organizational features and resources (Van Stekelenburg & Klandermans, 2009).
Movements are extensions of collective actions that form due to long-term changes in group resources, organization, and opportunities (Jenkins, 1983; Jenkins & Perrow, 1978). In many respects, the mobilization of resources is considered a prerequisite for collective action on environmental issues and policy.

Political Opportunity Structure Theory argues that social movements are affected by political opportunities, and that these opportunities determine their level of success or failure (Tarrow, 1994). The theory highlights that once organizational resources are secured, the context for policy activities influences how these resources are utilized. Activists do not choose their goals, timing, and strategies in a vacuum, but they consider the opportunities presented to them within the larger political environment. (Meyers, 2004; Jenkins, 1983). As such, it is expected that the issues addressed, tactics utilized, and perceived influence affect the collective actions of environmental groups that comprise local environmental movements. To evaluate the explanatory power of Political Opportunity Structure Theory, the issues addressed, the tactics used, and the organizational perception variables related to the local political context for environmental policy action are considered.

The diversity of organizational characteristics found in the five states in this study provides data to evaluate how well Resource Mobilization and Opportunity Structure Theory fit as models for understanding environmental movements in small, less populated states. Variables associated with each of these theories are used to examine environmental movements in the five small states selected for this study. First, the collectives of all organizations that comprise the state environmental movements are compared based on the factors from each theory. Organizations are then grouped into organizational categories of theoretically derived structural groups to analyze how these groupings differ in terms of a wide range of variables with the
thematic dimensions affecting movements. These categories and dimensions of movements are identified based on a review of the literature. Each dimension is associated with either Resource Mobilization Theory or political opportunity structure (see pages 55-56). Based on these considerations and the data collected in the survey of organizations, environmental movements in small states are grouped by structural characteristics including formal IRS recognition, budget size, existence of paid staff, and affiliation with a national organization. These groupings are subsequently compared and evaluated using variables associated with Political Opportunity Structure Theory.

The theoretical concepts associated with these movement theories are used to select organizational categories to group organizations and conduct comparative analysis to evaluate the extent to which they represent structures within the small state environmental movements. Resource Mobilization dimensions were expected to influence the structure of movements including fiscal, staff, and organizational resources. Key variables associated with these dimensions include annual budgets, number of paid staff, number of volunteers, formal IRS nonprofit tax status, and formal affiliation with a national organization (including both franchise and nationally owned chapters). Political opportunity dimensions were expected to influence the structure of movements including state political culture, integration/fragmentation of the policy process, lobbying and transparency, and social capital. Key variables associated with these dimensions that were operationalized included organization type, issues addressed, tactics utilized, effort for advocacy or service, organization perception of influence. They also included state context variables for environmental quality, political ideology, social capital, legislative professionalism, and budget.
This chapter discusses the diversity and the structure found in the environmental movement of the five small, less populated states. It begins by discussing the collective small state environmental movements and the extent of variation that helps characterize it. It then considers several structural groupings of this collective movement based on organizational categories. The groups are used to compare these organizational categories with variables associated with the thematic dimensions previously described in Chapter 2 (see pages 55-56). These analyses seek to describe the structure of the environmental movement in five small states and how the structure may vary across the overall environmental movements that work within the states. The extent to which this overall movement varies in size, tactics used, and strategies used to influence environmental policy are also discussed.

The comparison between the individual state movements comprised of organizations working in each of the five states is then discussed. Is there a significant difference in the way state movements structure themselves? Do they vary significantly in size and tactics used to influence state environmental policy? The discussion also considers the factors that account for any differences in the environmental movements in the five small Northeastern states including factors associated with both Resource Mobilization Theory and Political Opportunity Structure Theory.

At the close of this chapter, consideration is given to the influence and role of the state environmental movement on policy development based on organizational perceptions and various theoretical assumptions. This is used to consider the potential implications of these findings for environmental policy.
Variation in the Size, Tactics Utilized, and Goals of Collective Environmental Movement Groups from All Five States

Organizational diversity is prominent among the environmental organizations based in the five Northeastern states included in this study with regard to their size and resources and, to a lesser extent, their organization types. The organizations range from having very small or no annual budget to budgets in the millions of dollars. They also exhibit a wide range in the number of paid staff and volunteers with about half of the organizations being all-volunteer groups.

Overwhelmingly, the groups have become incorporated under the U.S. Tax Code; with about 82% being IRS tax-exempt nonprofit organizations. Seventy-seven percent (77%) of the organizations are IRS 501(c)(3) charitable organizations. Only 15% are informal local environmental groups without any IRS tax-exempt status. As a whole, the environmental movement organizations appear to have matured, moving toward more formal organizational structures and professionalism. Consistent with Bosso’s findings on national environmental groups concentrated in the U.S. Capitol, many of the state level environmental organizations appear to be “amateurs no more” (Bosso, 2005, p. 147). Many of the state organizations are now highly professionalized interest groups with limited spontaneity and space to bring in discontents that often bring a heightened consciousness of a particular environmental issue. While some groups may still be amateurs, the collective group of organizations appears to be moving toward more professionalization with formal organizational structure. Yet half of these groups have less annual revenue than the IRS Form 990 tax filing threshold of $50,000, raising questions of whether they have the resources required to sustain policy campaigns and have significant influence on state environmental policy making. However, the collective contributions of the many
organizations may have a synergistic effect allowing for more significant impact regardless of whether a group is formally a nonprofit or not. The groups surveyed collectively work on a broad diversity of issues, use a wide range of tactics and strategies, and collaborate extensively.

Diversity of Issues

The broad issues areas addressed by organizations ranged from a very small number of one issue organizations to those seeking to influence all 12 issue areas included in the survey. On average, the organizations report that they seek to address six different issue areas. The issue areas most frequently reported as being addressed include land protection and conservation, wildlife protection, outdoor recreation, land use and development, pollution abatement, and climate change. Historic origins of the environmental movement appear to still influence the preference of issues addressed, with the most frequently addressed issues related to more traditional early movement issues focused on land conservation and nature preservation. There are fewer organizations focusing on environmental protection and health related issues or issues associated with the emerging concerns of energy and climate. This may be linked to some of the deeper ideological underpinnings of those involved in environmental organizations (Dunlop & Mertig, 1992, Bosso, 2005).

Strategies and Tactics

The strategies and tactics utilized by organizations define the extent of their efforts to influence environmental policy. Due to the transient nature of policy debates and discussion, a wide range of tactics can be used to affect change. The choices for tactics and strategies describe how organizations respond to policy context.
The findings for the collective of all organizations surveyed from the five states indicates they utilized a wide range of strategies and tactics to acquire information, directly influence policy, and indirectly influence policy. They also utilize tactics to exert influence on the electoral process. Many of the tactics and strategies are also technology enabled. Forty-five specific tactics are included in the survey with organizations reporting a wide range of use from a low of three tactics to a high of 44 tactics used. These organizations used an average of 20 different tactics.

Among the tactics utilized, environmental groups reported very high levels of contact with government. Ninety percent (90%) talk to elected public officials, 65% serve on government committees, and 68% encourage their supporters to call, write or email policymakers. This indicates that the groups very actively seek to influence governmental activity and policy making in both direct and indirect ways. However, very few organizations engage in electoral politics. This is likely due to the organizational structure of environmental groups being dominated by those with IRS 501(c)(3) tax exempt status that specifically prohibits partisan activities, even though issue advocacy through electoral strategies such as holding candidate forums are not prohibited if nonpartisan. Despite this practice being allowed under IRS codes for charitable nonprofits, only 11% of organizations reported use of this strategy. The low level of involvement in electoral strategies may limit the effectiveness of advocacy as elected officials may not feel the pressure of environmental claims will impact their future election prospects.

Collaboration

Collaboration is an important consideration for collective action by movement organizations. It is also assumed that effective public policy advocacy and issue
development are improved by collaboration (Straughan & Pollack, 2008). Eighty-six percent (86%) of the organizations included in this study reported that they collaborate with other environmental organizations. Importantly, 55% report that they exchange organizational resources as part of these collaborations indicating a higher dedication to collaborative work. This leveraging of resources may have positive impacts on the effectiveness of the collective group of organizations, particularly if we assume that the tactics and strategies being utilized and shared are effective. However, high levels of collaboration may limit innovation in the environmental movement with many organizations sharing ideas and mimicking each other’s actions, rather than developing new approaches. As government agencies and others targeted by advocacy efforts adjust to older tactics or as the policy context changes over time, a lack of new approaches could limit the effectiveness of policy advocacy efforts.

As predicted by the literature, these findings suggest that there is considerable diversity within the collective of environmental organizations in the Northeast, much like that reported to be found in the national environmental movement (Bosso, 2005; Brulle, Turner, Armichael, & Jenkins, 2007). This diversity has also been reported among local environmental movements inferring that the diversity is even higher for local groups (Kempton, Holland, Bunting-Howarth, Hannan, & Payne, 2001; Straughan & Pollack, 2008). In addition, there is considerable similarity among the local organizations for numerous characteristics. This intertwining of diversity in some characteristics with similarities in other characteristics of organizations likely contributes to the stability of the environmental movement. It may also provide fringe or outlier groups that contribute to the movements by continually providing challenges to the status quo and new ideas, re-invigorating the movements, and helping them adapt to changing circumstances.
Variation among Environmental Movement Groupings Based on Organizational Categories

Analysis was conducted of the environmental movement in the five small states based on organizational groupings or characteristics including formal Internal Revenue Service (IRS) tax exempt determination, budget size, the existence of paid staff, and affiliation with a national organization. These major groupings are considered to determine the extent they represent structures within the movement. The analytical findings for each of these structural groupings are discussed in the following sections.

IRS tax-exempt Nonprofit Organizations and Informal Organizations

The analysis comparing those organizations in the small states with IRS tax-exempt nonprofit status and those without this status showed that the more formalized organizations tend to have larger budgets, more paid staff, and more volunteers. This finding is not surprising because the formal structure is established as part of the professionalization process that provides a mechanism for improved fund raising and management of organizational resources. The formal nonprofits also showed an expected significant difference in the sources of their revenue having higher percentages of their funding come from foundations, client services, and corporate contributions. In all three cases, donors or service clients likely expect a higher level of professionalism and legitimacy that is associated with the added fiscal reporting and accountability required of an IRS tax-exempt nonprofit.

No significant differences are found between the formal IRS tax-exempt nonprofit and informal organizations for the set of variables associated with Political Opportunity Structure. This indicates that groups use a similar diversity of strategies and tactics, dedicate similar efforts to policy advocacy, dedicate similar effort to
providing services, and collaborate extensively. The two groups also have the same perceptions of their policy influence, their government’s attitudes toward them, the availability of government information, and the level of state proactive engagement on policy issues. Formal IRS nonprofit status is an indicator of which organizations tend to have more resources, but does not appear to be a significant determinants of how groups use these resources as they seek to influence environmental policy in their state. Since organizations with more funds from government and corporate sources do not appear to use a significantly different repertoire of tactics, this provides some evidence that resource dependency has a limited effect on the state environmental movement overall.

Organizations with Budgets Below $50,000 versus Those with Budgets Greater or Equal to $50,000

The analysis comparing the collective group of organizations from all five states with annual budgets of less than $50,000 and those with budgets of $50,000 or greater indicate that the groups have similar characteristics to those without and with IRS tax-exempt nonprofit status. Nonprofit organizations with gross receipts of $50,000 or greater are required under IRS code to file a complete Form 990 tax report. Those with revenue below $50,000 provide much less information, typically filing only a note that confirms they are still an active organization. For resource mobilization variables, the group of organizations with budgets of $50,000 or greater relies more heavily on revenue from government, foundations and client services. They also have more staff and volunteers. The only resource difference is that they are less reliant on membership dues as a revenue source than the organizations with less than $50,000 budgets are. The higher budget group also uses a higher diversity of
tactics, collaborates more with other organizations, and perceives government as being receptive to their views on policy issues. However, they also perceive information from government as being less available and government as being less active on environmental issues than the group with fewer resources does.

While the differences are not large, the findings do indicate that money matters for policy advocacy. Organizations have a larger repertoire of tactics available, more human resources to participate in collaboration, and likely more perceived legitimacy from government organizations if they have larger budgets. Despite these differences, the percent of funding used for advocacy and to provide environmental services by organizations in the two different groups of organizations with revenues split above and below $50,000 is similar indicating that they likely try to influence policy and environmental issues in similar ways.

Affiliation with a National Organization

Organizations affiliated with a national organization and non-affiliated organizations collectively from all five states exhibit very little difference for resource mobilization variables. The only variable presenting a difference is for one of the ten revenue sources; fund raising events. Nationally affiliated organizations working in states appear to rely slightly more on fund-raising events for revenue than nonaffiliated groups do.

Despite the similarity in resources, affiliation with a national organization showed differences in key political opportunity structure variables related to policy advocacy. The analysis indicates that the group of organizations affiliated with a national environmental organization uses a higher diversity of tactics, addresses more issues, and devotes a higher percentage of its resources to policy advocacy. As such,
it is likely that these groups work locally to press for common environmental policies in their respective states based on policy guidance from their national affiliate. This may help maintain a national standard for environmental policy and reinforce the long standing federalist approach to environmental policy in the U.S.

Human Resources: All-Volunteer or a Combination of Paid Staff and Volunteers

The comparison of all-volunteer organizations and organizations that use a combination of paid staff and volunteers reports significant differences in both resource mobilization variables and political opportunity structure variables. This structural grouping shows more significant differences than any other movement structure.

The group with paid staff and volunteers has larger budgets, and relies more on six of the ten revenue sources than the all-volunteer group does. Intuitively, these statistical differences make sense, as more money is required to pay staff, and once you have professional staff on board they can work on revenue generating activities to secure resources from government, individual donors, foundations, corporations, and other revenue sources. Higher volunteer numbers are also found likely due to the ability of paid staff to better recruit, coordinate, utilize, and support the volunteer base.

These significant differences provide a more mixed set of results for political opportunity structure variables. The all-volunteer organization group addresses a higher diversity of issues perhaps due to more democratic input into the choices made on issue priorities. The organizations with paid staff and volunteers use a higher diversity of tactics likely due to the presences of professional staff capable of working on more complex tactics. Of interest is that the percent of effort devoted to advocacy did not differ between the groups.
Also of note is the discovery that only two groups, both of which were found to be for profit organizations working on issues normally associated with nonprofit environmental groups, reported having no volunteers. This differs from the nearly one third of environmental groups in North Carolina found to be professional environmental organizations comprised exclusively of paid staff according to a study of the structure of local environmentalism (Andrews & Edwards, 2004). Further evaluation is needed to determine if this represents a shift in how organizations are operating, a change in how they are structuring their human resources, a difference associated with a larger state from a different region of the U.S., or just an anomaly.

The review of these comparisons supports the previous observation showing a limited fit for some aspects of the structure of environmental movements in small states with the theoretical model for Resource Mobilization Theory. It also shows that Political Opportunity Structure appears to have limited utility for explaining how environmental movements operate providing further support for the exploration of alternative theoretical explanations.

**Variation Between Each of the Five State Environmental Movements**

Contrary to the expected proposition of finding considerable differences based on Political Opportunity Structure Theory, the analysis comparing state environmental movements shows that only small differences were found between environmental organizations that collectively work in each of the states. Most notable is the finding that there is a high level of similarity across the collections of organizations from each of the five states and the state movements they comprise. While organizations collectively show a broad range of diversity, this diversity in the state environmental movements is similar across the states, with only minor differences found. The
similarity may be even more pronounced than the analysis depicts, since some of the statistical differences exhibit low effect size and may not be substantive differences. The relationship of these groups to the larger environmental movement seems to be far more prominent than the more localized influences on how the movement structures itself. State context based on variables associated with Political Opportunity Structure Theory appear to have limited effect on the structure and characteristics of each of the small state environmental movements.

Very few of the variables analyzed demonstrate significant differences between the states. They include two sources of revenue out of the ten potential sources examined, with Maine organizations having a slightly higher percentage of revenue from foundations and Rhode Island having a higher percentage of revenue from government agencies. There was also a difference among states for their perceived policy influence, with Maine and Delaware reporting they have less influence and New Hampshire, Rhode Island, and Vermont reporting the have more influence. These differences, while statistically significant, have small to medium effect sizes. As a result, some of the statistical differences may not result in noticeable substantive differences, although supplemental information does indicate validity of at least the findings for group influence.

Follow-up discussions with several survey recipients from Maine and Delaware, and Rhode Island along with qualitative document reviews provided insights into the cause of the differences indicating these states have less influence. Environmental group leaders from both states specifically mention that they have had less influence in recent years as a result of changes in each state’s governor. They express that Governor LePage of Maine is aggressively at odds with environmental policy initiatives, and that Governor Markell strongly prioritizes economic growth
over the environment. The Maine staff also provided published news accounts of the open hostility between environmental groups and the Governor. The reduced influence reported by organizations in Maine can be attributed to the recent election of Governor Paul LePage who has been openly hostile and, reportedly, harass state environmental organizations (Schaffer, 2016). Also, the higher percentage of environmental group revenue from government in Rhode Island is believed to be associated with a State land trust law that provides significant funds to local groups for land protection.

No differences were found among state environmental movements, or the organizations that comprise them, for variables associated with Resource Mobilization including the sizes of annual budgets, eight of the ten sources of organizational revenue, the number of paid staff, the number of volunteers, the formal IRS nonprofit status of organizations, or the number of organizations with national affiliations.

The comparison of variables associated with the political opportunity structure shows a similar pattern to that seen with Resource Mobilization Theory variables. While there was a differences in the perception of policy influence, all other variables evaluated were not significant including the type of IRS organizations, the diversity of issues addressed, the diversity of tactics used, the resources allocated to policy advocacy, the resources allocated to providing environmental services, and the extent of collaboration with other organizations. Additionally, no differences were found in the perception of governments’ attitudes toward the organizations’ views, the availability of government information, or whether state government was being more active on environmental policy issues.

The similarity of the state movement organizations, rather than the limited differences, is of interest considering the diversity among the organizations. It
indicates that either the states are very similar leading to similar movements or that factors other than Resource Mobilization Theory or Political Opportunity Structure Theory may be more significantly affecting the structure of state environmental movements.

The quantitative and qualitative descriptions of the state contexts did show differences. Statistically significant differences were found for several EPA Environmental Quality Index variables among the states. The states also show differences in ideology, legislative professionalism, and budget sizes. Qualitative descriptions (see Chapter 4) provide additional support that differences exist in the political opportunity structure. These qualitative analyses show differences in the rural vs. urban geography, government structures, legislative leadership arrangements, executive powers, and lobbying contexts. Despite these differences in political opportunity structure variables, substantive differences were not found among the state environment movement organizations collectively evaluated in their respective states. However, it is possible that the selection of states with small populations has limited the variation of the political opportunity variables, masking more subtle differences. It would be useful to consider these factors in a larger sample of states that includes a representative sample of large states as well as small states to develop a better understanding of differences in state political contexts.

**Variables and Factors Explaining Key Differences in the Structure of Environmental Movement in the Five Northeastern States**

Linear probability analysis of the structure of organizations was used to evaluate the likelihood that several factors related to Political Opportunity Structure were useful in predicting membership in categorical groups identified based on
Resource Mobilization Theory. More specifically, linear probability models were used to evaluate the grouping variables of movement structure from theoretical assumption utilized to develop the organizational categories of state environmental movement groups. These models analyze the expected probability of group membership. They were utilized to explore the extent to which the patterns of strategies and the tactics utilized and the patterns of issues addressed predict membership of structural groups in the state environmental movement.

The independent variables of patterns of activities were developed using exploratory factor analysis. The nine independent variables included Legislative Action, Research and Information Sharing, Grassroots Advocacy, Science and Digital Information Sharing, Political Action, Accountability Demand, Habitat Conservation Orientation, Health and Environmental Protection Orientation, and Energy and Climate Change Orientation. The analysis provided a significant finding for groups based on budget levels, human resources, and national affiliation. No differences were found between groups that were formal IRS tax-exempt nonprofits or informal groups.

Just over one quarter (25.4%) of the difference between organizations with budgets of $50,000 or more and those with budgets below $50,000 was predicted by the linear probability model. Interestingly, the only significant independent variables predicting membership in the group with more funds were that they conduct research and information sharing, and use science and digital sharing tactics. These activities require more professionalism and are often costly. Considerable expense is typically associated with conducting technical studies, preparing reports, and disseminating this information. In addition, a significant predictor for membership in the group with smaller annual budgets was having an orientation toward health and environmental protection efforts. This may be due to an association of groups concerned with
environmental health often being local community groups working on environmental
justice in geographic areas of lower income populations. These populations can be
expected to have less financial capacity to support these organizations. This finding is
consistent with past research findings that a conservation orientation has long been
associated with a more educated, more privileged population demographic that leads
to higher resource levels for these groups (Bosso, 2005; Mitchell, Mertig, & Dunlap,

Belonging to the all-volunteer group of organizations (i.e. completely
voluntary organizations) or the group including a combination of paid staff and
volunteers was predicted by a linear probability model that explained about 23.6% of
the difference. Similar to the results for budget groups, significant contributors to
predicting membership in the group with paid staff were that they conduct research
and information sharing and science digital sharing tactics. Having a conservation
orientation was also a significant determinant.

Affiliation with a national organization was also significantly predicted by the
linear probability model, although it only explained about 9.5% of the difference
between the groups. The group of organizations with a national affiliation was almost
twice as likely to use legislative tactics as those that are not affiliated with a national
group. They are also about twice as likely to include an energy and climate
orientation. The nationally affiliated state organizations are also more likely to use
tactics associated with research and information sharing. A relationship with a
national group has some impact on advocacy and the issues addressed.

The models are consistent with the findings of the less statistically robust
group comparisons that indicate some minor effects from Resource Mobilization and a
very limited effect from Political Opportunity Structure variables. In fact, over 75%
of the difference was not predicted in any of the linear probability models suggesting that other models are needed to explain the structure of environmental movements in small states.

The Role and Influence of Small State Environmental Movements on Policy Development in the Five States

Environmental organizations and the movements they are part of play a key role in the development of environmental policy. The diversity of actions undertaken reinforce the public support for environmental policies whether they include direct advocacy, indirect grassroots efforts, or service provisions. These wide ranging efforts are in many cases complementary, reaching a broad range of citizens and policymakers in different ways.

Measuring the influence of any movement is challenging, however, data collected does provide information that can give us an indication of the role and influence of the environmental movements in the five states.

One measure is the perceived influence. Nearly three quarters (73%) of the survey respondents reported that they believe that they have had more, or at least the same, level of influence on environmental policy over the past few years. Similarly 66.8% of organizations reported that government is interested in their views, showing the receptiveness of policymakers to environmental policy input from the movement organizations. While reported by the organizations, it is possible that this perception overstates government receptiveness.

The perceived influence and government responsiveness provide some indication of influence when you consider the reported levels of direct interaction with policymakers. Ninety percent (90%) of the environmental organizations in the small
states reported talking directly to public officials to affect policy making. High levels of engagement are also reported for serving on government committees (65%), calling officials (88%), testifying at hearings (52%), and encouraging the public to call or write policy officials (68%). If politics is local, the direct access and level of engagement appears to indicate that collectively, these groups in small states are making their voices heard in a way that influences public policy.

Other indicators raise questions including the low percent of resources expended on policy advocacy and low levels of organizations with registered lobbyists. Only about 16% of organizational resources are reported as being allocated to influence environmental policy, and only 14% (n=41) of organizations have a lobbyist working with their respective state legislature to influence environmental policy. Although advocacy is broadly defined, it does leave open the question of whether many of the movement organizations surveyed should be considered advocacy organizations. All of the organizations work to improve the environment in some way, but many are not directly involved in advocating for environmental policy or commit only limited resources to advocacy. Should they still be considered part of a movement or are they more a part of a less engaged professional practice?

However, this low amount of resources allocated to advocacy may simply reflect a lower fiscal cost for advocacy compared to other activities of the environmental organizations that comprise the state movements. It may also reflect that fiscal accounting of resources may not fully account for the broader resources devoted to advocacy. It is possible that some organizations do not label or consider many of their actions to influence policy as advocacy. For example, despite the relative low percent of resources reported as being utilized for advocacy, 90% (n=259) of organizations respond that they talk with elected public officials, 68%(n=197)
responded that they encourage the public to call, write or, email policymakers, 70% (n=202) track legislation, and 52% (n=149) report that they testify at legislative hearings. Another explanation for the low percentage of resources allocated to advocacy is that organizations may depend upon grassroots efforts that are hard to account for in fiscal reporting. Finally, new technologies such as internet communication and social media may be significantly lowering the fiscal and transactional cost for conducting advocacy.

**Summary**

The analytical findings provided throughout this chapter provide important insights into environmental movements working in small states, particularly regarding the diversity and stability of the collective movement groups. In the final chapter, some of the most important findings, the limitations of this study, and some potential avenues for future research are presented.
Chapter 7

FINDINGS AND CONCLUSIONS

The purpose of this study is to improve our understanding of environmental movements that mobilize to influence state level policy in small, less populated U.S. States in the Northeast. Small states provide an opportunity to evaluate whether or not state level environmental advocacy is different in these states with less people from which to draw upon for resources, where states have less total resources for public services, and where more intimate relationships often develop in smaller policy communities. In particular, studying small states allows for an evaluation of the applicability of two broadly utilized social movement theories in the specific policy context of small states. The two theoretical frameworks considered in this study include Resource Mobilization Theory and Political Opportunity Structure Theory. The study seeks to determine the extent to which these theories can be utilized to adequately explain environmental movements and environmental policy advocacy that occurs at the scale of small, less populated U.S. States.

Several key findings are drawn from the analysis of the small state environmental movement data. The first key finding is that questions are raised about the extent to which Resource Mobilization and Political Opportunity Structure Theories are useful as models for understanding the environmental movements in small states. While the organizations that comprise the environmental movement in the five small states exhibit much diversity both collectively and within each state, groupings based on these differences did not predict the tactics and strategies utilized
by the different state movements and structural movement groups. Also, minimal differences were found between state movement activities and structures despite considerable differences found for the policy context in each state.

Differences in the issues addressed were observed between some structural groups within the small state environmental movement. This difference was especially prominent for environmental health and justice oriented groups that were poorly represented in the collection of environmental organizations that comprise the environmental movements. Environmental health and justice groups also reported having considerably fewer resources. Conversely, conservation oriented groups overwhelmingly outnumber those groups focused on other issues both in the number of organizations and the extent of resources these organizations control. Traditional conservation issues dominated the movement in all five states.

The environmental groups that comprise the small state movements devote much more effort in providing environmental services than in efforts that influence environmental policy. This may reflect the effect of the maturation of the groups and of environmental policies. The average age of the environmental groups was 33 years old. Many of the environmental policies were put in place decades ago and are in a more institutionalized phase of longer term implementation. This environmental group maturation likely supports the status quo and provides continuity for many policies passed during the peak of environmental action. However, it may also limit emphasis on changes or new policy needs emerging as old problems are resolved. The environmental movement has had tremendous success, but it may now be entering a phase of “post-environmentalism,” in which it is less a cause to be taken up by a movement and more a set of institutionalized societal values. If so, this may limit the
applicability of Resource Mobilization Theory since it largely seeks to understand how movements emerge and develop.

Finally, it was found that the most significant difference between various structural groups of the movement was that those with more resources more often utilized research and information sharing tactics. The use of scientific studies has been a mainstay of national environmental groups that have become specialized in response to the dominance of the national policy process. Much of this advocacy work has been supported by membership dues from a broad spectrum of the public. Environmentalism for decades enjoyed the support of those with higher socioeconomic status as well as many working class and low income citizens. With many of the most severe environmental threats reduced by past advocacy and policy success, growing economic inequities may change the support base of environmental movements. Many former middleclass people are now struggling due to the loss of blue-collar jobs leading to a shifting priority of jobs over the environment among this demographic. As citizens and groups from the American working class that previously supported the environmental movement and helped ensure the passage of major environmental policies, begin to view environmentalism as a threat to their livelihood; the movement is likely to grow increasingly marginalized. The movement will need to reconnect with this group of former supporters and address the anxieties of many working-class people or be increasingly pushed to the political sidelines.

Each of the key findings and some potential implications of each are summarized below.
Key Findings and Their Interpretation

1. The high level of similarity of organizations raises questions about the extent to which Resource Mobilization Theory or Political Opportunity Structure Theory explains the environmental movement in small states.

A consistently high level of similarity among the various movement groups and structures might suggest that local social and political contexts have marginal influence on the local environmental movements. They also indicate that collectively Resource Mobilization has limited utility for explaining the actions of the various groups that comprise the state movements. This is further supported by the limited influence of either resource mobilization variables or political opportunity structure variables utilized in the linear regression models that explained only small percentages of the differences among the organizations in the five states included in this study. It could also be that the contexts for environmental advocacy in the five states are not all that different, despite some evidence of statistically significant differences.

Neither Resource Mobilization Theory nor Political Opportunity Structure Theory adequately explains the structure of the movements. The similarity between the various groupings of organizations is the most important finding. The two dominant social movement framework theories explain little of the complex structure of the state movements. Resource Mobilization Theory has limited utility for explaining organization choices for tactics and strategies. Findings also indicate that Political Opportunity Structure was not a major determinant of the characteristics of state organizations and environmental movement structures.

The data suggest there is considerable diversity among the movement organizations. This may be seen as a reflection of the environmental movement’s lack of unification. While we often think of environmental management as a holistic
undertaking with everything interconnected, the environmental movement groups are fragmented in their issues of concern and organizational focus. They have not coalesced into a unified movement, although they share a very general interest in improving some aspect of the environment. This is similar to a concern expressed by Bosso (2005) that the national movement either has not coalesced or that, perhaps, environmentalism has devolved from a united movement because there “is no longer a single, identifiable entity” (p. 46).

This lack of unity may present a challenge to the use of Resource Mobilization Theory, since the environmental groups may actually have multiple movements or sub movements that limit our ability to consider them collectively. In this context, it may require a much larger sample to allow identification of the various sub movements influenced by variables associated with Resource Mobilization. Small states may not have enough resources to develop the critical mass of organizations necessary for creating large enough collectives of these movement subgroups. Small states, with less people and sources to draw upon for resource, may not be able to support a large enough number of organizations that are on a scale and density necessary for the mobilization and action of structural groups within the state.

This analysis also suggests that other theoretical models may better explain the phenomenon. Specifically, it suggests that new institutional theory, particularly isomorphism, is occurring throughout the environmental community in the five states included in this study. Isomorphism is an organizational homogenization concept describing the process under which different organizations working under similar environmental contexts begin to resemble each other (DeMaggio & Powell, 1983; Hawley, 1968). It is a similarity of the processes or structure of one organization to
those of another, arising as the result of imitation or from independent development under similar constraints.

It may be that the national movement and the long dominance of our federalist approach to environmental policy have been dominant enough to have penetrated all levels of environmental policy leading to considerable isomorphism. This institutionalization may help sustain a major national framework for state-level policy. However, it may also limit state innovation if it leads groups to promote policy that is out of touch with societal needs or beyond the capacity of states to implement. There are three main types of institutional isomorphism: normative, coercive and mimetic (DeMaggio & Powell, 1983). The environmental movement has matured and professionalized, making it likely that there is considerable normative pressure for those involved in the movement to conform to the professional standards, such as technical and scientific expertise as part of policy development. Similarly, coercive isomorphism has probably occurred due to a number of factors, chief among them are resource dependency and the expectations of other organizations to meet the cultural norms of the movement. Finally, mimetic isomorphism is likely at play. The high level of collaborations between organizations reported and the similarity of tactics and strategies utilized indicate that organizations mimic each other. We will discuss isomorphism as a partial explanation of findings more in the sections that follow.

2. There is a high level of similarity of environmental movement structures among the states included in this study, despite differences in state contexts and sociopolitical context.

The consistent similarity of movements in each of the states is a significant finding. It provides some reason to assume that despite a lack of action to address environmental policy at the national level, environmental groups at the state level can
be expected to behave in a consistent manner making similar demands in the different states. This may lead to more consistent policy between states assuming that the movements have influence on the state policy processes, and that the states have adequate resources to develop and implement these policies. The latter condition is of importance, as all five states included in this study have been reported to have a strong commitment to environmental protection, while also having limited government capacity to meet these commitments without significant federal support (Lester, 1995). Small Northeastern state movements and the government institutions they seek to influence may simply be “the little engines that can’t” due to factors related to the policy context in small states.

The movement organizations among states collaborate extensively and share practices and approaches. The findings indicate that collectively there is some consistency in the issues addressed and tactics utilized by the collective state movement groups, despite diversity among individual organizations. These movements will likely mimic many policy concepts as part of their advocacy efforts potentially helping to maintain considerable consistency in policy in different states even if federal laws wither. In fact, the environmental movement groups are well positioned for effective diffusion of any innovations and ideas. Based on Rogers (2003) Diffusion of Innovation Theory, effective practices would spread and be adopted efficiently in the environmental movement. The movement has been in existence for many decades and has a well-established communication network and social system. This diffusion of ideas and innovative approaches would most likely increase the process of isomorphism.

This similarity of structure and practice among state environmental movements indicates there is a potential for their behavior to steer policy in similar directions in
each state assuming they have influence in their respective state policy process. As individual states exert more autonomy in response to national inaction on environmental policy, the similarity found among the state and local environmental movements seem to indicate that they will respond in a similar fashion as part of their policy advocacy.

The results may also indicate that there has been a nationalization of state and local environmental movements in at least the five states in this study, perhaps through the high levels of collaboration among groups within a given state, between states, and with national groups. Another factor may be the collaboration of a subset of organizations directly affiliated with national organizations. Interestingly, these groups with a formal national affiliation tend to address a higher diversity of issues, use a higher diversity of tactics to influence policy, and have a higher use of legislative tactics most closely associated with advocacy for state policy.

3. There is considerable diversity both within each state movement and among the collective of all organizations from all five states, despite the similarity of state movements when the individual groups are considered collectively.

The finding shows that there is considerable diversity in organizations that comprise the environmental movement on different geographic scales, a characteristic often found in the analysis of the national environmental movement comprised of larger national groups (Bosso, 2005; Brulle, Turner, Armichael, & Jenkins, 2007). It should also be noted that despite the diversity of organizations, there is considerable similarity among the collective characteristics of movements at the state level. This intertwining of diversity on some characteristics with similarity on other characteristics of organizations likely contributes to the stability of the environmental movement. It most likely provides a normative social influence that reinforces the
stability of the local movements and is a mechanism for the movements to adapt to changes over time with the input of fringe groups. These fringe groups may present challenges to the status quo and generate new ideas; re-invigorating the movements.

The diversity within movements may be critical as we face environmental challenges in our contemporary contexts of a slow-growth economy and the decades of focused narrative by the conservative movement that has placed a call for more market over more nature. Economic issues and jobs have long been among the most important issues to Americans. The movement has long been criticized for being elitist due to composition, ideology, and impact (Morrison & Dunlop, 1986). Other critics have expressed that the major national environmental groups that are often highly influential on the national agenda and that influence local groups are “turning tame, corporate and compromising” (Bosso, 2005, p. 4). The diversity and more democratic participation from local participation in the movement as states, cities, and grassroots organizations played a larger role beginning with the new federalism in the 1980s which continues today, was expected to change this condition (Lester, 1995). Yet criticism continues to emerge regarding whether the movement is dying because it is failing to speak to the modern needs of the American people, which is a much broader agenda than the movement has been able to embrace (Schellenberger & Nordhaus, 2004; Werbach, 2005). While the diversity within the movements provides opportunities for challenges and new ideas, the data about the consistent similarity of the movements overall raises questions about whether the organizations are likely to adapt to new challenges, particularly the challenge raised to broaden their message to a more progressive message going beyond just environmental issues.
4. The movement structure is much stronger for some environmental issues than for others with environmental health and justice being poorly represented.

   The analysis of issues addressed by organizations and their orientations show that traditional land and habitat conservation issues dominate the environmental movement in these small states. Conservation oriented groups also tend to be much better funded. While these more traditional conservation groups do express concerns related to social and environmental justice, it is unclear if these are deep convictions that lead to action.

   Also, the linear probability models indicate that one of the significant predictors for membership in groups with smaller annual budgets was having an issue orientation toward health and environmental protections. These organizations are often closely associated with environmental justice in low income communities. This finding indicates that the environmental movements at the state level may have a way to go to meet the contemporary environmental needs of a broader segment of society. The local groups may still be overrepresented by a more prosperous segment of society.

   The peak of the national environmental movement has been characterized as having coincided with being more inclusive of all sectors of society as it shifted from a more elite conservation orientation supported by wealthier and more highly educated participants to a more inclusive and democratic movement. A large growth in support of the environmental movement came from the American middle class, American working class, and poor communities that perceived themselves as being disproportionally impacted by environmental problems (Bosso, 2005; Lester, 1995; Morrison & Dunlap, 1986).
A possible return to a perception of environmentalism that associates itself with wealthy white participants may be very damaging. The movement gained most of its social and political support through expanding its membership and democratically including a broad group of people. Its goals were aligned with the needs of a large sector of society.

With states taking on more environmental responsibility previously handled by the federal government, the emergence of strong state movements are needed to maintain and improve environmental conditions for all. This will not occur unless the local movements are able to more effectively address the concerns and anxieties of many in the working class and low income communities. This will likely require a shift from the tactics used so successfully to address the most egregious environmental problems of the past to efforts that promote both environmental improvement and the creation of jobs as part of the “green economy”. Unfortunately, the data do not indicate that this type of shift is occurring. In fact, the data indicates that in the five states, environmentalism and the environmental movements may be the purview of the privileged.

5. The significant independent variables that separated the advocacy actions of various structural groups of movement organizations were limited primarily to groups that conduct research and use information sharing tactics, and use science and digital sharing tactics.

Linear probability analysis of the structural groupings of organizations is used to evaluate the likelihood that several factors related to Political Opportunity Structure were useful in predicting membership in categorical groups identified based on Resource Mobilization Theory.
The analysis provides a significant finding for groups based on budget levels, human resources, and national affiliation. Of interest is that membership in the groups with higher budgets, more paid professional staff, and a national affiliation were the best predicted by using two types of tactics. These included conducting research and information sharing tactics, and using science and digital sharing tactics.

The mainstream environmental groups increased their credibility and clout by developing extensive technical and scientific expertise that was particularly useful for direct lobbying by environmental insiders (Gottlieb, 1993; Mitchel, 1986). The emphasis on scientific and technical expertise on environmental issues and credibility continues to be a part of environmental action today. However, this emphasis of a narrow focus on science and environmental expertise has led to problems for the movement. The conservative movements oppose many of the successes of the environmental movement and have responded by challenging the science. In effect, they have excelled at raising questions that cannot be proven. In essence, they recognize that many theories in science can never be proven, only falsified. But by requiring indisputable fact, anti-environmental interests have stalled much of the environmental movement’s actions on key issues like climate change. This has been a successful strategy against environmental policy improvements, despite the fact that it often unjustifiably belittles actual science and calls it junk science.

Recent critics of the environmental movement have focused on this overemphasis of a tactic of scientific study that was so successful in the past (Schellenberger & Nordhaus, 2004; Werbach, 2005). They have emphasized that what is needed is a more expansive, inclusive, and compelling vision for the future. Environmentalism has accomplished much of its early agenda to protect habitat, clean up the air and water, and improve public health. However, in a period of
globalization and economic change, environmentalism may no longer speak to the modern needs of many Americans. The critics argue that new tactics are needed that are less narrow and reductionist and tell a story about America’s future. The emphasis on this mainstay tool of science from the past may now be limiting the environmental movement. The movement may need to develop significantly different new tactics and approaches, perhaps based on a new approach to environmental policy that integrates it with programs and policies that do not have environmental issues as their primary objective.

Another important factor regarding information provided to decision makers is that there is a limited understanding of both the type of information provided in different policy contexts and how it is used, particularly by state legislators. Nownes and Newmark (2016) have found that while much of the information provided by interest groups is analytical in nature, the information valued most by legislators is not policy analytical. State legislators were found to hear less from constituents than federal legislators, perhaps causing them to be more interested in constituency opinion, broader public opinion, and ideological considerations – particularly during the more contentious policy debates (Nownes & Newmark, 2016). This may indicate a disconnect between the types of information needed to influence state environmental policy and the type of information provided by those groups providing costly technical and scientific studies. However, it may also indicate that additional constituency information is needed along with the more analytical information to increase its use by policymakers. This is an area in need of additional study.

6. It appears that collectively the movement organizations devote much more effort to service than to policy advocacy.
In addition to the institutional structure of environmental groups, consideration was given as to how groups of organizations allocate resources for policy advocacy or providing service affects the movement structure. This indirectly evaluates the structuring of the groups in the movement based on their placement along a continuum of advocacy and service. The reported percentage of an organization’s resources allocated to policy advocacy and the percentage of organizational resources allocated to providing environmental services were used as criteria and the tactics and issue orientation factors scores as predictors.

Predictors of policy advocacy that made statistically significant contributions included tactics associated with grassroots advocacy and accountability demand. This showed that advocacy groups use both broad public appeals as well as direct challenges to public agencies.

The analysis of service provisions showed that orientation associated with health and environmental protection was the strongest predictor of being service oriented. Grassroots advocacy and accountability were significant negative predictors indicating that service oriented organizations tend to be far less inclined to participate in direct and indirect advocacy efforts.

**Theoretical Implications**

A key finding is the limitation of Resource Mobilization Theory and Political Opportunity Structure Theory to explain the structure and predict the actions taken by environmental movements in the five small states included in this study. This finding adds to the ongoing debate about the need to develop new theoretical models for movements in the context of a changing social structure. These theories were developed to explain movement activities emerging from an industrial society, and our
society is now largely an information society. Social structures have changed, and our models for explaining social dynamics may need to change as well. While there has not been a clear consensus formed on more recent social movement theories, many of the evolving contemporary theoretical perspectives are emerging due to the anomalies encountered with these major theories and the pursuit of alternative models. For example, Resource Mobilization Theory recognizes that movements need to get control over their resources to collectively mobilize. However, new internet communication technologies are reducing the cost of mobilization and organizing. With much lower costs, organizations may emerge and mobilize much faster. They may not need the formal structures that are often the foundation of understanding movements based on Resource Mobilization Theory.

However, it is also worth noting that Resource Mobilization Theory was developed to explain the emergence of movements. As such, it may be expected to better explain new movements as they emerge, not established movements that periodically refresh themselves when new threats arise like occurs in the environmental movement. In fact, the environmental movement may largely be much more of a loose connection of interest groups than a movement at this point in time.

This research seems to indicate that institutional theory, particularly isomorphism, may be a more useful model for explaining the state environmental movements. Indeed, the groups seem to have mimicked each other and emerged as localized versions of the National environmental movement, unlike movements that emerged from locally available resources and social political context. This observation of isomorphism in the movement may be better understood through more intensive study of the alliances and associations of inter-organizational networks.
Networks can be understood with data collected on cooperative activities using cluster analysis and other techniques (Diana, 2011; McCulloh, Armstrong, & Johnson, 2013; DeNooy, Mruar, & Gatgelj, 2005; Diani, 2004). Qualitatively, an evaluation of those groups and individuals that key leaders of organizations choose to interact and collaborate with on environmental issues can also provide important insights about movements. This can start with simple heuristic approaches, such as semi-structured interviews with movement leaders to understand inter-organizational dynamics and mechanisms that may lead to isomorphism. It could consider variables such as the extent and frequency of collaborations, detailed evaluation of the sharing of members and fiscal resources, evaluations of the number of subsets of participants in inter-organizational campaigns, and other factors that describe how organizations are or are not connected. These could then be bolstered with more specific details to support more robust network analysis to provide information about the social movement beyond that derived from only analyzing the aggregation of organizational information (Diani, 2013; Carrington, Scott, & Wasserman, 2005).

The research adds to the literature on environmental movements and advocacy by evaluating the extent to which existing theories explain environmental movements in the context of state environmental policy. It may also lead to insights on future environmental policy development due to changes in our interpretation of cooperative federalism where states take a larger role in environmental policy. This may be particularly important as we address a midlife crises in environmental policy based on several prominent statutory canons and develop new strategies that decentralize this approach to environmental policy.

The high level of success in the environmental movement combined with its institutionalization may now make it resistant to changes, despite a changing context.
for environmental policy. The movement experienced undeniable success, if not unprecedented success, during its peak in the 1970s and 1980s. Nearly all of our major environmental laws were passed in this era including the environmental statutory canons like the Clean Air Act, Clean Water Act, National Environmental Policy Act, Superfund Act, and Endangered Species Act. Each of these was developed to address high profile environmental crises, relied heavily on regulatory approaches, and required extensive expenditure of funds by both government and the regulated community. During strong economic times that created opportunities for high paying jobs for all Americans, the actions received broad support. Drastic improvements in our most egregious environmental problems combined with a change in our economy due to technology and globalization have changed the context for environmental policy. Increasingly, environmental actions are seen as a threat to job creation. Environmentalism is increasingly perceived as no longer meeting the needs of a large sector of middle and working-class Americans. A shift in policy to simultaneously promote environmental protection and job creations may be needed, but may be difficult to accomplish with the current environmental policies. The new Trump Administration has also indicated a policy direction reducing environmental protection to stimulate job growth, rolling back environmental regulations, and signaling reductions in funding to Federal environmental agencies. This is not conducive to the type of compromise likely needed to achieve both economic and environmental goals, and a loss of funding may seriously impact state capacity to fill any voids created in a weakened federal environmental framework.

Rethinking environmental policy may require integrating and embedding environmental policy into other programs that are not primarily environmental laws. It may also require a more localized approach to the nuances of environmental
protection under more localized contexts. Understanding local environmentalists will be particularly important if the new decentralized approach continues to emerge with a strong local emphasis. Yet it is unclear if the current culture dominating the environmental movement will be able to change to this new context. At midlife, the movement may be facing a considerable make the challenge to once again reinvent itself. Simultaneously, it may be restrained from adapting to meet this need by its long history and cultural entrenchment.

Finally, the rapid emergence of new technology and new social movement theories that are now used to help fill the void left by the limitations of Resource Mobilization Theory and Political Opportunity Theory deserve more attention. They provide new frameworks for exploration into movements in our evolving society and may be a key part of the emergence of new, more comprehensive, theoretical explanations of social movement and collective action in an information society.

**Limitation**

This study focused on a sample of organizations that comprise the environmental movement in five Northeast states, so the findings are limited to this geographic region that has a unique social and political culture different from many other areas in the U.S. In addition, the sample size was modest with 289 responses and a 50.7% response rate.

The study was also limited by problems inherent to survey research. As with all methods of data collection, there are potential problems that may affect the accuracy of the data (Dillman, Smyth, & Christian, 2014). These include problems with the detail and depth of the information obtainable, potential bias in questions, and representativeness of the sample and the responses. Several types of error may have
affected this survey despite considerable effort to reduce them, including coverage errors, nonresponse errors, and measurement errors.

It is assumed that the sample selected, based on an exhaustive effort to identify all environmental organizations in the five states did not have any coverage errors. It is likely that some groups may have been missed, although use of the peak list approach is assumed to have reduced this potential error (Andrews, Edwards, Al-Turk, & Hunter, 2016).

Another important consideration is the potential for nonresponse error. The survey had a 50.7% response rate, which also means that nearly half of the survey sample did not respond. It is assumed in the analysis that the nonresponses were random. However, very little information exists about the non-respondents and any potential nonresponse error. One potential consideration is that some environmental organizations could have chosen not to respond because they do not label any of their activities as being involved in advocacy. Three survey recipients did provide an email response stating that they did not plan to complete the survey for this reason. In each case, after they were contacted, and the importance of their responses was explained, they did complete the survey. Several survey respondents also provided feedback that they were simply too busy to complete the survey.

Another form of nonresponse error may have occurred due to incomplete responses. A subset of survey respondents had partial responses, particularly late in the survey due to response dropout. To address this problem, data imputation was employed for some variables (see Appendix B). No reason was found to lead the researcher to believe any of the missing data was systematic. So it was assumed that any missing was missing completely at random. However, even at the low levels of
data imputation, this may have induced both non-response and measurement error into the data (Allison, 2002).

To address measurement error, every effort was made to avoid any bias in questions. Still, several survey recipients provided correspondences that they did not think they should complete the survey because they do not conduct any advocacy. There appears to be confusion about what actions are and are not defined as policy advocacy within the environmental community, and even some that undertake non-confrontation and collaborative actions that influence policy may be reluctant to label these actions as advocacy. This may bias the data in a manner that lowers the reported level of advocacy actually conducted by some environmental groups.

It should also be noted that the survey data represents the responses of environmental organization leaders. Surveys are limited by asking questions to which responders provide accurate answers (Dillman, Smyth, & Christian, 2014). Responses likely introduced an undetermined level of measurement error into the data.

Finally, the analysis of secondary data had some limitations due to the small sample size of the five states. For several variables, the differences were analyzed based on the county level data to enable statistical comparison of variability. However, states are not monolithic in their social capital or ideology, so this comparison may actually better capture the real world social context in these states.

**Areas of Future Research**

Further studies are needed to compare this group of states to other groups. The five states are in the culturally similar Northeastern United States. An additional cluster of low population or small states is found in the North Central U.S., a much less densely populated area, significantly influenced by rural community life and an
area with far more conservative political ideology. A comparison of the Northeastern states with this area would provide an improved understanding of the role of state context. In addition, a comparative analysis with larger states is needed. Are there unique attributes of smaller states or is the movement largely independent of the influences of state and local political context?

A compelling finding is the gap between the theoretical expectations associated with Resource Mobilization Theory and Political Opportunity Structure Theory and what was found in this study. As such, more focused research is needed to determine whether other theories can better explain the phenomena. Promising theories include isomorphism and a number of new social movement theories. Institutional theory can be aided through more in depth network analysis of inter-group dynamics. Social movement theories may be far more challenging to use because the data and information required, such as that related to group identity and other factors, is extremely difficult to collect and operationalize. New social movements concepts are very hard to measure.

While this study relied heavily on quantitative data that are helpful for broader generalizations about the environmental movements, additional insights may be gained by more in-depth analysis of the organizations and subsets of the organizations through semi-structured interviews and discussions. Qualitative data can more richly describe the contexts in which environmental communities operate. The qualitative analysis builds upon the more generalizable quantitative data adding additional insights about state environmental communities and movements.

Additional interviews would be particularly useful for obtaining information about leadership and networked relationships. Recent studies on how organizations develop activist have indicated that leadership is an important component (Han, 2014).
The role of leadership in movements at the state and local levels promises to provide valuable insights into whether or not both environmental movements and organizations at the state and local level are adapting to meet a potentially changing landscape of environmental policy with an increasing state and local role.

Another important opportunity is to use the data from extensively used internet communication technology. As seen in the survey for this study, most environmental groups extensively use this technology in increasingly innovative ways. Using digital media provides opportunities to harvest data and metadata that help us understand the networking of organizations and many other factors that influence the institutionalization of movements.

Finally, much more intensive, computer assisted network analysis is needed (McCulloh, Armstrong, & Johnson, 2013; Diana, 2013). This analysis would help us to better understand the extent to which institutional theory explains the environmental movements in small states. The analysis needs to be expanded beyond just environmental organizations to recognize the much broader range of organizations now involved in environmental action. This includes environmental groups, government opposition and business groups, progressive non-environmental NGOs, and others that comprise an environmental policy organizational field. This field is now institutionalized and appears to be comprised of a mix of those working as part of a professional practice along with groups engaged in more contentious change actions usually associated with outsiders to the policy process.

**Final Thoughts**

To carry out this research, a multi-methods design which includes collecting and mixing both quantitative and qualitative data was employed. A variety of data
collection techniques were used including a structured internet based survey, secondary data acquisition, document analysis, and content analysis of textual documents. Quantitative analysis employed statistical tests including descriptive statistics, parametric and nonparametric tests for group independence, factor analysis of survey response data, linear probability models, and linear regression models. Qualitative analysis was also conducted for state social and political context variables. All results were presented and discussed, regardless of the statistical significance. The similarity found among groups is believed to be as important of a finding as the significant differences in some cases.

The study is intended to inform both policymakers and advocates about the current structure of environmental movements in small states, and the implications it may have for state environmental policy. Specifically, the research provides insights into environmental advocacy in a new context. It improves our understanding of how environmental movement organizations collectively work to influence state policy in similar ways, regardless of their respective state context. For those interested in environmental advocacy, this research provides a better understanding of socio-political conditions, variation in resources, and diversity within the collection of movement organizations that collectively build movements with similar combined resources, capacities, and policy interests.

Environmental advocacy organizations are critical to the establishment of public policies for natural resource conservation and the protection of environmental resources (Bosso, 2005; Andrews & Edwards, 2005). These organizations play an essential role in the public policy process by bringing attention to conservation and environmental issues, building support for change, and lobbying for new laws. These groups gather financial and human resources, educate the public, increase awareness,
galvanize voters, and reframe policies issues (Pendall & Schmidt, 2011). They often identify many environmental problems and perceive that government agencies and elected officials sometimes lack the political will to address these problems. They organize to influence decision makers, policy, and public perception on issues related to the environment.

The focus of U.S. environmental policy has been dominated by the passage of laws and the development of programs at the national level. This is clearly seen in the most prominent federal environmental laws that include the Clean Air Act, Clean Water Act, Superfund Act, National Environmental Policy Act, and Endangered Species Act passed in the 1970s. A part of this federal environmental policy framework is the relationship of federal and state government through cooperative federalisms. The federal government typically sets a minimum standard that states must meet or exceed and then provides states with implementation funding to meet or exceed these minimum standards in a manner tailored to specific state contexts. This focus of environmental policy on several major federal statutes has led to a considerable concentration of policy advocacy by environmental groups on national policy, often concentrated in Washington, D.C. However, Federal inaction on environmental policy is causing a shift in the focus of environmental policy from the national to the state level for action (National Conference of State Legislatures, 2014; Nash, 2006; Bryner, 2002).

During the 1980s, environmental policy in the U.S. did experience increased involvement at the state level from both local government and environmental organizations (John, 2004; Lowry, 1992; Ringquest, 1993). This occurred in response to the new Federalism approaches started under the Carter and Reagan Administrations in which more responsibility was delegated to the states. A spike was
seen during this same era in the growth of environmental organizations working at the state level (Staughan & Pollack, 2008; Carter, 2011). While these groups were initially grassroots organizations that ushered in a period of significant citizen activism in local movements, these groups matured and professionalized over the decades. Many of the organizations appear to have become more rigid in their approaches and may be less inclined to adapt to changing policy contexts and the more recent shift of environmental policy to the state and local levels. The initial promise of localism identified as part of this early wave of new federalism should be revisited through the lens of the changing policy context of today. How and whether or not the movement can maintain its broad base of support at midlife is questionable.

This changing policy context and a recent shift that is increasing the emphasis of local policy highlights the need for increased attentional by environmental groups that advocate for policies at the state level. There is considerable uncertainty about how environmental advocacy efforts may differ under the various contexts of different state geographies. It may be an even greater concern for environmental policy if these groups are too entrenched in their ways to adapt to these local contexts.

This study sought to understand whether the conditions for advocacy in small states may put them at a disadvantage due to resource mobilization challenges associated with a smaller concentration of resources and fewer organizations that can collaborate to influence policy. Just as important, movements in small states may experience a unique political opportunity for advocacy due to the more intimate nature of political relationships that arise from the physical closeness of geography and a smaller size community of politically active people. These factors would be expected to influence how the movements structure themselves and how these different structural groups respond to the local context by their choices of strategies and the
actions they employ to influence policy. This influence was not observed in this study.

Also of critical importance is whether the environmental movement is still flexible enough to shift its orientation to better meet the needs of many Americans that now see it as a threat to their livelihood. This may be the largest challenge the movement faces, and its future projection is unclear.

In today’s political environment, the environmental movement at all levels is subject to considerable conflict, and its effectiveness appears to be in decline. While memory of the many past successes may now be deeply engrained in the public at large, like support for recycling, new challenges may not be met. Many of the tried and true approaches may have outlived their usefulness leading to a need for new ideas, innovations, and collective actions to apply the pressure needed to meet these challenges. This will be far more difficult among a public deeply divided on environmental issues and will require a radical rethinking of our approach to environmental issues. Perhaps the next generation of activism must be far more inclusive of the range of issues, seeing environmental sustainability as a piece of other social justice and economic justice efforts. This may be the best way to get beyond the current role of protecting existing laws, while having a limited capacity to press for new laws and policies to address emerging issues. The new activism must also adapt to new technology and the changing nature of social interaction and collective action.

Ultimately, this study should inform both environmental movement organizations and policymakers working at the state and local levels about environmental policy processes as environmental policy shifts from the federal to local level, begins to become outdated with older laws, and requires new ideas and innovations to address the environmental issues of today in a changing social context.
REFERENCES


Appendix A

STATE ENVIRONMENTAL ORGANIZATIONS
Delaware

American Birding Association
American Industrial Hygiene Association, Delaware Local Section
American Lung Association of Delaware
Brandywine Conservancy, Inc.
Caesar Rodney Institute
Christina Conservancy Inc.
Citizens for Clean Power
Civic League for New Castle County
Claymont Community Coalition
Clean Air Council
Coalition for Natural Stream Valleys
Conservation Fund A Nonprofit Corporation (Total)
Delaware Chapter of the Surfrider Foundation
Delaware Association of Conservation Districts
Delaware Audubon Society
Delaware Bass Federation Chapter
Delaware Center for Horticulture
Delaware Center for the Inland Bays
Delaware Environmental Alliance for Senior Involvement
Delaware Federation of Garden Clubs
Delaware Forestry Association
Delaware Greenways
Delaware Interfaith Power & Light
Delaware Invasive Species Council
Delaware Mobile Surf Fisherman, Inc.
Delaware Native Plant Society
Delaware Nature Society
Delaware River Keeper Network
Delaware Seashore Preservation Foundation, Inc.
Delaware State Sportsmen's Association
Delaware Valley Green Building Council
Delaware Wild Lands
Delawareans for Social and Economic Justice (dsej)
Delmarva Ornithological Society
DLITE – Delmarva Low Impact Tourism Experiences
Ducks Unlimited - Delaware Chapter
Ecological Research & Development Group, Inc.
Eden-Hamilton Park Environmental Civic Association
Food and Water Watch of Delaware
Friends of Bombay Hook
Friends of Lums Pond, Inc.
Friends of Prime Hook National Wildlife Refuge, Inc.
Friends of the Nanticoke River
Friends of White Clay Creek State Park
Friends of Wilmington Parks
Green Delaware
Greenwatch Institute
Inland Bays Foundation
League of Women Voters of Delaware
Manomet - Delaware Bay Program Coordinator
Mid-Atlantic Environmental Law Center, Inc.
Mid-Atlantic Renewable Energy Coalition
Mt. Cuba Center
Naamans Creek Watershed Association
Nanticoke River Watershed Conservancy
Nanticoke Watershed Alliance
Nature Conservancy - Delaware Chapter
Newark Residents Against the Power Plant
Partnership for Sustainability in Delaware
Partnership for the Delaware Estuary
Protecting Our Indian River
Quality Deer Management Association, Delaware Chapter
Red Clay Valley Association
Save Our Lakes Alliance
Save Wetlands and Bays
Sierra Club - Delaware Chapter
Socially Responsible Agricultural Project
Southern Delaware Botanic Gardens
Southern New Castle County Alliance
Sussex County Land Trust
Tri-State Bird Rescue and Research, Inc.
White Clay Fly Fishers, Inc.
White Clay Watershed Association
Wilmington in Transition
Maine

30 Mile River Watershed Association
Acadia Center/Environment Northeast
Acadia Wildlife Foundation
Action-Shapleigh Youth Conservation Corps
American Lung Association of Maine
Androscoggin Land Trust
Androscoggin River Alliance
Association to Promote & Protect the Lubec Environment
Atlantic Salmon Federation
Augusta Trails
Bagaduce Watershed Association
Bangor Land Trust
Bates Morse Mountain Conservation Area Corporation
Bear Pond Improvement Association
Belfast Garden Club
Belgrade Lakes Association
Belgrade Regional Conservation Alliance (BRCA)
Biddeford Pool Land Trust
Biodiversity Research Institute
Blandings Park Wildlife Sanctuary
Blue Hill Garden Club
Blue Hill Heritage Trust
Boothbay Region Garden Club, Inc.
Boothbay Region Land Trust
Brewer Land Trust
Brunswick Area Citizens for a Safe Environment
Brunswick-Topsham Land Trust
Campaign Earth
Cape Elizabeth Land Trust
Casco Bay Estuary Partnership
Cathance River Education Alliance
Center for Wildlife
Chebeague and Cumberland Land Trust
Chewonki Foundation, Inc.
China Lake Association
Chiputneticook Lakes International Conservancy, Inc.
Clark Mountain Community Land Trust
Coastal Conservation Association Maine
Coastal Maine Botanical Gardens, Inc.
Coastal Mountains Land Trust
Cobscook Bay Resource Center, Inc.
Cold Stream Campowners’ Association
Conservation Law Foundation/Maine Advocacy Center
Crabtree Neck Land Trust
Damariscotta Lake Watershed Association
Damariscotta River Association
Damariscotta River Association (DRA)
Davis Conservation Foundation
Delaware Audubon Society
Downeast Audubon
Downeast Coastal Conservancy
Downeast Institute for Applied Marine Research and Education
Downeast Lakes Land Trust
Downeast Salmon Federation
Ducktrap Wildlife Preserve
East Pond Association
Eastern Trail Alliance
Ecotat Trust
Elliotsville Plantation, Inc.
Environment Maine
Environmental & Energy Technology Council of Maine
Falmouth Land Trust
Foothills Land Conservancy
Forest Ecology Network
Forest Society of Maine (FSM)
Francis Small Heritage Trust, Inc.
Freeport Conservation Trust
Frenchman Bay Conservancy
Friends of Acadia
Friends of Baxter State Park
Friends of Blue Hill Bay
Friends of Casco Bay
Friends of Cobbossee Watershed District
Friends of Craig Brook
Friends of Hog Island
Friends of Maine State Parks
Friends of Maine’s Mountains
Friends of Maine’s Seabird Islands (FOMSI)
Friends of Merrymeeting Bay
Friends of Messalonskee Lake
Friends of Midcoast Maine
Friends of Sears Island
Friends of Sebago Lake
Friends of Taunton Bay
Friends of the Eastern Promenade (FoEP)
Friends of the Kennebec River Rail Trail
Friends of the Presumpscot River
Friends of Wilson Pond Area, Inc.
Fundy Audubon Chapter
Garden Club Federation of Maine President
Georges River Land Trust
Georges River Tidewater Association
Great Pond Mountain Conservation Trust
Great Works Regional Land Trust
Greater Lovell Land Trust
Greater Pushaw Lake Association, Inc.
Green Lake Association
Growsmart Maine
Gulf of Maine Institute
Harpwell Garden Club
Harpwell Heritage Land Trust
Highland Lake Association
Holden Land Trust
Island Heritage Trust
Island Rover Foundation
Islesboro Island Trust
Kennebec Estuary Land Trust
Kennebec Land Trust
Kennebunk Land Trust
Kennebunkport Conservation Trust
Kezar Lake Watershed Association
Kittery Land Trust
Lace Arrowhead Conservation Council
Lake Anasagunticook Association
Lakes Association of Norway
Lakes Environmental Association (LEA)
Laudholm Trust
Little Sebago Lake Association
Loon Echo Land Trust
Mahoosuc Land Trust
Mahoosuc Pathways, Inc.
Maine Agri-Women
Maine Appalachian Trail Club
Maine Appalachian Trail Land Trust
Maine Association of Conservation Districts (MACD)
Maine Audubon - Penobscot Valley Chapter (PVC)
Maine Audubon Society
Maine Bowhunters Association
Maine Chapter of the American Chestnut Foundation
Maine Coast Heritage Trust
Maine Conservation Alliance (MCA)
Maine Environmental Education Association
Maine Environmental Policy Institute
Maine Green Independent Party
Maine Indoor Air Quality Council
Maine Initiatives
Maine Interfaith Power and Light
Maine Island Trail Association
Maine Lakes Society
Maine Land Trust Network
Maine League of Conservation Voters (MCV)
Maine Materials Exchange
Maine Organic Farmers and Gardeners Association
Maine People's Alliance
Maine Professional Guides Association
Maine Renewable Energy Association
Maine Rivers
Maine Solar Energy Association (MESEA)
Maine Timber Research & Maine Tree Foundation
Maine Volunteer Lake Monitoring Program
Maine Wilderness Watershed Trust
Maine Wildlife Conservation Council
Maine Woods Forever
Matagamon Lake Association, Inc.
McGrath Pond and Salmon Lake Association
Megunticook Watershed Association
Merrymeeting Audubon
Midcoast Audubon Society
Midcoast Maine Fishing Heritage Alliance
Moosehead Lake Fisheries Coalition
Mountain Division Alliance
Mousam Lake Region Association
Mt. Desert Land and Garden Preserve
National Wild Turkey Federation, Central Maine Chapter
National Wild Turkey Federation, Covered Bridge Chapter
National Wild Turkey Federation, Down East Chapter
National Wild Turkey Federation, Maine
National Wild Turkey Federation, Penobscot Valley Chapter
National Wild Turkey Federation, Southern Aroostook Chapter
Natural Resources Council of Maine
Nature Conservancy - Maine
New England Wildlife Center
Nickerson Lake Wilderness Preservation, Inc.
North Haven Conservation Partners
North Pond Association, Inc.
Ocean Point Colony Trust, Inc.
Oceanside Conservation Trust of Casco Bay
Orono Land Trust
Oyster River Bog Association
Panther Pond Association
Parker Pond Association, Inc.
Peaks Environmental Action Team
Peaks Island Land Preserve
Pemaquid Watershed Association
Penobscot Bay Watch
Penobscot County Conservation Association
Penobscot East Resource Center
Penobscot River and Bay Institute
Penobscot River Restoration Trust
Phippsburg Land Trust
Pleasant River Fish & Game Conservation Assoc.
Portland Trails
Presumpscot Regional Land Trust
Project Share
Prouts Neck Audubon Society
Quality Deer Management Association, Maine State Chapter
Range Ponds Environmental Association
Rangeley Lakes Heritage Trust
Raymond Waterways Protective Association
Restore the North Woods
REVERB, Inc.
Royal River Conservation Trust
Runs with Wolves Sanctuary, Inc.
Saco River Salmon Club
Saco Valley Land Trust
Safari Club International, Maine Chapter
Sandy River Land Trust
Sanford-Springvale Mousam Way Land Trust
Save our Shores Maine
Scarborough Land Conservation Trust
Sebasticook Regional Land Trust
Second Chance Wildlife, Inc.
Sheepscot Valley Conservation Association
Sierra Club, Maine Chapter
Small Woodland Owners Association of Maine
Somerset Woods Trustees
Somes-Meynell Wildlife Sanctuary
South Portland Land Trust
Sportsman's Alliance of Maine
Stanwood Wildlife Sanctuary
Star City ATV Club
Sustain Mid Maine Coalition
Taylor Pond Association
The Conservation Trust of Brooksville, Castine, and Penobscot
Thompson Lake Environmental Association, Inc.
Three Rivers Land Trust
Trickey Pond Environmental Protection Association Inc.
Trout Unlimited Kennebec Chapter
Trout Unlimited, George's River
Trout Unlimited, Maine Chapter
Trout Unlimited, Merrymeeting Bay Chapter
Trout Unlimited, Mollyockett Chapter
Trout Unlimited, Sebago Chapter
Upper St. John Land Trust
Viles Arboretum
Vinalhaven Land Trust
Waterboro Land Trust
Webb Lake Association
Western Foothills Land Trust
Western Maine Audubon
Windham Land Trust
Woodie Wheaton Land Trust
York County Audubon
York Land Trust
New Hampshire

Acton Wakefield Watersheds Alliance, Inc
Advocates for the North Mill Pond
American Bass Association of New Hampshire
American Cancer Society Cancer Action Network
Amherst Land Trust
Ammonoosuc Conservation Trust
Ashland Garden Club
Audubon Society of New Hampshire
Ausbon Sargent Land Preservation Trust
Aziscohos Lake Preservation Council
Balch Lake Improvement Organization
Bear Hill Conservancy Trust
Bear-Paw Regional Greenways
Beaver Brook Association
Beaver Lake Improvement Association
Bedford Garden Club
Bedford Land Trust
Blaisdell Lake Protective Association
Blue Ocean Society for Marine Conservation
Bow Open Spaces, Inc.
Bowhunters Wildlife Management Association of New Hampshire
Breathe New Hampshire
Canobie Lake Protective Association
Capital City Organic Gardeners
Chapman Sanctuary and Visny Woods
Chocorua Lake Conservancy
Citizens for a Future New Hampshire
Climate Counts
Coastal Conservation Association of New Hampshire (CCANH)
Connecticut River Joint Commissions
Conservation Law Foundation
Conservation New Hampshire
Contoocook Lake Area Preservation Association
Dan Hole Pond Watershed Trust
Derry Garden Club
Eastman Charitable Foundations
Environment New Hampshire
Five Rivers Conservation Trust
Flint Pond Improvement Association
Francesstown Land Trust
Friends of Big Island Pond
Friends of Mount Sunapee
Friends of Open Space in Keene
Friends of Pisgah, Inc.
Friends of the Suncook River
Friends of the Wapack Inc.
Friends of Tuckerman Ravine
Gilmanton Land Trust
Goose Pond Lake Association
Granite State Rural Watershed Association
Great Bay Stewards, Inc.
Great East Lake Improvement Association
Green Mountain Conservation Group
Green Start
Green Woodlands Foundation
Greenfield Trails Association
Hampstead Garden Club
Hanover Conservancy
Hanover Garden Club
Harris Center for Conservation Education
Howfirma Trust
Hubbard Brook Research Foundation
JACKSONS EASTSIDE WALK FOUNDATION
KINGSTON LAKE ASSOCIATION
Kroka Expeditions
Lake Armington Association
Lake Kanasatka Watershed Association
Lake Sunapee Protective Association
Lake Wentworth Foundation
Lake Winnipesaukee Watershed Association
Lakes Region Conservation Trust
Lamprey River Watershed Association
LAND BANK OF WOLFEBORO-TUFTONBORO INC
LAND FOR GOOD INC
Laurel Lake Association
Loon Preservation Committee - New Hampshire (LPC)
LOVELL LAKE ASSOCIATION INC
Masonoma Watershed Conservation Council
MERRYMEETING LAKE ASSOCIATION
Messer Pond Protective Association
Millville Lake Protective Association
Mirror Lake Protective Association
Monadnock Community Land Trust
Monadnock Conservancy
Monadnock Garden Club
Moose Mountains Regional Greenways
Mountain Garden Club
Nature Conservancy - New Hampshire Chapter
New Hampshire Agriculture in the Classroom (NHAITC)
New Hampshire Association of Conservation Commissions (NHACC)
New Hampshire Federation of Garden Clubs, Inc.
New Hampshire Lakes Association
NEW HAMPSHIRE ORCHID SOCIETY INC
New Hampshire Project Learning Tree
New Hampshire Rivers Council
New Hampshire Sustainable Energy Association
New Hampshire The Beautiful
New Hampshire Wildlife Federation
Newfound Lake Region Association
Nichols Smith Conservation Land Trust
Nissitissit River Land Trust, Inc.
North East Biosolids and Residuals Association
Northeast Resource Recovery Association
Northern Forest Center, Inc.
Northwood Lake Watershed Association
Ossipee Lake Alliance
Otter Pond Protective Association
Oyster River Watershed Association
Oyster River Watershed Association
Pathways for Keene
Pemi-Baker Land Trust
Piscataquog Land Conservancy
Pleasant Lake Protective Association
Plymouth Area Renewable Energy Initiative
Powwow Pond Council, Inc.
Pratt Pond Association
Quality Deer Management Association, First New Hampshire Branch
Russell Farm and Forest Conservation Foundation
Safari Club International, New Hampshire Chapter
Sandown Garden Club
Seacoast Anti-Pollution League (SAPL)
Sierra Club, New Hampshire Chapter
Sierra Club, Upper Valley Chapter
Silver Lake Land Trust
Society for the Protection of New Hampshire Forests
Souhegan Valley Land Trust
Southeast Land Trust of New Hampshire
Spofford Lake Association
Squam Lakes Association
Squam Lakes Conservation Society
Squam Lakes Natural Science Center
Strafford Rivers Conservancy
The Amherst Garden Club
Tin Mountain Conservation Center
Trailwrights, Inc.
Trout Unlimited, Ammonoosuc Chapter
Trout Unlimited, Great Bay Chapter
Trout Unlimited, Merrimack River Valley Chapter
Trout Unlimited, Monadnock Chapter
Trout Unlimited, New Hampshire Chapter
Trout Unlimited, Pemigewasset Chapter
U.S. Green Building Council, New Hampshire Chapter
Upper Saco Valley Land Trust
Upper Valley Land Trust
Webster Lake Association
Windham Rail Trail Alliance
Wonalancet Out Door Club
Rhode Island

Organization Name
Acadia Center
Alliance for a Livable Newport
American Lung Association of Rhode Island
Apeiron Foundation
Aquidneck Land Trust
Audubon Society of Rhode Island
Barrington Land Conservation Trust
Blackstone Parks Conservancy
Blackstone River Valley Corridor Keepers
Blackstone River Watershed Council / Friends of the Blackstone
Blithewold Mansion, Gardens & Arboretum
Block Island Conservancy
Block Island Land Trust
Bonnet Shores Land Trust
Borders Farm Preservation, Inc.
Bristol Land Conservation Trust, Inc.
Buckeye Brook Coalition
Burrillville Land Trust
Charlestown Land Trust
Childhood Lead Action Project
Citizens for the Preservation of Waterman Lake, Inc.
Citywide Green
Clean the Bay, Inc
Clean Water Action - Rhode Island
Coalition for Buzzards Bay - Bay Lands Center
Commercial Fisheries Research Foundation
Conanicut Island Land Trust
Conservation Law Foundation - RI
Coventry Land Trust
Crystal Spring Center for Earth Learning
Cumberland Land Trust
Defenders of Animals
Ducks Unlimited, Rhode Island
East Beach Association
East Greenwich Land Trust
East Providence Land Conservation Trust
Ecology Action for Rhode Island
ecoRI, Inc.
Edgewood Waterfront Preservation Association
Environment Council of Rhode Island
Environment Council of Rhode Island Education Fund
Environment Rhode Island
Environmental Justice League of Rhode Island
Foster Land Trust
Friends of Ballard Park
Friends of India Point Park
Friends of the Moshassuck
Friends of the National Wildlife Refuges of Rhode Island
Friends of the Pawtuxet
Glocester Land Trust
Governor Francis Farms Garden Club
Green Earth Corporation Kindness Organization, Inc.
Green Living Rhode Island Resources
Greenwich Bay Watershed Group
Groundwork Providence
Johnston Land Trust *
Keep Blackstone Valley Beautiful
Kickemuit River Council
Lake Mishnock Preservation Association, Inc.
Land Conservancy of North Kingstown
Lights Out Green In
Lincoln Municipal Land Trust *
Little Compton Agricultural Conservancy Trust
Little Compton Garden Club
Living on the Edge
Mill Cove Conservancy, Inc.
Ministerial Road Preservation Association
Narragansett Land Conservancy Trust
Narragansett Tree Society
Narragansett Water Pollution Control Association
Narrow River Land Trust, Inc.
Narrow River Preservation Association
Nature Conservancy, Rhode Island Chapter
Neutaconkanut Hill Conservancy
New Dawn Earth Center
New England Small Farm Institute
New England Trackers
Newport Garden Club
Newport Tree Society
Nopes Island Conservation Association, Inc.
Norman Bird Sanctuary
North Providence Land Trust
North Smithfield Land Trust Corporation
Northeast Organic Farming Association of Rhode Island
Ocean State Action
Ocean State Aquaculture Association
Ocean View Foundation
Pawtucket Land Trust
Pawtuxet River Authority & Watershed Council
People's Power & Light
Post Carbon Rhode Island
Providence Neighborhood Planting Program
Prudence Conservancy
Resources for RI Education
Revive the Roots
Rhode Island Alliance for Clean Energy
Rhode Island Association of Conservation Districts (RIACD)
Rhode Island Center for Agricultural Promotion and Education
Rhode Island Chapter of Surfrider Foundation
Rhode Island Chapter of the American Society of Landscape Architects
Rhode Island Chapter of the Ruffed Grouse Society
Rhode Island Chapter of the Weston A. Price Foundation
Rhode Island Environmental Education Association
Rhode Island Farm Bureau Land Trust
Rhode Island Federation of Garden Clubs, Inc.
Rhode Island Forest Conservators Organization
Rhode Island Interfaith Power & Light
Rhode Island Jewish Environmental Alliance
Rhode Island Land Trust Council
Rhode Island Natural History Survey
Rhode Island Nursery & Landscape Association
Rhode Island Public Interest Research Group
Rhode Island Tree Council
Rhode Island Vegan Awareness - RIVA
Rhode Island Wild Plant Society
Richmond Rural Preservation Land Trust *
Roaring Brook Watershed Association
Sakonnet Harbor Conservancy
Sakonnet Preservation Association
Salt Ponds Coalition
Saugatucket River Heritage Corridor Coalition, Inc.
Save Bristol Harbor
Save The Bay
Save the Lakes
Scenic Block Island
Scituate Land Trust
Shellfish Restoration Foundation of Narragansett Bay
Shelter Harbor Conservation Society
Sierra Club - Rhode Island Chapter
Smithfield Land Trust
South County Garden Club of Rhode Island, Inc.
South Kingstown Land Trust
Southside Community Land Trust
The Committee for the Great Salt Pond
The Plum Beach Garden Club, Inc.
Tiverton Land Trust
Town of Foster Land Trust
Toxics Information Project
Trout Unlimited, Narragansett 225 (NCTU)
Trout Unlimited, Northern Rhode Island Chapter
U.S. Green Buildings Council-Rhode Island Chapter
Warren Land Conservation Trust
Warwick Land Trust
Watch Hill Conservancy
Waypoyset Preserve Trust
Weekapaug Foundation for Conservation
West Bay Land Trust
West Greenwich Land Trust
Westerly Land Trust
Westerly Municipal Land Trust
Wildlife Rehabilitators Association of Rhode Island (WRARI)
Womans Wilderness Weekend of Rhode Island
Wood-Pawcatuck Watershed Association
Woonasquatucket River Watershed Council
Vermont

350 Vermont
Addison County River Watch
American Hiking Society | Northwoods Stewardship Center
American Lung Association of Vermont
American Society of Landscape Architects: Vermont Chapter
Arrowhead Mountain Lake Association
Ascutney Mountain Audubon Society
Association of Vermont Conservation Commissions
Audubon Vermont
Batten Kill Watershed Alliance
Black River Action Team
Black River Area Community Coalition, Inc.
Burlington Garden Club
Burr Pond Association
Castanea Foundation
Cedar Lake Association
Center for Whole Communities
Center for Woodlands Education, Inc.
Charlotte Land Trust
Colchester Land Trust
Cold Hollow to Canada, Inc.
Composting Association of Vermont
Connecticut River Watershed Council
Connecticut RiverFest
Conservation Law Foundation
Cross Vermont Trail Association
Crystal Lake Preservation Association
Cycle Conservation Club of Vermont
Daniels Pond Association
Duxbury Land Trust
Earthwalk Vermont
East Montpelier Trails, Inc.
Echo Lake Association
Eligo Lake Association
Energize Vermont, Inc.
Environmental Mediation Center -Vermont
Fairfield Pond Association
Fairfield Pond Recreation Assoc.
Federated Garden Clubs of Vermont
Federation Fund for Conservation and Training, Inc.
Federation of Vermont Lakes and Ponds
Four Winds Nature Institute, Inc.
Franklin Watershed Committee
Friends of Green River Reservoir
Friends of Northern Lake Champlain
Friends of Sabins Pasture, Inc.
Friends of the Horticulture Farm
Friends of the Mad River
Friends of the Ompompanoosuc River
Friends of the Poultney River
Friends of the West River Trail, Inc.
Friends of The Winooski River
Friends of Waterbury Reservoir
Glen Lake Association
Green Mountain Audubon
Green Mountain Club
Green Mountain Conservancy
Green Mountain Fly Tyers Club
Green Mountain Water Environment Association (GMWEA)
Green Up Vermont
Greensboro Association
Greensboro Land Trust
Greenwood Lake Association
GunSense Vermont, Inc
Halls Lake Association
Hartland Garden Club
Hartland Nature Club
Hazen's Notch Association
Healing Ourselves & Mother Earth (HOME)
Highfields Center for Composting
Highgate Springs Protective Association
Hinesburg Land Trust
Holiday Point Community Association
Huntington River Conservation Partnership
Isle La Motte Preservation Trust
Jenches Foundation, Inc
Jericho Underhill Land Trust
Joe's Pond Association
Kingdom Trails Association
Lake Bomoseen Association
Lake Carmi Camper's Association, Inc.
Lake Champlain Committee
Lake Champlain International, Inc.
Lake Champlain Land Trust
Lake Champlain Research Consortium
Lake Dunmore/Fern Lake Association
Lake Eden Association
Lake Elmore Association
Lake Fairlee Association
Lake Groton Association
Lake Harveys Association, Inc.
Lake Hortonia Property Owners Association
Lake Iroquois Association, Inc.
Lake Morey Protective Association, Inc.
Lake Parker Association
Lake Raponda Association, Inc.
Lake Rescue Association
Lake Saint Catherine Conservation Fund
Lake St. Catherine Association, Inc.
Lake Wallace Recreational Association
Lamoille River Anglers Assoc.
Lamoille River Watershed Association
Laplatte Watershed Partnership
Lewis Creek Association
Living Future Foundation
Local Motion, Inc.
Lull's Brook Watershed Association
Lyford Pond Association
Maidstone Lake Campowners Association
Memory Lane and Shore Road Improvement Association
Memphremagog Conservation, Inc.
Memphremagog Watershed Association
Merck Forest & Farmland Center's
Metta Earth Institute, Inc.
Middlebury Area Land Trust
Middlebury River Watershed Partnership
Missisquoi River Basin Association
Missisquoi River Keepers - Abenaki Nation
Moosalamoo Ecotourism Association
Nature Conservancy of Vermont
Neal Pond Campowners Association
Nennington Garden Club, Inc.
New England Coalition on Nuclear Pollution, Inc.
New England Grassroots Environmental Fund, Inc.
New Haven River Watch
Ninevah Foundation
Noise Pollution Clearinghouse
North Branch Nature Center, Inc.
Northeast Kingdom Audubon Society
Northeast Organic Farming Association of Vermont
Northeast Recycling Council
Northeast Stewardship Project, Inc.
Northeast Wilderness Trust
Northern Forest Canoe Trail
Northern Rivers Land Trust
Northwoods Stewardship Center
One World Conservation Center
Orange County Headwaters Project
Otter Creek Audubon Society
Otter Creek River Association
Outreach for Earth Stewardship.
Paran Recreation, Inc.
Passumpsic River Network
Passumpsic Valley Land Trust
Pelots Bay Restoration Association
Post Oil Solutions
Pownal Hoosic River Watershed Association
Preservation Trust of Vermont, Inc.
Putney Mountain Association
Quality Deer Management Association - Champlain Valley Branch
Renewable Energy Vermont
Resilient Design Institute, Inc.
Richmond Land Trust
Ridge Protectors
Rivendell Trails Association, Inc.
Riverbank Media
Rock River Preservation Vermont
Rootsworlk, Inc.
Rozalia Project
Rutland County Audubon Society
Rutland Garden Club
Salem Lakes Association
Seeds of Self Reliance
SEWER - Save Everyone’s Wells River
Seymour Lake Association
Shadow Lake Association
Shelburne Farms
Sierra Club - Vermont Chapter
Silver Lake Association
SolarFest, Inc.
South Burlington Land Trust, Inc.
South End Newark Pond Association
South Hero Land Trust
South Pond Land Owners Association
Southeastern Vermont Audubon Society
Southern Vermont Chapter of the Ruffed Grouse Society
Southern Vermont Riders, Inc.
St. Albans Bay Association, Inc.
Stark Mountain Foundation, Inc.
Sterling Falls Gorge Natural Area Trust
Stowe Land Trust
Stratton Area Citizens Committee
Sunset Lake Preservation Association
Sunset Lake, Sunrise Lake, Perch Pond Association
Sustainable Energy Resource Group
Sustainable Woodstock
Taconic Tri-State Audubon Society
Tannery Wildlife Refuge
The Watershed Center
Ticklenaked Pond Watershed Association
Tinmouth Land Trust, Inc.
Tinmouth Pond Lake Association
Treleven
Trout Unlimited- Central Vermont Chapter
Trout Unlimited, Connecticut River Valley Chapter
Trout Unlimited, MadDog Chapter
Trout Unlimited, Northeast Kingdom Chapter
Trout Unlimited, Southwestern Vermont Chapter
TWIN LAKE WATERSHED ASSOCIATION LTD
Vermont ATV Sportsman's Association, Inc.
Vermont BASS Chapter Federation
Vermont Botanical & Bird Club
Vermont Center for Ecostudies
Vermont Community Forests, Inc.
Vermont Community Garden Network
Vermont Conservation Voters
Vermont Coverts
Vermont Ducks Unlimited
Vermont Ducks Unlimited, Central
Vermont Ducks Unlimited, Central East
Vermont Ducks Unlimited, Northwest District
Vermont Ducks Unlimited, Southwest District
Vermont Family Forests
Vermont Farm Bureau, Inc.
Vermont Federation of Sportsmen's Club, Inc.
Vermont Fish and Wildlife Conservation Group
Vermont Forestry Foundation
Vermont Housing and Conservation Board
Vermont Institute of Natural Science
Vermont Land Trust
Vermont Natural Resources Council
Vermont Paddlers Club
Vermont Public Interest Research Group
Vermont River Conservancy
Vermont State-Wide Environmental Education Programs
Vermont Sustainable Heating Initiative, Inc.
Vermont Wilderness School
Vermont Woodlands Association
Vermont Youth Conservation Corps
Vermonters for a Clean Environment
Vermonters for a Sustainable Population
Waterbury Leap
West River Watershed Alliance
Whipstock Hill Preservation Society
White River Partnership
Wild in Vermont, Inc.
Willoughby Watershed Committee
Windmill Hill Pinnacle Association
Windsor Good News Electronics Recycling Education, Inc.
Woodbury Lake Association
Woodford Lake Estates, Inc.
Appendix B

FIXED FORM AND INTERNET BASED SURVEYS
Survey Description, Purpose, and Informed Consent of Participants

Thank you for taking the time to complete this survey. This survey is being conducted to provide information about environmental organizations and the activities and actions they take to influence environmental policy. It is specifically looking at the role of environmental groups to influence state environmental policy in the states of Delaware, Maine, New Hampshire, Rhode Island, and Vermont, each of which can be considered a small state in terms of total population.

As part of a state environmental community, your responses will allow us to better understand how environmental groups work individually and collectively on issues they care about. The research project seeks to better understand how environmental policy is shaped with the help of environmental organizations in these five states.

This on-line survey will take approximately 30 minutes of your time. The study results will be shared with all survey participants upon its completion and should provide insights about how environmental groups operate in your state, what tactics are most effective, and how you may be able to better accomplish your work. Before starting this survey, please carefully review the Informed Consent Form and Agreement to Participate (click here). [NOTE: LINKED FROM HAS BEEN INSERTED AS LAST PAGE OF THIS WORD FILE FOR IRB REVIEWERS.]

If you choose to participate in this survey your responses will be kept confidential. If you have questions about the project you may contact David Carter by e-mail at Davidctr@udel.edu or by phone at (302) 270-6816. Have your read the Informed Consent Form and do you agree to participate in this survey?

☐ YES (1)
☐ NO (2)
General Background Information about Your Organization (6 questions)

This set of questions will provide general background information about your organizations. It includes questions about your organization name and location, when your organization was founded, and how it is organized (informal group, IRS recognized nonprofit, etc.).

Q1 Responding as a representative of your organization, do you believe that environmental organizations have had more or less influence on environmental issues in your State during the past five years?
   - Much More Influence (1)
   - More Influence (2)
   - About the Same (3)
   - Less Influence (4)
   - Much Less Influence (5)
   - Don't Know (6)

Q1 Please provide the following contact information.
   - Organization Name (1)
   - Title of Person Completing Survey (2)
   - City (3)
   - State(s) (4)

Q2 What year was the organization founded?
   - Year (1)

Q3 Is your organization incorporated?
   - Yes (4)
   - No (6)
   - Don't Know (5)
Answer If Is your organization an IRS recognized nonprofit (eg. IRS 501(c), 527, etc.)? Yes Is Selected

Q4 Is your organization organized as a: (select from drop-down list)
- 501(c)(3) — IRS Recognized Nonprofit Charitable Organization (1)
- 501(c)(4) — IRS Recognized Civic Leagues or Social Welfare Organizations (2)
- 501(c)(5) — IRS Recognized Agricultural and Horticultural Organizations or Labor Union (3)
- 501(c)(6) — IRS Recognized Business League, Chambers of Commerce, Real Estate Boards, etc. (4)
- 501(c)(7) — IRS Recognized Social and Recreational Clubs (5)
- 501(c)(8) - Fraternal beneficiary societies and associations (14)
- 501(c)(9) - Voluntary employee beneficiary associations (16)
- 527 - IRS Recognized Political party; campaign committees for candidates; and political action committee (9)
- Private Foundation (10)
- For Profit (6)
- Other (8) _______________
- Don't Know (11)

Q5 Is your organization a chapter or affiliate of a national organization?
- Yes (Please list National Organization) (5) _______________
- No (6)
- Don't Know (7)

Answer If Is your organization an IRS recognized nonprofit (eg. IRS 501(c), 527, etc.)? Yes Is Selected

Q6 Is your organization affiliated with a different type of organization(s) to carry out different types of activities? (Example: National Sierra Club is a 501(c)(4) social welfare organization and affiliated with the 501(c)(3) Sierra Club Foundation that focuses on charitable activities).
- Yes (1)
- No (2)
- Don't Know (3)

Environmental Issues Important to Your Organization (3 questions) In this section, we seek to learn more about the issues of importance to your organization, the information you use to guide your work on these issues, and where you acquire your information.

Q7 To help us better understand the environmental issues most important to your organization, please indicate how often your organization has commit funding, staffing, or volunteer
resources to impact the following general categories of environmental issues during the past three years? (Complete all that apply to your organizations).

<table>
<thead>
<tr>
<th>Environmental Category</th>
<th>Never (52)</th>
<th>Rarely (53)</th>
<th>Sometimes (54)</th>
<th>Most of the Time (55)</th>
<th>Always (56)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pollution Abatement &amp; Control (1)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Environmental Health (Chemical and Toxic Waste, Brownfield, Lead abatement, etc.) (6)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Environmental Justice (7)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Global Warming/Climate Change (5)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Energy (Renewable Energy, Fossil Fuel Reduction, Nuclear Power) (8)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Land Protection &amp; Conservation (Wetlands, Habitat Restoration) (3)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Wildlife Preservation or Protection (Biodiversity, (4)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Land Use and Development (2)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Outdoor Recreation (9)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Animal Protection and Welfare (11)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Oceans and Marine Life (10)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Other (please specify) (12)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

Q8 On the scale below, please indicate the extent to which your organization has found your State's environmental records, data, and budget information has been made available to the public.

<table>
<thead>
<tr>
<th>Information Availability to Public in your State (1)</th>
<th>Never (14)</th>
<th>Rarely (15)</th>
<th>Sometimes (16)</th>
<th>Most of the Time (17)</th>
<th>Always (18)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
Q9 We would like to know a little about where you get your information and the importance of various data sources to your organization. Please select any of the following sources of information about environmental issues, programs, or activities in your state used by your organization.

<table>
<thead>
<tr>
<th>Source of Information</th>
<th>Never (11)</th>
<th>Rarely (12)</th>
<th>Sometimes (13)</th>
<th>Most of the Time (14)</th>
<th>Always (15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Collected by citizens (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer Review Scientific Studies &amp; Data (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nongovernmental websites (that may package gov. data) (12)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government databases (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Website (4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calling Government Officials (5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freedom of Information Act Requests (6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civic minded former government employees (15)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legislative Bill Tracking Website (9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legislative Budget Hearing (7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campaign Finance Reports (8)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Lobbying Expenditure Disclosure Records (10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal Discovery (11)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nongovernmental publications or services (13)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>News media (14)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (Please Specify) (16)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Organizational Resource: Staff, Volunteers, Annual Budget, and Funding (7 questions)  This set of questions will ask you about your staff, volunteer, membership resources. It will also ask you to estimate your annual operating budget, the sources of your funding, and an estimate of how you distribute these funds to provide service and to influence policy.

Q10 How many full-time equivalent staff are in your organization on average during the past three years? (enter "0" if you have no full-time staff)
   Number of Professional Staff (1)
   Number of Support Staff (2)
   Number of Interns (3)
   Other (Please Specify) (4)

Q11 Do you have members? If so, on average how many of them are in the following categories on average during the past three years? (enter "0" if you have no members)
   Number of Individuals (1)
   Number of Organizations (2)
   Number of Government Agencies (3)
   Other (please specify): (4)

Q12 Do you have volunteers? Is so, how many volunteers work with your organization on average during the past 3 years? (enter "0" if you have no volunteers)
   Number of Volunteers (1)

Q13 Approximately how much is your organization’s annual operating budget? (Please select a range from the drop-down box.)
   ○ No annual budget (1)
   ○ $1 - $5,000 (2)
   ○ $5,001 - $25,000 (3)
   ○ $25,001 - $100,000 (4)
   ○ $100,001 - $1,000,000 (5)
   ○ $1,000,000 - $5,000,000 (6)
   ○ Greater than $5,000,000 (7)
Q14 What are the sources of your organization’s annual income? (Rough Estimates are perfectly fine – indicate percentage from a range 0-100% - The total will calculate automatically).

_____ Membership Dues (%) (1)
_____ Individual Donors (%) (2)
_____ Government: Any Level (%) (3)
_____ Corporate Contributions (%) (4)
_____ Foundation Funding (%) (5)
_____ Legal Settlements (%) (6)
_____ Fund-raising Events (%) (7)
_____ Income from Services provided to clients or others (%) (8)
_____ Sale of Merchandise (%) (9)
_____ Other (%): Please describe. (10)

Q15 What percent of your organizations budget would you estimate is spent to provide environmental services (e.g., land or habitat restoration projects, education programs, environmental clean-ups, land protection, etc.)?

_____ Percent of Effort spent providing environmental services. (1)

Q16 What percent of your organizations budget would you estimate is spent advocating for environmental policies (grassroots organizing, testifying on legislation or regulations, direct lobbying, legal actions, etc.)?

_____ Percent of Effort spend advocating for environmental policies. (1)
Interaction with Government Officials to Influence State Environmental Issues (3 questions). The questions in this section will provide us information about the staff resources your organization devotes to government relations, how often your organization interacts with government; any how your message is received by agencies.

Q17 How many people in your organization have responsibility for government relations or public/environmental policy?

    Number of people responsible for Government Relations (1)

Q18 In addition to efforts made by people in your organization, contact with those in government sometimes comes about at the initiative of the policymakers themselves. How often on average would you say that people in government approach people in your organization to discuss matters of mutual interest? (Please select a range from the drop-down box.)

    Never (9)
    1-3 times/year (10)
    4-6 times/year (11)
    6-12 times/year (12)
    More than 12 times/year (13)
    Don't Know (14)

Q19 Thinking generally about those in government that your organization deals with, please select the description below that typically describes those official’s attitudes.

    Not really interested in hearing our views. (1)
    Sometimes interested in what we have to say. (2)
    Usually interested in what we have to say. (3)
    Interested in what we have to say and interested in actively working with us to achieve a common goal. (4)
    Our organization does not deal with government officials. (7)
    Other (Please Specify) (5) ____________________
    Don't Know (6)
Opportunity to Influence Environmental Policy in your State (2 Questions)  
This section will help us understand the opportunities your organization has to influence environmental policies and programs in your state. It will give us information about the perceived political will to take action in your state, the issues or problems that may be creating or limiting these opportunities and the ways your organization acts to take advantage of the opportunities.

Q20 Responding as a representative of your organization, do you agree or disagree that public officials in your state have been taking a more active role in protecting the environment during the past 5 years?
- Strongly Agree (1)
- Agree (2)
- Neither Agree nor Disagree (4)
- Disagree (6)
- Strongly Disagree (7)
- Don't Know (8)

Q21 Sometimes key events motivate state policymakers to take action on environmental issues. Please list any key events that have helped or hindered your opportunities to influence environmental policy and actions in your state in the past 5 years. (e.g. Change in public opinion, significant environmental accident or natural disaster, election of new officials, emergence of new issues such as gas/oil fracking, new funding opportunity, etc.).

Event 1 (1)
Event 2 (3)
Event 3 (4)
Resources Allocated to Influence Policy (3 questions)  This section is designed to let us know how often, and how much, of your organization’s resources are used to influence environmental policies in your state. The questions ask how often you utilize a range of possible strategies, an estimate of the percent of your resources used on these strategies, and a little about your organization’s use of emerging technology.

Q22 Please indicate how often your organization staff and leaders engages in each of the following strategies to affect the environment and improve policy in your state. (Complete all that apply to your organization).

<table>
<thead>
<tr>
<th></th>
<th>Never (14)</th>
<th>Rarely (15)</th>
<th>Sometimes (16)</th>
<th>Most of the Time (17)</th>
<th>Always (18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide analysis of legislative or regulatory proposals (1)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Talk to elected public officials (2)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Release research reports to the media, public, or policymakers (3)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>File a law suit or a friend of the court brief (6)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Testify at legislative or administrative hearings (7)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Serve on planning or advisory committees with government officials (8)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Tracking legislation (16)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Draft &amp; propose environmental legislation (17)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Having a registered lobbyist (18)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other (15)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Q23 Please indicate how often your organization uses each of the following strategies to encourage others to affect the environment and improve policy in your state. (Complete all that apply to your organization).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never (14)</th>
<th>Rarely (15)</th>
<th>Sometimes (16)</th>
<th>Most of the Time (17)</th>
<th>Always (18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct educational programs, workshops, or conferences about environmental issues. (18)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Encourage the public to call, write, or email policymakers (4)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Organize events in support or opposition to proposed legislation, regulation, or other policy pronouncement (5)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Conduct on-line Advocacy Campaigns (14)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Hold, attend, or promote participation in public protests to bring attention to issues (15)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Other (Please Specify) (19)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>

Q24 Please indicate how often your organization engages in each of the following electoral strategies to affect the environment and improve policy in your state. (Complete all that apply to your organization).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never (14)</th>
<th>Rarely (15)</th>
<th>Sometimes (16)</th>
<th>Most of the Time (17)</th>
<th>Always (18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host candidate forums or candidate scorecards (11)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Conduct voter registration drives (9)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Conduct get out the voter activities (10)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Support or oppose candidates for office (12)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Other (Please Specify) (19)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>
Q25 Does your organization use any of the following electronic communication tools in your advocacy efforts? (Select all that apply.)

- Email Group (like Google Groups, Yahoo Groups, or a list serve). (1)
- Email Blast (e-mail to a large list often using e-mail software like Mail Chimp, Constant Contact, Vertical response, etc.) (2)
- Social Networking Site (like Facebook, Twitter, Instagram, etc.) (3)
- Electronic Action Alerts (email, text messages, social media). (4)
- Web Blog (5)
- Videosharing (like YouTube, Vimeo) (6)
- Comprehensive Advocacy Software [Such as Getactive, Netaction or so forth] (7)
- Digital Storytelling (8)
- Infographics (9)
- On-line Petitions (10)
- On-line Mapping Software (11)
- Other (please specify) (12) ____________________

Relationships with Other Organizations (2-5 questions, based initial response)  This is the final series of questions. You are almost done. These questions seek to understand the extent to which your organization collaborates with other organizations, and the costs and benefits of these cooperative efforts if you do work in coalitions or informal networks.

Q26 Is your organization currently involved in formal collaborations (legal, fiscal, administrative, or programmatic exchanges) or in informal networks (cooperating, coordinating, or working together in other ways)?

- Yes, involved in one or more formal collaborations (legal, fiscal, administrative, or programmatic exchanges) with other organizations (1)
- Yes, involved in one or more informal networks (cooperation, coordination, working together) with other organizations (2)
- Yes, involved in both formal collaborations and informal networks (3)
- No, not involved in any collaborations or informal networks (skip to 25) (4)

If No, not involved in any col... Is Selected, Then Skip To  If NOT involved in collaborations ...

Q27 If currently involved in collaboration or networks, please describe briefly the purpose of the one that is most important to your organization.
Q28 If involved in collaborations or networks, in general do these relationships make it easier or harder to accomplish your organization's key mission or priority activities? (Select best response for each type of resource)

<table>
<thead>
<tr>
<th>Resource</th>
<th>Much Harder (1)</th>
<th>Harder (2)</th>
<th>Neutral (4)</th>
<th>Easier (6)</th>
<th>Much Easier (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obtain funding (1)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Recruit members/staff/volunteers (2)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Enhance your visibility/reputation (3)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Have Legislators Consider Your Issue (4)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Have State Agency Staff Consider Your Issue (5)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Q29 If NOT involved in collaborations or networks, is that due to a need for greater capacity or technical assistance? (Select best response)
- ☐ Yes, your organization would network and/or collaborate with other entities if it had the capacity and/or technical assistance to do so. (1)
- ☐ No, your organization has the capacity and technical know-how (2)
- ☐ Don’t Know (3)

Q30 In the past 5 years, has your organization competed with other environmental organizations for any of the following reasons? (Check all that apply).
- ☐ Obtaining fiscal resources (1)
- ☐ Recruiting members/staff/volunteers (2)
- ☐ Developing Programs/Services (3)
- ☐ Differences in positions on issues (4)
- ☐ Personality Conflicts (5)
- ☐ Lack of Trust (6)
- ☐ We do not compete with any other organizations (7)
Informed Consent Form and Agreement to Participate

The University of Delaware is conducting research regarding environmental advocacy by examining the environmental organizations. This study is being conducted by David Carter, a PhD candidate in the School of Public Policy and Administration.

The online survey is being conducted to provide information about environmental organizations, the resources they secure to promote environmental work, the tactics they utilize, and the opportunities they have to influence environmental policy in their state. It will include questions on general background information, environmental issues addressed interaction with government agencies, collaborations with other groups, strategies used, and organizational capacity.

This survey has been sent to approximately 350 organizations from 5 states. These groups have been identified through numerous national directories, web searches, rosters of environmental organizations, and consultation with environmental organization representatives in the states included in this study.

You have been chosen from the list of environmental or natural resource conservation organizations with activity in the states of Delaware, Maine, New Hampshire, Rhode Island, or Vermont. Participation in the study will require answering questions from a survey and will take approximately 30 minutes of your time.

Your answers will be kept confidential and your responses will not be linked to you personally. The data will be stored for three years as required by the University of Delaware's Human Subjects Review Board. The dissertation is expected to be written, defended, and completed no later than June of 2016. Your participation is completely voluntary. You can refuse to answer any question or to stop the interview at any time.

If you have questions about the project you may contact David Carter by e-mail at Davidc@udel.edu or by phone at (302) 270-6816.

If you have questions regarding your rights as a participant, you may contact the Chair of the Institutional Review Board, University of Delaware at (302) 831-2137.
Appendix C

IMPUTED SURVEY RESPONSE VARIABLES & NUMBER OF CASES
<table>
<thead>
<tr>
<th>Survey Response</th>
<th>Number Imputed</th>
<th>Percent Imputed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact from those in government</td>
<td>7</td>
<td>2.4%</td>
</tr>
<tr>
<td>State Government Officials are Taking More Active Role in Protecting Environment</td>
<td>7</td>
<td>2.4%</td>
</tr>
<tr>
<td>Government Officials Attitudes Toward Organization's Views</td>
<td>8</td>
<td>2.8%</td>
</tr>
<tr>
<td>News Media</td>
<td>14</td>
<td>4.8%</td>
</tr>
<tr>
<td>Lobbying Expenditure Disclosure Records</td>
<td>15</td>
<td>5.2%</td>
</tr>
<tr>
<td>Civic Minded Former Government Employees</td>
<td>15</td>
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<td>16</td>
<td>5.5%</td>
</tr>
<tr>
<td>Government Website</td>
<td>16</td>
<td>5.5%</td>
</tr>
<tr>
<td>Data Collected by Citizens</td>
<td>16</td>
<td>5.5%</td>
</tr>
<tr>
<td>Legislative Budget Hearing</td>
<td>16</td>
<td>5.5%</td>
</tr>
<tr>
<td>Nongovernmental Publications or Services</td>
<td>17</td>
<td>5.9%</td>
</tr>
<tr>
<td>Legal Discovery</td>
<td>17</td>
<td>5.9%</td>
</tr>
<tr>
<td>Calling Government Officials</td>
<td>17</td>
<td>5.9%</td>
</tr>
<tr>
<td>Talk to elected public officials</td>
<td>18</td>
<td>6.2%</td>
</tr>
<tr>
<td>Nongovernmental Websites (that may package gov. data)</td>
<td>18</td>
<td>6.2%</td>
</tr>
<tr>
<td>Government Databases</td>
<td>18</td>
<td>6.2%</td>
</tr>
<tr>
<td>Legislative Bill Tracking Website</td>
<td>18</td>
<td>6.2%</td>
</tr>
<tr>
<td>Peer Review Scientific Studies &amp; Data</td>
<td>19</td>
<td>6.6%</td>
</tr>
<tr>
<td>Host candidate forums or candidate scorecards</td>
<td>19</td>
<td>6.6%</td>
</tr>
<tr>
<td>Support or oppose candidates for office</td>
<td>19</td>
<td>6.6%</td>
</tr>
<tr>
<td>Conduct voter registration drives</td>
<td>20</td>
<td>6.9%</td>
</tr>
<tr>
<td>Collaborative Relationship Impact.-Enhance your visibility/reputation</td>
<td>20</td>
<td>6.9%</td>
</tr>
<tr>
<td>Testify at legislative or administrative hearings</td>
<td>21</td>
<td>7.3%</td>
</tr>
<tr>
<td>Release research reports to the media, public, or policymakers</td>
<td>21</td>
<td>7.3%</td>
</tr>
<tr>
<td>Conduct get out the voter activities</td>
<td>21</td>
<td>7.3%</td>
</tr>
<tr>
<td>Collaborative Relationship Impact-Obtain funding</td>
<td>21</td>
<td>7.3%</td>
</tr>
<tr>
<td>Conduct educational programs, workshops, or conferences about environmental issues.</td>
<td>21</td>
<td>7.3%</td>
</tr>
<tr>
<td>Information Availability to Public in your State</td>
<td>21</td>
<td>7.3%</td>
</tr>
<tr>
<td>Encourage the public to call, write, or email policymakers</td>
<td>22</td>
<td>7.6%</td>
</tr>
<tr>
<td>Email Blast (e-mail to a large list )</td>
<td>23</td>
<td>8.0%</td>
</tr>
<tr>
<td>Survey Response (N=289)</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------</td>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td>Collaborative Relationship Impact-Have State Agency Staff Consider Your Issue</td>
<td>23</td>
<td>8.0%</td>
</tr>
<tr>
<td>Tracking legislation</td>
<td>23</td>
<td>8.0%</td>
</tr>
<tr>
<td>Collaborative Relationship Impact-Have Legislators Consider Your Issue</td>
<td>24</td>
<td>8.3%</td>
</tr>
<tr>
<td>File a law suit or a friend of the court brief</td>
<td>24</td>
<td>8.3%</td>
</tr>
<tr>
<td>Collaborative Relationship Impact-Recruit members/staff/volunteers</td>
<td>24</td>
<td>8.3%</td>
</tr>
<tr>
<td>Provide analysis of legislative or regulatory proposals</td>
<td>25</td>
<td>8.7%</td>
</tr>
<tr>
<td>Organize events in support or opposition to proposed legislation, regulation</td>
<td>25</td>
<td>8.7%</td>
</tr>
<tr>
<td>Hold, attend, or promote participation in public protests to bring attention to issues</td>
<td>25</td>
<td>8.7%</td>
</tr>
<tr>
<td>Conduct on-line Advocacy Campaigns</td>
<td>25</td>
<td>8.7%</td>
</tr>
<tr>
<td>Social Networking Site (like Facebook, Instagram, etc.)</td>
<td>25</td>
<td>8.7%</td>
</tr>
<tr>
<td>Serve on planning or advisory committees with government officials</td>
<td>25</td>
<td>8.7%</td>
</tr>
<tr>
<td>Electronic Action Alerts (email, text messages, social media).</td>
<td>26</td>
<td>9.0%</td>
</tr>
<tr>
<td>Draft &amp; propose environmental legislation</td>
<td>27</td>
<td>9.3%</td>
</tr>
<tr>
<td>Having a registered lobbyist</td>
<td>27</td>
<td>9.3%</td>
</tr>
<tr>
<td>Videosharing (like YouTube, vimeo)</td>
<td>28</td>
<td>9.7%</td>
</tr>
<tr>
<td>Discussion Group (like Google Groups, Yahoo Groups, or a list serve)</td>
<td>29</td>
<td>10.0%</td>
</tr>
<tr>
<td>Blog</td>
<td>30</td>
<td>10.4%</td>
</tr>
<tr>
<td>Comprehensive Advocacy Software (like GetActive, NetAction, etc.)</td>
<td>30</td>
<td>10.4%</td>
</tr>
<tr>
<td>On-line Mapping Software</td>
<td>31</td>
<td>10.7%</td>
</tr>
<tr>
<td>Digital Storytelling</td>
<td>31</td>
<td>10.7%</td>
</tr>
<tr>
<td>Infographics</td>
<td>31</td>
<td>10.7%</td>
</tr>
<tr>
<td>On-line Petitions</td>
<td>31</td>
<td>10.7%</td>
</tr>
<tr>
<td>Micro-Blog (like Twitter, Plurk, Tumblr, etc.)</td>
<td>35</td>
<td>12.1%</td>
</tr>
</tbody>
</table>
Appendix D

A SUMMARY OF THE STATE DEFINITIONS AND KEY PROVISIONS GOVERNING LOBBYING IN THE STATES INCLUDED IN THIS STUDY.
<table>
<thead>
<tr>
<th>State &amp; Authority</th>
<th>Definition &amp; Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>LOBBYIST means any individual who acts to promote, advocate, influence or oppose any matter pending before the General Assembly by direct communication with the General Assembly or any matter pending before a state agency by direct communication with that state agency, and who in connection therewith either: a. Has received or is to receive compensation in whole or in part from any person; or b. Is authorized to act as a representative of any person who has as a substantial purpose the influencing of legislative or administrative action; or c. Expends any funds during the calendar year for the type of expenditures listed in § 5835(b) of this title.</td>
</tr>
<tr>
<td>(Delaware Code Title 29 5831. Definitions)</td>
<td></td>
</tr>
</tbody>
</table>
State & Authority | Definition & Summary
--- | ---
Maine | LOBBYING means to communicate directly with any official in the legislative branch or any official in the executive branch or with a constitutional officer for the purpose of influencing any legislative action or with the Governor or the Governor's cabinet and staff for the purpose of influencing the approval or veto of a legislative action when reimbursement for expenditures or compensation is made for those activities. Lobbying includes the time spent to prepare and submit to the Governor, an official in the legislative branch, an official in the executive branch, a constitutional officer or a legislative committee oral and written proposals for, or testimony or analyses concerning a legislative action.

EXCEPTIONS: Lobbying does not include time spent by any person providing information to or participating in a subcommittee, stakeholder group, task force or other work group regarding a legislative action by the appointment or at the request of the Governor, a Legislator or legislative committee, a constitutional officer, a state agency commissioner or the chair of a state board or commission.

INDIRECT LOBBYING means to communicate with members of the general public to solicit them to communicate directly with any covered official for the purpose of influencing legislative action, other than legislation that is before the Legislature as a result of a direct initiative in accordance with the Constitution of Maine, Article IV, Part Third, Section 18, when that solicitation is made by: A. A broadcast, cable or satellite transmission; B. A communication delivered by print media; or C. A letter or other written communication delivered by mail or by comparable delivery service. E-mail is not considered a letter for the purposes of this paragraph.

LOBBYIST means any person who is specifically employed by another person for the purpose of and who engages in lobbying in excess of 8 hours in any calendar month, or any individual who, as a regular employee of another person, expends an amount of time in excess of 8 hours in any calendar month in lobbying.

EXCEPTIONS: "Lobbyist" does not include a lobbyist associate.
Registration for an individual considered a LOBBYIST is defined as follows:

Registration. – Any person who is employed for a consideration by any other person, except the state of New Hampshire, in a representative capacity for the purposes specified in paragraph II of this section shall first register as a lobbyist with the secretary of state.

II. Registration is required where the person, partnership, firm or corporation is employed:

(a) To promote or oppose, directly or indirectly, any legislation pending or proposed before the general court, or;

(b) To promote or oppose, directly or indirectly, any action by the governor, governor and council, or any state agency, as defined in RSA 15-A:2, where such action concerns legislation or contracts pending or proposed before the general court, any pending or proposed administrative rule, or the procurement of goods and services that are being or may be purchased by the state, subject to the exclusions in paragraph III.

EXCLUSIONS: III. Such registration is not required where the person:

(a) Is employed to represent another only in an adjudicative proceeding or nonadjudicative process as defined or described in RSA 541-A, other than rulemaking proceeding or any process related to the purchasing of goods and services by the state, and who files an appearance with the authority conducting the matter; or

(b) Is an owner or employee, of a business seeking to do business with the state or communicating with an executive branch official or employee, a state agency, or an administrative official of the general court regarding goods or services that are being or may be purchased by the state.

V. The following communications are excluded from regulation imposed by this chapter and shall not be considered in a determination of where a person is required to register and report as a lobbyist:

(a) Public testimony before a legislative committee or subcommittee.

(b) Public testimony before any entity subject to RSA 91-1, the right-
<table>
<thead>
<tr>
<th>State &amp; Authority</th>
<th>Definition &amp; Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>to-know law.</td>
<td>(c) A written document filed in the course of a public proceeding or any other communication that is made on the record in a public proceeding.</td>
</tr>
<tr>
<td></td>
<td>(d) Communication made by a public official acting in the public official's official capacity.</td>
</tr>
<tr>
<td></td>
<td>(e) Communication made by a representative of a media organization if the purpose of the communication is gathering or disseminating news and information to the public.</td>
</tr>
<tr>
<td></td>
<td>(f) Communication made in a speech, article, publication, or other material that is distributed and made available to the public, or through radio, television, cable television, the Internet, or other medium of mass communication.</td>
</tr>
<tr>
<td></td>
<td>(g) Communication made in writing which becomes a public record subject to the provisions of RSA 91-A, the right-to-know law, provided in response to a written request by a legislative or executive official.</td>
</tr>
<tr>
<td></td>
<td>(h) Communication made to the governor or to any member of the executive council, member of the general court, or public official as defined in RSA 15-B:2, X by an employee on behalf of his or her employer that would otherwise require registration under RSA 15:1, II, provided that the person making the communication:</td>
</tr>
<tr>
<td></td>
<td>(1) Is not required to register and report as a lobbyist for any person, including the employer on whose behalf the communication exempted under this subparagraph is made;</td>
</tr>
<tr>
<td></td>
<td>(2) Is not specifically compensated by the employer or any other person for making the communication;</td>
</tr>
<tr>
<td></td>
<td>(3) Has not been required to make the communication by the employer or any other person required to register and report under this chapter; and</td>
</tr>
<tr>
<td></td>
<td>(4) The purpose of the communication is to allow the employee to communicate the employer's views or his or her personal views on any matter within the scope of RSA 15:1, II that may affect the employer and/or the employee in his or her capacity as an employee.</td>
</tr>
<tr>
<td>State &amp; Authority</td>
<td>Definition &amp; Summary</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>LOBBYING means acting directly or soliciting others to act for the purpose of promoting, opposing, amending, or influencing in any manner the passage by the general assembly of any legislation or the action on that legislation by the governor. LOBBYIST means any person who engages in lobbying as the appointed representative of another person. A person is &quot;appointed&quot; by another if he or she receives compensation for lobbying or pursuant to a mutual understanding or agreement engages in lobbying. &quot;Compensation&quot; means any remuneration received or to be received for services rendered as a lobbyist, whether in the form of a fee, salary, forbearance, forgiveness, reimbursement for expenses or any other form or recompense, and any combination thereof. Where lobbying is incidental to a person's regular employment, his or her compensation for lobbying shall be reported as such and the lobbyist shall record the dollar amount of that portion of his or her compensation that is attributed to the time spent pursuing lobbying activities. In such instances, it shall not be necessary to disclose one's total salary or the percentage of one's time spent on lobbying. The lobbyist shall be required to disclose only his or her best good faith estimate of the dollar amount which corresponds to the portion of his or her time spent on lobbying activities. Person means an individual, firm, business, corporation, association, partnership, or other group. EXCEPTIONS: The following persons shall be exempt from the provisions of this chapter: (1) Any elected public official or the official's designee acting in his or her official capacity. (2) News media executives or their employees or agents, who in the ordinary course of business write, publish, or broadcast news items, editorials, or other comments or paid advertisements which directly or indirectly urge legislative action, if such persons engage in no other lobbying activities in connection with that action. (3) Persons engaged solely in drafting legislation. (4) Persons who appear solely for themselves or at the request of a legislative committee or any general officer to testify at a public</td>
</tr>
</tbody>
</table>
State & Authority | Definition & Summary
---|---
| forum in support of or in opposition to legislation. (5) Persons whose sole lobbying activity is testifying at a public hearing of a legislative committee or commission on behalf of a nonprofit organization and who receive no compensation from that nonprofit organization and for whom said organization expends no funds related to the appearance.
<table>
<thead>
<tr>
<th>State &amp; Authority</th>
<th>Definition &amp; Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vermont</td>
<td>LOBBY or LOBBYING means: (A) to communicate orally or in writing with any legislator or administrative official for the purpose of influencing legislative or administrative action; (B) solicitation of others to influence legislative or administrative action; (C) an attempt to obtain the goodwill of a legislator or administrative official by communications or activities with that legislator or administrative official intended ultimately to influence legislative or administrative action; or (D) activities sponsored by an employer or lobbyist on behalf of or for the benefit of the members of an interest group, if a principal purpose of the activity is to enable such members to communicate orally with one or more legislators or administrative officials for the purpose of influencing legislative or administrative action or to obtain their goodwill. LOBBYIST means a person who receives or is entitled to receive, either by employment or contract, $500.00 or more in monetary or in-kind compensation in any calendar year for engaging in lobbying, either personally or through his or her agents, or a person who expends more than $500.00 on lobbying in any calendar year.</td>
</tr>
</tbody>
</table>

Appendix E

COMPARISONS AMONG ENVIRONMENTAL MOVEMENT GROUPS
BASED ON ORGANIZATIONAL CATEGORIES – DETAILED INDIVIDUAL
ANALYSIS
Comparisons Among Environmental Movement Groups Based on Organizational Categories – Detailed Individual Analysis

Several organizational categories for movement groups based on resource characteristics can be compared to theoretical factors associated with political opportunity structure. These include aspects of thematic dimensions 3 through 6 that are summarized in Table 1 (see pages 55-56). In this section, analysis is presented from comparative analysis of groups derived from the collective of organizations from all five states based on organizational categories. The categories include nonprofit status, budget of greater or less than $50,000, formal affiliation with national environmental organization, and professionalism.

Organizational Resources of Categorical Groups

Organization resources are another key variable associated with thematic dimension 1 and resource mobilization capacity (see pages 55-56). The analysis that follows will compare how the categorical groups compiled from the sample of all organizations from all five states, providing insights on how these organizations structures and variables associated with the thematic dimensions affect the small state environmental movement.

Group Comparisons for Annual Budgets

Fiscal resources were compared for organizations with or without IRS Nonprofit status and for organizations affiliated or chapters of a national organization and those that are not. The dependent variable of annual budget was on the ordinal scale. Therefore, data were analyzed using the Mann-Whitney U-Test. The Mann-Whitney U Test is a nonparametric alternative to the T-test for independent samples.
Instead of comparing means of the independent samples like done in the t-test, Mann-Whitney compares the medians. Mann-Whitney also converts the scores on the variable to ranks across the two groups and then compares whether or not these group ranks are statistically different (Pallant, 2016). Once converted the ranks, the scores do not matter for the statistical analysis for the Mann-Whitney U Test.

The Mann-Whitney U Test revealed a significant difference in budget levels of organizations with formal IRS Nonprofit states (Md=4/$25K-$50K, n=241) and non-affiliated organizations (Md=3/$5K-$25K, n=46), U = 3,577, z = -3.877, p = .001, r = .23. Table 1 presents ranks for the two groups on the dependent variable of annual budget. Organizations with at least some paid staff had significantly higher budgets.

Table 1. Distributional Statistics for Annual Budget between IRS Tax-exempt Nonprofit Organizations & Informal Groups.

<table>
<thead>
<tr>
<th>Group</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal Group</td>
<td>101.26</td>
</tr>
<tr>
<td>IRS Tax-exempt Nonprofit Organization</td>
<td>152.16</td>
</tr>
</tbody>
</table>

The Mann-Whitney U Test revealed no significant difference in budget levels of organizations affiliated with a national organization (Md=4, n=63) and non-affiliated organizations (Md=4, n=226), U = 7,755, z = 1.10, p = .27, r = .07. Table 2 presents ranks for the two groups on the dependent variable of annual budget. Statistically, organizations with or without a national affiliation have similar budget levels or sizes.
Table 2. Distributional Statistics for Annual Budget between Organizations with and without an affiliation with a National Organization.

<table>
<thead>
<tr>
<th>Group</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affiliated with National Organization</td>
<td>134.9</td>
</tr>
<tr>
<td>Not Affiliated with National Organization</td>
<td>147.8</td>
</tr>
</tbody>
</table>

The Mann-Whitney U Test revealed a significant difference in budget levels of all-volunteer organizations (Md=3/$5K-$25K, n=143) and organizations with a combination of paid staff and volunteers (Md=6/$100K-1,000K, n=143), U = 2,272, z = -11.568, p = .001, r = .69. Table 3 presents ranks for the two groups on the dependent variable of annual budget.

Table 3. Distributional Statistics for Annual Budget between All-volunteer Organizations and Organizations with a combination of Paid Staff & Volunteers.

<table>
<thead>
<tr>
<th>Group</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-volunteer Organization</td>
<td>134.9</td>
</tr>
<tr>
<td>Combined Paid Staff &amp; Volunteer Organization</td>
<td>147.8</td>
</tr>
</tbody>
</table>

The sources of revenue for organizations were also analyzed. Table 4 summarizes the percentage of revenue from various sources reported by environmental organizations.
Table 4. Percentage of Organization Revenue from Various Sources

<table>
<thead>
<tr>
<th>Source of Revenue</th>
<th>Number of Responses</th>
<th>Mean Percentage of Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership Dues</td>
<td>285</td>
<td>22.59</td>
</tr>
<tr>
<td>Individual Donors</td>
<td>288</td>
<td>20.30</td>
</tr>
<tr>
<td>Government: Any Level</td>
<td>288</td>
<td>11.93</td>
</tr>
<tr>
<td>Fund-raising Events</td>
<td>288</td>
<td>11.26</td>
</tr>
<tr>
<td>Foundation Funding</td>
<td>288</td>
<td>10.59</td>
</tr>
<tr>
<td>Income from Services Provided to Clients</td>
<td>287</td>
<td>4.61</td>
</tr>
<tr>
<td>Corporate Contributions</td>
<td>288</td>
<td>3.93</td>
</tr>
<tr>
<td>Sale of Merchandise</td>
<td>287</td>
<td>1.94</td>
</tr>
<tr>
<td>Legal Settlements</td>
<td>288</td>
<td>0.30</td>
</tr>
<tr>
<td>Other Sources</td>
<td>285</td>
<td>5.28</td>
</tr>
</tbody>
</table>

Membership dues and contributions from individual donors provide the highest percentage of revenue for the organizations and in combination account for 43% of organization funding. Government funding is reported to account for about 12% of the funding and foundations provide 11%. Revenue generated from providing services is 4.6% and revenue from corporate contributions is just under 4%.

**Group Comparisons for Revenue Sources**

Revenue sources were also compared for organizations with or without IRS Nonprofit status and for organizations affiliated or chapters of a national organization and those that are not.

A Mann-Whitney U Test revealed a statistically significant difference in the percentage of the ten sources of revenue. Three of the ten revenue sources were statistically different between organization with and without formal IRS Nonprofit status.
Corporate contributions were significantly different for IRS Nonprofits (M=4.6, n=240) and non-affiliated organizations (M=0.8, n=46) U = 4,176, z = -3.190, p = .001, r = .19. The amount of corporate contributions is higher for IRS Nonprofit organizations than informal groups with mean ranks of 149.1 and 114.28 respectively.

Foundation funding was significantly different for IRS Nonprofits (M=11.4, n=240) and non-affiliated organizations (M=6.8, n=46) U = 4,489, z = -2.224, p = .026, r = .13. The amount of foundation funding is higher for IRS Nonprofit organizations than informal groups with mean ranks of 147.8 and 121.9 respectively.

Income from services was significantly different for IRS Nonprofits (M=5.3, n=240) and non-affiliated organizations (M=1.2, n=46) U = 4,770, z = -1.980, p = .048, r = .12. The amount of income from services is higher for IRS Nonprofit organizations than informal groups with mean ranks of 146.0 and 127.2 respectively.

Revenue sources were also compared for organizations with annual budgets below $50,000 and at $50,000 or more. A Mann-Whitney U Test revealed a statistically significant difference in the percentage of the ten sources of revenue listed in table 5.
Table 5. Mann-Whitney U Test Results for Comparison of Organizations with Annual Budgets below $50,000 and at $50,000 or more.

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>Mann-Whitney U</th>
<th>Test Statistic (z)</th>
<th>Sig.</th>
<th>Effect Size (r)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership Dues</td>
<td>7.056</td>
<td>-4.277</td>
<td>0.001</td>
<td>0.252</td>
</tr>
<tr>
<td>Individual Donors</td>
<td>11.032</td>
<td>1.315</td>
<td>0.188</td>
<td>0.077</td>
</tr>
<tr>
<td>Government: Any Level</td>
<td>13.722</td>
<td>5.848</td>
<td>0.001</td>
<td>0.345</td>
</tr>
<tr>
<td>Fund-raising Events</td>
<td>9.451</td>
<td>-1.030</td>
<td>0.303</td>
<td>0.061</td>
</tr>
<tr>
<td>Foundation Funding</td>
<td>15.600</td>
<td>8.702</td>
<td>0.001</td>
<td>0.513</td>
</tr>
<tr>
<td>Income from Services Provided to Clients</td>
<td>13.443</td>
<td>6.845</td>
<td>0.001</td>
<td>0.403</td>
</tr>
<tr>
<td>Corporate Contributions</td>
<td>12.828</td>
<td>4.783</td>
<td>0.001</td>
<td>0.282</td>
</tr>
<tr>
<td>Sale of Merchandise</td>
<td>10.645</td>
<td>1.157</td>
<td>0.247</td>
<td>0.068</td>
</tr>
<tr>
<td>Legal Settlements</td>
<td>10.007</td>
<td>-565</td>
<td>0.572</td>
<td>0.033</td>
</tr>
<tr>
<td>Other Sources</td>
<td>11.657</td>
<td>3.773</td>
<td>0.001</td>
<td>0.222</td>
</tr>
</tbody>
</table>

*Effect Size (r): .1=small effect, .3 medium effect, .5= large effect (Cohen, 1988)

Six of the ten revenue sources were statistically different between groups of organizations split at $50,000 annual budget level. Organizations with annual budgets above $50,000 had higher percentages of funds from government, foundations, income for services, corporate contributions, and other sources. Only the percent of revenue from membership dues was higher for organizations with annual budgets below $50,000. The Mann Whitney U Test ranks and medians for revenue source with statistically significant differences are summarized in the table below.
Table 6. Mann-Whitney U Test Ranks and Medians for Organizations with Annual Budgets below $50,000 and at $50,000 or more

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>Organization with Annual Budget &lt; $50,000</th>
<th>Organization with Annual Budget &gt; $50,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mann-Whitney U Rank Mean Std. Dev.</td>
<td>Mann-Whitney U Rank Mean Std. Dev.</td>
</tr>
<tr>
<td>Membership Dues</td>
<td>160.4 31.03 35.15</td>
<td>119.3 11.14 16.41</td>
</tr>
<tr>
<td>Government: Any Level</td>
<td>122.8 7.80 19.49</td>
<td>174.0 17.56 24.71</td>
</tr>
<tr>
<td>Foundation Funding</td>
<td>111.5 6.21 18.191</td>
<td>189.4 16.55 19.76</td>
</tr>
<tr>
<td>Income from Services</td>
<td>123.5 2.71 13.63</td>
<td>172.1 7.22 12.49</td>
</tr>
<tr>
<td>Corporate Contributions</td>
<td>128.4 3.15 10.48</td>
<td>166.89 5.00 11.52</td>
</tr>
<tr>
<td>Other Sources</td>
<td>132.3 4.49 16.39</td>
<td>157.87 11.15 16.41</td>
</tr>
</tbody>
</table>

Fewer differences were observed based on national affiliations of organizations. A Mann-Whitney U Test revealed that a statistically significant difference occurred for only one of the ten sources of revenue previously discussed; the percent of funding from fund raising events were significantly different for nationally affiliated (M=24.9, n=63) and non-affiliated organizations (M=7.4, n=225) U = 4,616, z = -4.512, p = .001, r = .27. The percent of revenue from fundraising events is higher for nationally affiliated organizations than nonaffiliated organizations with mean ranks of 183.7 and 133.52 respectively.

Finally, revenue sources were also compared for all-volunteer organizations and organizations with a combination of paid staff and volunteers.

A Mann-Whitney U Test revealed a statistically significant difference in the percentage of the sources of revenue. Seven of the ten revenue sources were statistically different between all-volunteer organizations and organizations with a combination of paid staff and volunteers. The Mann-Whitney U Test statistics are summarized in the table below.
Table 7. Mann-Whitney U Test Results for Comparison of All-volunteer Organizations and Organizations with a Combination of Paid Staff and Volunteers

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>Mann-Whitney U</th>
<th>Test Statistic (z)</th>
<th>Sig.</th>
<th>Effect Size (r)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership Dues</td>
<td>12,748</td>
<td>4.201</td>
<td>0.001</td>
<td>0.25</td>
</tr>
<tr>
<td>Individual Donors</td>
<td>8,414</td>
<td>-2.522</td>
<td>0.011</td>
<td>0.15</td>
</tr>
<tr>
<td>Government: Any Level</td>
<td>6,761</td>
<td>-5.536</td>
<td>0.001</td>
<td>0.33</td>
</tr>
<tr>
<td>Fund-raising Events</td>
<td>10,590</td>
<td>0.669</td>
<td>0.504</td>
<td>0.04</td>
</tr>
<tr>
<td>Foundation Funding</td>
<td>5,150</td>
<td>-8.015</td>
<td>0.001</td>
<td>0.48</td>
</tr>
<tr>
<td>Income from Services Provided to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clients</td>
<td>7,277</td>
<td>-5.754</td>
<td>0.001</td>
<td>0.34</td>
</tr>
<tr>
<td>Corporate Contributions</td>
<td>7,734</td>
<td>-4.268</td>
<td>0.001</td>
<td>0.26</td>
</tr>
<tr>
<td>Sale of Merchandise</td>
<td>9,751</td>
<td>-0.636</td>
<td>0.525</td>
<td>0.04</td>
</tr>
<tr>
<td>Legal Settlements</td>
<td>10,220</td>
<td>0.318</td>
<td>0.751</td>
<td>0.02</td>
</tr>
<tr>
<td>Other Sources</td>
<td>8,244</td>
<td>-3.631</td>
<td>0.001</td>
<td>0.22</td>
</tr>
</tbody>
</table>

*Effect Size (r): .1=small effect, .3 medium effect, .5= large effect (Cohen, 1988)

Six of the statistically significant differences in resource sources between all-volunteer organizations and organizations with a combination of paid staff and volunteers were higher for those organizations with paid staff. Only the percent of revenue from membership dues was higher for the all-volunteer group of organizations, which was almost three times higher. The Mann Whitney U Test ranks and medians for revenue source with statistically significant differences are summarized in the table below.
Table 8. Mann-Whitney U Test Ranks and Medians for Revenue Sources of All-volunteer Organizations and Organizations with a Combination of Paid Staff and Volunteers

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>Combined Paid Staff &amp; Volunteer Organization</th>
<th>All-volunteer Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mann-Whitney U Rank</td>
<td>Mean</td>
</tr>
<tr>
<td>Membership Dues</td>
<td>121.6</td>
<td>12.14</td>
</tr>
<tr>
<td>Individual Donors</td>
<td>155.3</td>
<td>22.96</td>
</tr>
<tr>
<td>Government: Any Level</td>
<td>166.9</td>
<td>16.68</td>
</tr>
<tr>
<td>Foundation Funding</td>
<td>178.2</td>
<td>16.05</td>
</tr>
<tr>
<td>Income from Services</td>
<td>162.9</td>
<td>6.30</td>
</tr>
<tr>
<td>Corporate Contributions</td>
<td>160.0</td>
<td>4.26</td>
</tr>
<tr>
<td>Other Sources</td>
<td>153.7</td>
<td>5.91</td>
</tr>
</tbody>
</table>

**Group Comparisons for Staff Resources**

The Mann-Whitney U Test revealed a significant difference in staff resources for organizations with or without IRS Nonprofit status. For total staff of IRS nonprofit organization (Md=1, n=240) and non-affiliated organizations (Md=0, n=45), U = 4,047, z = -2.843 p = .004, r = .17. A statistically significant difference was also reported for the number of volunteers of organizations affiliated with a national organization (Md=25, n=235) and non-affiliated organizations (Md=14.5, n=46), U = 3,866, z = -3.058, p = .002, r = .19.

Staff resources were also compared for organizations with annual budgets below $50,000 and at $50,000 or more. The Mann-Whitney U Test revealed a significant difference for total staff of organizations with annual budgets below $50,000 (Md=0, n=165) and at $50,000 or more (Md=3.75, n=122), U = 17,726, z = 11.766 p = .001, r = .69. A statistically significant differences was also reported for the number of volunteers of organizations with annual budgets below $50,000.
(Md=20, n=283) and at $50,000 or more (Md=50, n=117), U = 14.085, z = 6.461, p = .001, r = .38. The number of total staff and the number of volunteers reported were both higher for organizations in the higher budget group.

Similarly, staff resources were also compared for organizations formally affiliated with a national organization and those that are not. Since the data were not normally distributed they were analyzed using the Mann-Whitney U-Test.

The Mann-Whitney U Test revealed no significant difference in staff resources for organizations affiliated with a national organization (Md=0, n=61) and non-affiliated organizations (Md=1, n=226), U = 7,516, z = 1.157, p = .247, r = .07. Similarly, no significant difference was found for the number of volunteers of organizations affiliated with a national organization (Md=25, n=61) and non-affiliated organizations (Md=24, n=222), U = 6,447, z = -.573, p = .566, r = .04.

Group Comparisons for Issues Addressed

The issues addressed by the various categorical groupings of organizations are considered. The issues addressed are associated with themetic dimension 3: State Political Culture that is related to political opportunity structure determined by the context for conducting policy work (see pages 55-56.) The diversity of issue addressed by two different groups is also compared. Group 1 includes those organizations that are formal IRS tax-exempt nonprofit organizations and Group 2 includes those that are informal groups.

Table 9 presents the means and standard deviations for the dependent variable of diversity of issue addressed and it does so separately for the two groups. Results showed no statistically-significant difference (t=.503, df [285], p = .615) and a very small effect size (Cohen’s, 1988, d = 0.001).
Table 9. Means, Standard Deviations, and Distributional Statistics for Diversity of Issues Addressed by IRS Tax-exempt Nonprofits and Informal Groups

<table>
<thead>
<tr>
<th>Statistic</th>
<th>IRS Tax-exempt Nonprofit Organization</th>
<th>Informal Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>6.05</td>
<td>5.85</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>2.49</td>
<td>2.51</td>
</tr>
</tbody>
</table>

The researcher compared the diversity of issue addressed by organizations grouped by those with annual budgets below $50,000 and those with budgets of $50,000 or more.

Table 10 presents the means and standard deviations for the dependent variable of diversity of issue addressed and it does so separately for the two groups. Results showed no statistically-significant difference ($t = -0.693$, df [287], $p = .489$). The effect size is very small (Cohen’s, 1988, $d = 0.0006$).
Table 10. Means, Standard Deviations, and Distributional Statistics for Diversity of Issues Addressed by organizations with Budgets above & below $50,000

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Organizations with Annual Budgets &lt; $50,000</th>
<th>Organizations with Annual Budgets ≥ $50,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>5.94</td>
<td>6.15</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>2.62</td>
<td>2.34</td>
</tr>
</tbody>
</table>

Also compared was the diversity of issue addressed by two different groups. Group 1 includes those organizations that are a chapter or affiliate of a national organization and Group 2 includes those that are not affiliated with a national organization.

Table 11 presents the means and standard deviations for the dependent variable of diversity of issue addressed and it does so separately for the two groups. Results showed a statistically-significant difference with national affiliate organizations addressing a higher diversity of issues than those not associated with a national organization (t=2.897, df [287], p = .004). The effect size is medium (Cohen’s, 1988, d = 0.41) and represents a difference between the two groups.

Table 11. Means, Standard Deviations, and Distributional Statistics for Diversity of Issues Addressed

<table>
<thead>
<tr>
<th>Statistic</th>
<th>National Chapter of Affiliate Organization</th>
<th>No Affiliation with a National Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>6.93</td>
<td>5.81</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>2.67</td>
<td>2.41</td>
</tr>
</tbody>
</table>
Finally, a comparison of the diversity of issue for those organizations that are all-volunteer groups and those that have a mix of paid staff and volunteers is completed.

Table 12 presents the means and standard deviations for the dependent variable of the number of issues addressed for the two groups. Results showed a statistically-significant difference with all-volunteer organizations addressing more issues than organizations with a mix of paid staff and volunteers ($t=2.922$, df [284], $p = .004$). The effect size is medium (Cohen’s, 1988, $d = 0.35$) and represents a difference between the two groups.

Table 12. Means, Standard Deviations, and Distributional Statistics for Diversity of Issues Addressed

<table>
<thead>
<tr>
<th>Statistic</th>
<th>All-volunteer Organization</th>
<th>Combination of Paid Staff and Volunteer Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>6.48</td>
<td>5.62</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>2.44</td>
<td>2.50</td>
</tr>
</tbody>
</table>

Group Comparisons for Diversity of Strategies & Tactics Utilized

The diversity of tactics used is an indicator of the political opportunity structure. It is impacted by a broad range of variables. These 45 variables for tactics are associated with several of the thematic dimensions associated with political opportunity structure. It includes variables associated with Factors 3: State Political Culture, 4: Level of Integration or Fragmentation of the Policy Process, and Lobbying.
and Transparency (see pages 55-56). The diversity of tactics and strategies addressed by two different groups are compared. Group 1 includes those organizations that are formal IRS tax-exempt nonprofit organizations and Group 2 includes those that are informal groups.

Table 13 presents the means and standard deviations for the dependent variable of diversity of strategy & tactics utilized and it does so separately for the two groups. Results showed no statistically-significant difference (t=1.458, df [285], p = .146). The effect size is very small (Cohen’s, 1988, d = 0.007).

Table 13. Means and Standard Deviations for Diversity of Strategies & Tactics Used by IRS Tax-exempt Nonprofits and Informal Groups

<table>
<thead>
<tr>
<th>Statistic</th>
<th>IRS Tax-exempt Nonprofit Organization</th>
<th>Informal Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>19.89</td>
<td>18.04</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>7.66</td>
<td>8.88</td>
</tr>
</tbody>
</table>

A comparison is made for the diversity of tactics and strategies issue addressed by organizations grouped by those with annual budgets below $50,000 and those with budgets of $50,000 or more. Table 14 presents the means and standard deviations for the dependent variable of diversity of issue addressed and it does so separately for the two groups. Results showed a statistically-significant difference (t=-4.574, df [287], p = .001). The effect size is moderate (Cohen’s, 1988, d = 0.068). Organizations with budgets of $50,000 appear to use more tactics than those with smaller budgets.
Table 14. Means, Standard Deviations, and Distributional Statistics for Diversity of Tactics and Strategies Used by Organizations with Budgets above & below $50,000

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Organizations with Annual Budgets &lt; $50,000</th>
<th>Organizations with Annual Budgets &gt; $50,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>17.77</td>
<td>21.92</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>7.85</td>
<td>7.29</td>
</tr>
</tbody>
</table>

The diversity of tactics and strategies used by organizations that are a chapter or affiliate of a national organization are also compared. Group 1 includes affiliates of a national organization and Group 2 includes those that are not affiliated with a national organization.

Table 15 presents the means and standard deviations for the dependent variable of diversity of tactics and strategies used separately for the two groups. Results showed a statistically-significant difference (t = 2.540, df [287], p = .012). The effect size is small (Cohen’s, 1988, d = 0.022) and potentially represents a substantive difference between the two groups since the statistical difference was small.

Table 15. Means and Standard Deviations for diversity of tactics and strategies used.

<table>
<thead>
<tr>
<th>Statistic</th>
<th>National Chapter of Affiliate Organization</th>
<th>No Affiliation with a National Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>21.75</td>
<td>18.92</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>8.97</td>
<td>7.46</td>
</tr>
</tbody>
</table>

Finally, a comparison of the diversity of tactics used by those organizations that are all-volunteer groups and those that have a mix of paid staff and volunteers is
completed. Table 16 presents the means and standard deviations for the dependent variable of number of tactics utilized for the two groups. Results showed a statistically-significant difference with all-volunteer organizations utilizing fewer tactics than organizations with a mix of paid staff and volunteers (t=6.661, df [284], p = .001). The effect size is medium (Cohen’s, 1988, d = 0.79) and represents a difference between the two groups.

Table 16. Means and Standard Deviations for Diversity of Issues Addressed

<table>
<thead>
<tr>
<th>Statistic</th>
<th>All-volunteer Organization</th>
<th>Combination of Paid Staff and Volunteer Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>16.64</td>
<td>22.44</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>7.12</td>
<td>7.60</td>
</tr>
</tbody>
</table>

Resources Allocation by Organizations

Closely related to the tactics used is the extent in which organization allocate resources to policy advocacy or to providing services. In the following sections, the extent of resource allocation for the categorical groups of movement organizations is compared.

Group Comparisons for Advocacy Effort

The effort spent advocating for environmental policy was compared for organizations with or without IRS Nonprofit status. The Mann-Whitney U Test revealed no significant difference in advocacy effort of IRS nonprofit organization
Similarly, the percent of effort spent advocating for environmental policy was compared for organizations with annual budgets below $50,000 and those with $50,000 or greater. A Mann-Whitney U Test revealed no significant difference in advocacy effort organizations with annual budgets less than $50,000 (M=16.72, n=132) and those with budgets of $50,000 or greater (M=14.73, n=108), U = 7,538, z = .772 p = .440, r = .05.

However, advocacy effort for organizations associated with a national organization did indicate a difference. The Mann-Whitney U Test revealed a significant difference for advocacy effort of organizations affiliated with a national organization (M=22.04, n=55) and non-affiliated organizations (M=13.98, n=185), U = 3,830, z = -2.797 p = .005, r = .18. Organizations associated with national organizations devote more resources to advocacy efforts than those unaffiliated with a national group.

The effort spent advocating for environmental policy was compared for all-volunteer organizations and organizations with a combination of paid staff and volunteers. The Mann-Whitney U Test revealed no significant difference in advocacy effort for voluntary organizations (M=15.21, n=111) and organizations with paid staff and volunteers (M=16.67, n=126), U = 6,213, z = -1.491 p = .136, r = .10.

Group Comparisons for Service Provision Effort

The effort spent providing services was compared for organizations with or without IRS Nonprofit status. The Mann-Whitney U Test revealed no significant
difference in effort providing services of IRS nonprofit organization (M=61.51, n=222) and non-affiliated organizations (M=64.92, n=37), U = 4,520, z = .981 p = .327, r = .06.

The percent of effort spent providing environmental services was compared for organizations with annual budgets below $50,000 and those with $50,000 or greater. A Mann-Whitney U Test revealed no significant difference in advocacy effort organizations with annual budgets less than $50,000 (M=63.51, n=148) and those with budgets of $50,000 or greater (M=60.03, n=113), U = 7,372, z = -1.642, p = .101, r = .006.

Similarly, the effort spent providing services for organizations associated with a national organization did not indicate a difference. The Mann-Whitney U Test revealed no significant difference for effort providing services by organizations affiliated with a national organization (M=58.05, n=59) and non-affiliated organizations (M=63.15, n=36), U = 6,358, z = .784, p = .433, r = .05.

The effort spent providing services were also compared for all-volunteer organizations and organizations with a combination of paid staff and volunteers. The Mann-Whitney U Test revealed a significant difference in providing services effort for voluntary organizations (M=64.94, n=124) and organizations with paid staff and environmental volunteers (M=59.43, n=134), U = 9,582, z = 2.132 p = .033, r = .13.

All-volunteer organizations report spending a slightly higher percent of resource providing services than those organizations with a combination of paid staff and volunteers report spending.
Group Comparisons for Collaboration Among Organizations

The extent of collaboration between movement organizations is a factor directly related to Resource Mobilization Theory. It is a measure of movement capacity to collectively mobilize. The extent of collaborations is a variable associated with thematic dimension 2, Level of Inter-organizational Collaboration (see pages 55-56). The organization collaboration with other organizations was compared for organizations with or without IRS Nonprofit status. The Mann-Whitney U Test revealed no significant difference in collaboration of IRS nonprofit organization (Md=2, n=241) and informal organizations (Md=1, n=46), U = 5,030, z = -1.038, p = .229, r = .06.

Organization collaboration with other organizations was compared for organizations with annual budgets below $50,000 and those with $50,000 or greater. A Mann-Whitney U Test revealed a significant difference in the level of collaboration for organizations with annual budgets less than $50,000 (Md=1, n=166) and those with budgets of $50,000 or greater (Md=2, n=123), U = 13,388, z = 4.715, p = .001, r = .28. Organizations in the higher budget group collaborate with other groups moderately more than those with smaller budgets.

The Mann-Whitney U Test revealed no significant difference in organization collaboration of organizations affiliated with a national organization (Md=2, n=63) and non-affiliated organizations (Md=2, n=226), U = 7,327, z = .369, p = .712, r = .02.

Also compared were the level of collaboration between all-volunteer organizations and organizations with a combination of paid staff and volunteers. Results showed a statistically significant difference with all-volunteer organizations (Md=1, n=143) having lower rankings of collaboration than
organizations with a mix of paid staff and volunteers (Md=2, n=143), U = 7,093, z = -4.666, p = .001, r = .28.

Group Perceptions of Influence and Role in Policy Process

Several survey questions were specifically designed to provide an indication of the influence and role of the environmental groups that comprise the movements in small states associated with research question 4. These included questions about their perceived influence on environmental policy, government receptiveness to their claims, perceptions of government action on environmental issues, and government transparency.

Group Comparison for Perceived Change of Influence on State Environmental Policy

The organization perception of change in influence was compared for organizations with or without IRS Nonprofit status. The Mann-Whitney U Test revealed no significant difference in change in influence of IRS nonprofit organization (Md=3, n=230) and informal organizations (Md=2, n=46), U = 5,270, z = -0.024, p = .981, r = .001.

Perceived change in influence was compared for organizations with annual budgets below $50,000 and those with $50,000 or greater. A Mann-Whitney U Test revealed a significant difference in the change of influence for organizations with annual budgets less than $50,000 (Md=3, n=161) and those with budgets of $50,000 or greater (Md=2, n=117), U = 9,429, z = .016, p = .987, r = .001. Those organizations in the lower budget group perceive having an increase in influence in recent years.

Similarly, the Mann-Whitney U Test revealed no significant difference in change in influence of organizations affiliated with a national organization (Md=3,
n=60) and non-affiliated organizations (Md=2, n=218), U = 6,394, z = .281, p = .770, r = .017.

The perceived change in influence between all-volunteer organizations and organizations with a combination of paid staff and volunteers were also compared. Results showed no statistically-significant difference with all-volunteer organizations (Md=2, n=137) having lower change in influence than organizations with a mix of paid staff and volunteers (Md=2.5, n=138), U = 6,394, z = -2.81, p = .770, r = .017.

**Receptiveness of Governmental Policymakers to Organizational Views**

The difference in government receptiveness was compared for organizations with or without IRS Nonprofit status. The Mann-Whitney U Test revealed no significant difference in collaboration of IRS nonprofit organization (Md=3, n=239) and informal organizations (Md=3, n=46), U = 5,279, z = -0.27, p = .981, r = .001.

Government receptiveness was compared for organizations with annual budgets below $50,000 and those with $50,000 or greater. A Mann-Whitney U Test revealed a significant difference in the government receptiveness for organizations with annual budgets less than $50,000 (Md=3, n=139) and those with budgets of $50,000 or greater (Md=4, n=112), U = 9,429, z = .016, p = .987, r = .001. Government was reported to be more receptive of organization in the higher budget grouping.

The Mann-Whitney U Test revealed no significant difference in government receptiveness for organizations affiliated with a national organization (Md=3, n=55) and non-affiliated organizations (Md=3, n=196), U = 5,392, z = .005, p = .006, r = .001.
The level of collaboration between all-volunteer organizations and organizations with a combination of paid staff and volunteers were compared. Results showed a statistically significant difference with all-volunteer organizations (Md=1, n=143) having lower rankings of collaboration than organizations with a mix of paid staff and volunteers (Md=2, n=143), U = 7,093, z = -4.666, p = .001, r = .28.

**Perceptions on Government Activity on Environmental Issues**

The difference in perceptions of government action on environmental issues was compared for organizations with or without IRS Nonprofit status. The Mann-Whitney U Test revealed no significant difference in collaboration of IRS nonprofit organization (Md=3, n=227) and informal organizations (Md=4, n=44), U = 5,145, z = .332, p = .740, r = .003.

Perception of government action on environmental issues was compared for organizations with annual budgets below $50,000 and those with $50,000 or greater. A Mann-Whitney U Test revealed a significant difference in government environmental action for organizations with annual budgets less than $50,000 (Md=4, n=157) and those with budgets of $50,000 or greater (Md=3, n=116), U = 7,483, z = -2.627, p = .009, r = .16. The group of organizations in the higher budget group reported that government officials were taking a more active role on environmental policy issues that those in the group of organizations with budgets below $50,000.

The Mann-Whitney U Test revealed no significant difference in perceptions of government action on environmental issues for organizations affiliated with a national organization (Md=4, n=57) and non-affiliated organizations (Md=3, n=216), U = 5,717, z = .864, p = .338, r = .052.
The level of government action on environmental issues between all-volunteer organizations and organizations with a combination of paid staff and volunteers were also compared. Results showed no statistically significant difference with all-volunteer organizations (Md=4, n=134) having lower rankings of collaboration than organizations with a mix of paid staff and volunteers (Md=3, n=137), U = 10,306, z = 1.822, p = .068, r = .111.

**Group Comparison of Perception on Availability of Government Information/Transparency**

The difference in state government information responses was compared for organizations with or without IRS Nonprofit status. The Mann-Whitney U Test revealed no significant difference in collaboration of IRS nonprofit organization (Md=4, n=227) and informal organizations (Md=4, n=44), U = 6,172, z = 1.332, p = .183, r = .078.

The availability of government information response was compared for organizations with annual budgets below $50,000 and those with $50,000 or greater. A Mann-Whitney U Test revealed a significant difference in availability of government information for organizations with annual budgets less than $50,000 (Md=4, n=166) and those with budgets of $50,000 or greater (Md=4, n=123), U = 8,382, z = -2.841, p = .004, r = .16. Those with budgets below $50,000 reported slightly higher responses on their perception of the availability of government information in their state.

The Mann-Whitney U Test revealed no significant difference in state government information responses for organizations affiliated with a national
organization (Md=4, n=57) and non-affiliated organizations (Md=3, n=216), U = 6,425, z = -1.291, p = .197, r = .052.

Also compared was the level of availability of state government information between all-volunteer organizations and organizations with a combination of paid staff and volunteers for state government information responses. Results showed no statistically significant difference between volunteer organizations (Md=4, n=143) and organizations with a mix of paid staff and volunteers (Md=4, n=143), U = 11,378, z = 1.802, p = .071, r = .106.
Appendix F

COMPARISONS BETWEEN THE FIVE STATE ENVIRONMENTAL MOVEMENTS – DETAILED INDIVIDUAL ANALYSIS
Comparisons between the Five State Environmental Movements – Detailed Individual Analysis

A comparison of organization variables was conducted to evaluate potential differences among the five states included in this study. This evaluation directly addresses research questions 2 and 3, both of which relate to the differences in state environmental movement structures and how the state context affects these structures.

Comparative analysis is conducted for several organizational category groupings, organization characteristic variables, perception of influence variables, and a range of state context variables.

Organizational Categories within State Movements

Organizational types are an important descriptor and variable associated with resources. In the framework of this study, they provide variables associated with Themetic dimension 1, Resource Availability (see pages 55-56). In this section, we compare these organizational categories between each of the five states to determine how they may impact the structure of environmental movements at the state scale.

Formal and Informal Organizations within each State Movement

The five states for differences in the composition of formal and informal groups were compared. A chi-square test for independence (with Yates’ Continuity Correction) indicated no significant association between states and organization type (IRS Tax-exempt or Informal), \( \chi^2 (4, n = 289) = 4.10, p = .39, \text{ Cramers } V = .222 \)

National Affiliation of groups found within each State Movement

A comparative analysis was completed for the five states for differences in the composition of groups with or without national affiliations. A chi-square test for
independence indicated no significant association between states and national affiliation (National Affiliate or Not Affiliated), $\chi^2 (4, n = 289) = 1.59, p = .81$, Cramers $V = .203$.

The five states were also compared for organizations with annual budgets below $50,000 and $50,000 and above. A chi-square test for independence indicated a significant difference between states and budgets above or below $50,000, \chi^2 (4, n = 289) = 11.891, p = .018, \text{Cramers V = .392. However, once corrected for the overall/family-wise error rate of a 2x5 contingency table for post hoc analysis, the overall alpha was not significant (p=.18).}$

**Organization Resources within State Movements**

Organization resources variable are associated with themetic dimension 1: Resource Availability and Resource Mobilization Theory (see pages 55-56). The analysis that follows will compare resources available within each separate state environmental movement.

State Comparisons for Annual Budgets

A comparative analysis was conducted for the five states in the study, each reporting their budget level in an eight category ordinal scale of measurement. Nonparametric statistical test are recommended for ordinal data (Field, 2013). Consequently, the data were analyzed using a Kruskal-Wallis Test rather than ANOVA. Kruskal-Wallis test is the nonparametric alternative to ANOVA. The test is similar to the Mann-Whitney U test, but allows a comparison of more than two groups. The scores are converted to ranks and the mean rank of each group is compared for statistical differences for the between group comparisons (Pallent,
The sample size for analysis was $N = 289$. Four organizations were excluded from the analysis because they had reported “don’t know” as a response to the survey question. Table 1 presents the ranks from the Kruskal-Wallis Test.

Table 1. Ranks for Budget Levels Among States

<table>
<thead>
<tr>
<th>State</th>
<th>N</th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>37</td>
<td>144.91</td>
</tr>
<tr>
<td>ME</td>
<td>87</td>
<td>155.92</td>
</tr>
<tr>
<td>NH</td>
<td>54</td>
<td>133.94</td>
</tr>
<tr>
<td>RI</td>
<td>43</td>
<td>151.40</td>
</tr>
<tr>
<td>VT</td>
<td>68</td>
<td>135.82</td>
</tr>
<tr>
<td>Total</td>
<td>289</td>
<td></td>
</tr>
</tbody>
</table>

The Kruskal-Wallis Test revealed no significant difference in the budget levels of environmental organizations between the states, $\chi^2 (4, n = 289) = 3.63, p=.459$.

State Comparisons for Revenue Sources

A Kruskal-Wallis Test was utilized to compare the sources of revenue for groups of organizations from each state. This nonparametric test was selected because the data were not normally distributed, violating an assumption for the use of parametric tests. The revenue sources of organizations in different states reported similar percentages for each source with the exceptions of foundation funding and government funding to environmental groups.

A Kruskal-Wallis Test revealed a statistically significant difference in the percentage of foundation funding across the five states (DE, n = 37; ME, n=86; NH,
n=54; RI, n=43; VT, n=68), \( \chi^2 (4, n = 288) = 9.58, p = .039 \). The State of Maine recorded a higher median score (M=4%) than all four other states that recorded a median foundation funding level of zero.

Similarly, a Kruskal-Wallis Test revealed a statistically significant difference in the percentage of government funding across the five states (DE, n = 37; ME, n=86; NH, n=54; RI, n=43; VT, n=68), \( \chi^2 (4, n = 288) = 14.12, p = .007 \). The State of Rhode Island recorded a higher median score (M=7%) than all four other states that recorded a median government funding level of zero.

State Comparison of Staff Resources

A Kruskal-Wallis Test was utilized to compare paid staff resources for groups of organizations from each state. This nonparametric test was selected because the data were not normally distributed, violating an assumption for the use of parametric tests.

A Kruskal-Wallis Test revealed no statistical difference in total number of paid staff across the five states (DE, n = 37; ME, n=87; NH, n=54; RI, n=43; VT, n=68), \( \chi^2 (4, n = 289) = 6.59, p = .159 \). Similarly, the Kruskal-Wallis Test revealed no statistical difference in total number of volunteers across the five states (DE, n = 37; ME, n=87; NH, n=54; RI, n=43; VT, n=68), \( \chi^2 (4, n = 289) = 5.04, p = .283 \)

Staff resources were also compared for organizations with or without IRS Nonprofit status. Since the data were not normally distributed they were analyzed using the Mann-Whitney U-Test
State Comparisons for Issues Addressed

Consideration is given to the issues addressed by the collection of each of the environmental movement organizations in along with other groups in their respective states. The issues addressed by the state movement are associated with thematic dimension 3: State Political Culture. This factor is related to political opportunity structure and determined by the state context for conducting policy work (see pages 55-56.) A comparison is also made for the diversity of issue addressed by the collection of organizations grouped by state.

The diversity of issues address by organization was also compared by State. The sample size was N=289. Table 2 presents the means and standard deviations for the five states.

Table 2. Means and Standard Deviation for Issues Addressed by Organization in the Five States

<table>
<thead>
<tr>
<th>State</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>37</td>
<td>6.62</td>
<td>2.701</td>
</tr>
<tr>
<td>ME</td>
<td>87</td>
<td>5.95</td>
<td>2.236</td>
</tr>
<tr>
<td>NH</td>
<td>54</td>
<td>5.67</td>
<td>2.599</td>
</tr>
<tr>
<td>RI</td>
<td>43</td>
<td>6.44</td>
<td>2.789</td>
</tr>
<tr>
<td>VT</td>
<td>68</td>
<td>5.82</td>
<td>2.431</td>
</tr>
</tbody>
</table>

Note: N= Number of Organizations, M = mean, SD = standard deviation.

Preliminary comparisons of data for issues addressed at the state level revealed that the homogeneity assumption underlying ANOVA was met (Levene statistic=.742, df[4, 284], p=.564). However, there were no differences found in the diversity of issues addressed by the environmental organizations in the five states. The overall
ANOVA showed no statistically significant difference between groups ($F = 1.232$, $df[4, 284]$, $p=.297$).

State Comparisons for Diversity of Strategies & Tactics Utilized

The diversity of tactics used is an indicator of the political opportunity structure. It is impacted by a broad range of variables. These 45 variables for tactics are associated with several of the thematic dimensions associated with political opportunity structure. It includes variables associated with Dimension 3: State Political Culture, Factor 4: Level of Integration or Fragmentation of the Policy Process, and Factor 5: Lobbying, FOIA, and Transparency Laws (see pages 55-56).

The diversity of strategies and tactics utilized by organizations were compared by State. The sample size was $N=289$. Table 3 presents the means and standard deviations for the five states.

Table 3. Means and Standard Deviation for Number of Tactics Utilized by Organization in the Five States

<table>
<thead>
<tr>
<th>State</th>
<th>$N$</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>37</td>
<td>21.49</td>
<td>9.76</td>
</tr>
<tr>
<td>ME</td>
<td>87</td>
<td>18.83</td>
<td>6.71</td>
</tr>
<tr>
<td>NH</td>
<td>54</td>
<td>17.93</td>
<td>7.35</td>
</tr>
<tr>
<td>RI</td>
<td>43</td>
<td>20.63</td>
<td>8.37</td>
</tr>
<tr>
<td>VT</td>
<td>68</td>
<td>19.97</td>
<td>8.10</td>
</tr>
</tbody>
</table>

*Note: N= Number of Organizations, M = mean, SD = standard deviation.*
Preliminary comparisons revealed that the homogeneity assumption underlying ANOVA was not met (Levene statistic=3.352, df[4, 284], p=.011). However, there were no differences found in the diversity of tactics used by the environmental organizations in the five states. The more robust Welch tests of equality means was used due to the violation of the homogeneity assumption of sample sizes which showed no statistically significant difference between states (Welch Statistic=1.401, df[4], p=.264). Collectively, the tactics utilized by each of the state environmental communities appear to be essentially the same repertoire.

**Resources Allocation by Organizations in States**

The allocation of resources by organization to conduct policy advocacy or to providing services relates to the tactics utilized. It provides an indicator of the emphasis of either type of activity. In the following sections, the extent of resource allocation by the collections of environmental movement organizations is compared between each of the five states studied.

State Comparisons for Advocacy Effort

A comparison is made of the five states in the study, each reporting the percent of their resources expended on advocacy for environmental policy. The survey data for the advocacy effort variable were not normally distributed. Consequently, the data were analyzed using a Kruskal-Wallis Test. The sample size for analysis was \( N = 240 \). Table 4 presents the ranks from the Kruskal-Wallis Test.
The Kruskal-Wallis Test revealed no significant difference in the percent of effort for environmental advocacy of environmental organizations between the states, $\chi^2 (4, n = 289) = 3.72, p = .318$.

State Comparisons for Service Provision Effort

The groups of organizations by state were compared for the percent of their resources expended on providing environmental services. The data were analyzed using a Kruskal-Wallis Test since the survey response data variable was not normally distributed. The sample size for analysis was $N = 261$. Table 5 presents the ranks from the Kruskal-Wallis Test.

Table 5. Ranks for Effort Spent Providing Services

<table>
<thead>
<tr>
<th>State</th>
<th>N</th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>37</td>
<td>98.22</td>
</tr>
<tr>
<td>ME</td>
<td>87</td>
<td>130.98</td>
</tr>
<tr>
<td>NH</td>
<td>54</td>
<td>138.7</td>
</tr>
<tr>
<td>RI</td>
<td>43</td>
<td>150.77</td>
</tr>
<tr>
<td>VT</td>
<td>68</td>
<td>129.27</td>
</tr>
<tr>
<td>Total</td>
<td>240</td>
<td></td>
</tr>
</tbody>
</table>
The Kruskal-Wallis Test revealed marginally indicates there is no significant difference in the percent of resources allocated to provide services between the states, $\chi^2 (4, n = 2261) = 9.302, p=.054$. However, this value is very close to meeting the significance test so there may be a slight difference that is not clearly indicated due to a small sample size used for the test.

**State Comparisons for Collaboration**

The extent of collaboration between movement organizations is a factor directly related to Resource Mobilization Theory. It is a measure of movement capacity to collectively mobilize. The extent of collaborations is a variable associated with themetic dimension: Level of Inter-organizational Collaboration (see pages 55-56).

The five states in the study for organization collaboration with other organizations are compared. The data were collected on an ordinal scale. Consequently, the data were analyzed using a Kruskal-Wallis Test. The sample size for analysis was $N = 289$. Table 6 presents the ranks from the Kruskal-Wallis Test.

**Table 6. Ranks for Advocacy Effort**

<table>
<thead>
<tr>
<th>State</th>
<th>N</th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>37</td>
<td>162.46</td>
</tr>
<tr>
<td>ME</td>
<td>87</td>
<td>150.16</td>
</tr>
<tr>
<td>NH</td>
<td>54</td>
<td>125.01</td>
</tr>
<tr>
<td>RI</td>
<td>43</td>
<td>139.85</td>
</tr>
<tr>
<td>VT</td>
<td>68</td>
<td>148.03</td>
</tr>
<tr>
<td>Total</td>
<td>289</td>
<td></td>
</tr>
</tbody>
</table>
The Kruskal-Wallis Test revealed no significant difference in the extent of collaboration of environmental organizations between the states, $\chi^2 (4, n = 289) = 5.74$, $p = .219$.

**Organizational Perceptions of State Environmental Movement Groups**

Several survey questions were specifically designed to provide an indication of the influence and role of the environmental groups that comprise the movements in small states associated with research question 4. Questions inquired about each organization’s perceived influence on environmental policy, government receptiveness to their claims, perceptions of government action on environmental issues, and government transparency.

**State Comparison of Perceived Change in Influence on State Environmental Policy**

The perceived change in influence between states was analyzed. Perceived change response was the dependent variable and state is the independent variable. Data were analyzed using a 5 x 2 chi square analysis.

Table 7 presents the 5 x 2 contingency arrangement between the independent and dependent variables. Results show a statistically significant difference between groups, $X^2 = 18.282$, df = 4, $p = .001$. This obtained difference represents a medium effect size (Cohen’s, 1988, $d = 0.5296$).
Table 7. Cross Tabulation Between Perceived Change in Influence and State

<table>
<thead>
<tr>
<th>State</th>
<th>More Influence</th>
<th>Less or Same Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>ME</td>
<td>30</td>
<td>56</td>
</tr>
<tr>
<td>NH</td>
<td>27</td>
<td>24</td>
</tr>
<tr>
<td>RI</td>
<td>30</td>
<td>11</td>
</tr>
<tr>
<td>VT</td>
<td>37</td>
<td>29</td>
</tr>
</tbody>
</table>

Since the overall chi-square was significant, post hoc analysis was conducted to determine where the differences between states exist. For a 5x2 contingency arrangement, there are 10 post hoc comparisons. The post hoc comparisons reveal that Maine’s environmental organizations believe they have less influence than organizations in New Hampshire, Rhode Island, or Vermont (respectively, $X^2=.038$, $X^2=.001$, $X^2=.0009$). Similarly, Delaware’s environmental organizations believe they have less or the same influence than organizations in Rhode Island ($X^2=.011$). Rhode Island organizations also perceive a change of more influence significantly more than organizations in New Hampshire ($X^2=.047$). Organizations in Maine and Delaware differ from the other northeastern states surveyed in that they perceived reduced influence in recent years. Table 8 summarizes the post hoc comparisons between states for perceived change in influence on environmental policy.
Table 8. Post Hoc Comparisons for Change in Influence on Environmental Policy

<table>
<thead>
<tr>
<th>State</th>
<th>DE vs. ME</th>
<th>DE vs. NH</th>
<th>DE vs. RI</th>
<th>DE vs. VT</th>
<th>ME vs. NH</th>
<th>ME vs. RI</th>
<th>ME vs. VT</th>
<th>NH vs. RI</th>
<th>NH vs. VT</th>
<th>RI vs. VT</th>
</tr>
</thead>
<tbody>
<tr>
<td>More Influence</td>
<td>15</td>
<td>30</td>
<td>15</td>
<td>37</td>
<td>30</td>
<td>37</td>
<td>30</td>
<td>37</td>
<td>30</td>
<td>37</td>
</tr>
<tr>
<td>Less or Same Influence</td>
<td>19</td>
<td>56</td>
<td>19</td>
<td>24</td>
<td>19</td>
<td>24</td>
<td>19</td>
<td>24</td>
<td>19</td>
<td>24</td>
</tr>
</tbody>
</table>

| $\chi^2$ | 0.886 | 0.635 | 6.537 | 1.282 | 4.297 | 16.33 | 6.794 | 3.946 | 0.113 | 3.163 |
| df      | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| p       | 0.346 | 0.425 | 0.011 | 0.257 | 0.038 | 0.001 | 0.009 | 0.047 | 0.737 | 0.075 |

The post hoc analysis provides confirmation of the statistically significant differences of perception of reduced influence in the State of Maine, and increased influence in the State of Rhode Island. Sixty-five percent of Maine organizations and 55.8% of Delaware’s organizations reported reduced influence, while 73.2% of Rhode Island organizations reported increased influence on environmental policy in their state. This is clearly visualized in the graphical representation of the percentage of responses by each state on their perceived influence in Figure 1.
Figure 1. Perceived Change in Policy Influence

State Comparison for Receptiveness of Governmental Policymakers to Organizational Views

The receptiveness of government officials to the views of environmental organizations responses among states was analyzed for those organizations that responded along the ordinal scale for government responsiveness. Consequently, the data were analyzed using a nonparametric independent samples test. Organizations responding that they do not work with government officials or with a response of others (n=29) were not included in the analysis.

For differences in government receptiveness among the states, the sample size for analysis was \( N = 251 \). The Kruskal-Wallis Test revealed no significant difference in the extent of collaboration of environmental organizations between the states, \( \chi^2 (4, n = 251) = 9.10, p= .059 \).
State Comparison of Perceptions on Government Activity on Environmental Issues

For differences in perceptions of government action on environmental issues among the states, the Kruskal-Wallis Test revealed a significant difference in the organization responses between the states, $\chi^2 (4, n = 273) = 54.2, p = .001$. Maine responses (Md=2, n=85) for government action on environmental issues was significantly lower than that in New Hampshire (Md=3, n=48), Rhode Island (Md=4, n=42), or Vermont (Md=4, n=67).

State Comparison of Perception on Availability of Government Information/Transparency

The availability of state government information response among states was analyzed for those organizations that responded along the ordinal scale. For differences in the availability of state government information responses among the states, the Kruskal-Wallis Test revealed a significant difference in the organization responses between the states, $\chi^2 (4, n = 289) = 20.35, p = .001$. Maine responses (Md=3, n=87) for availability of government information was significantly lower than that in New Hampshire (Md=4, n=54) or Vermont (Md=4, n=68).

Comparison of State Context Variables

A comparison of several context variables was conducted to evaluate potential differences among the five states included in this study. Differences in the context, if meaningful, may potentially influence the political opportunity structure in which environmental organizations and movements operate. These state context variables are primarily associated with Thematic dimension 3: State Political Culture (see pages...
and help answer the research questions that asks how state contexts explain the structure and variation of the environmental movements in the five small states.

**Environmental Quality Data**

The environmental quality data utilized is the U.S. Environmental Protection Agency’s (USEPA) Environmental Quality Index (EQI). This index was developed to calculate overall environmental quality in each of the 3,141 counties in the United States to provide a comprehensive set of data for researchers who study the environment (USEPA, September 2014). The EQI represents five environmental domains including air, water, land, built, and sociodemographic. This data are provided as an overall EQI variable as well as a separate index value for each of the five domains. In order to compare the environmental conditions that may impact environmental movements in each state, a comparison of the means of the county EQI values for each state were compared.

Kruskal-Wallis Tests were used to identify difference in the county level environmental quality index values of the Northeast States (DE, n = 3; ME, n=16; NH, n=10; RI, n=5; VT, n=14). The analysis of the aggregation of county data are used as a proxy for statewide environmental quality. Significant differences were found between the county environmental data by states for the overall EQI values and four of the domain specific EQI values. The results for each of the domain EQI variables and the overall EQI variable are summarized in the table below.
Table 9. Differences in County EQI values of Five Northeastern States

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>df</th>
<th>( \chi^2 )</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air EQI</td>
<td>48</td>
<td>4</td>
<td>18.993</td>
<td>0.001</td>
</tr>
<tr>
<td>Water EQI</td>
<td>48</td>
<td>4</td>
<td>33.545</td>
<td>0.001</td>
</tr>
<tr>
<td>Land EQI</td>
<td>48</td>
<td>4</td>
<td>20.082</td>
<td>0.001</td>
</tr>
<tr>
<td>Sociodemographic</td>
<td>48</td>
<td>4</td>
<td>12.527</td>
<td>0.014</td>
</tr>
<tr>
<td>EQI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Built EQI</td>
<td>48</td>
<td>4</td>
<td>3.402</td>
<td>0.493</td>
</tr>
<tr>
<td>Overall EQI</td>
<td>48</td>
<td>4</td>
<td>11.91</td>
<td>0.018</td>
</tr>
</tbody>
</table>

The State of Vermont had a higher mean (\( M = 79.10 \)) for the overall EQI than the other states (RI, \( M = 3.04 \); ME, \( M = 70.80 \); DE, \( M = 65.36 \); NH, \( M = 44.54 \)).

Post hoc comparisons demonstrated the state differences for each of the variables. For the Air EQI, Rhode Island air quality was significantly worse than that of Vermont (\( p = .001 \)) with a large effect size (\( r = .55 \)). Water quality was significantly worse in New Hampshire (\( p = .001, r = .79 \)), Rhode Island (\( p = .015, r = .79 \)), and in Vermont (\( p = .001, r = .79 \)), than in Maine with medium to large effect sizes. The Land EQI demonstrated significantly worse conditions in Maine than in New Hampshire (\( p = .043, r = .41 \)) or Rhode Island (\( p = .003, r = .52 \)) with medium to large effect sizes. Land EQI was also demonstrated to be worse in Delaware than in Rhode Island (\( p = .014, r = .46 \)) with a medium effect size. The Socioeconomic EQI was only found to be significantly different between Maine and Rhode Island (\( p = .042, r = .41 \)) with Rhode Island being worse than Maine.

Post hoc comparisons demonstrated that there was no true difference between states for the overall EQI values for counties from each respective state.
Political Ideologies

Political ideology is a key variable associated with two thematic dimensions from Table 10, State political culture and Lobbying, FOIA, and Transparency Laws (see pages 55-56). A comparison is made of the current and long term trends of both citizen and government ideology in each of the five states. The ideology data utilized was secondary data from the revised 1960-2013 citizen ideology series that position state citizens and state government on a liberal-conservative continuum (Berry, Ringquist, Fording & Hanson, 1998). On the scale from zero (not liberal) to 100 (very liberal), the government ideology scores for all five states lean toward the liberal side of the continuum, with Vermont depicting the highest index values for both citizen and government ideology. New Hampshire has the lowest values for both ideologies along with the largest difference between ideology values of citizens and government.

Table 10. State Citizen and Government Ideology, 2013

<table>
<thead>
<tr>
<th>State</th>
<th>Citizen Ideology</th>
<th>State Government Ideology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>66.4</td>
<td>76.6</td>
</tr>
<tr>
<td>Maine</td>
<td>74.2</td>
<td>66.9</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>50.7</td>
<td>66.2</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>78.1</td>
<td>78.2</td>
</tr>
<tr>
<td>Vermont</td>
<td>86.7</td>
<td>90.1</td>
</tr>
</tbody>
</table>

State Citizen Ideology

The long term trend for State Citizen Ideology from 1960-2013 has consistently similar fluctuations along the conservative-liberal continuum in all 5
states, with a modest shift toward a more liberal ideology over time. New Hampshire has consistently been slightly less liberal than the four other states over the long term.

While the long term trends is similar among the states, the most recent trend shows a drop in citizen ideology values for all states following the 2008 economic collapse following a decade long gradual rise in liberal ideology. As of 2012, ideology values in Maine, New Hampshire and Vermont seemed to be increasing toward pre-great recession levels on the liberalism index. Delaware and Rhode Island state ideology continued to trend toward slightly less liberal ideology. A comparison of this recent shift in the trend for each of the five states are depicted in Figure 12.

![State Citizen Ideology Trend 1998-2013](image)

Figure 2. State Citizen Ideology Trend 1998-2013
Citizen ideology of the five states included in this study with remaining states in the U.S. A Mann-Whitney U Test revealed a statistically significant difference in the State Citizen Ideology Index for period 1960-2013 of the Northeast States included in this study and the remaining 45 states was also conducted. (Counties in NE States, n=270; Counties in all other states, n=2,430), U = 505,656, z = 14.62, p = .001, r = .28. The northeast states of this study were significantly more liberal than the rest of the U.S. States.

The five states were also analyzed for differences in citizen ideology. A Kruskal-Wallis Test revealed a statistically significant difference in the State Citizen Ideology Index for period 1960-2013 of the Northeast States (DE, n = 54; ME, n=54; NH, n=54; RI, n=54; VT, n=54), $\chi^2 (4, n = 270) = 176.34, p = .001$. The State of Rhode Island was more liberal ($M=77.19$) than the other states (VT, $M=71.03$; ME, $M=66.18$; DE, $M=54.65$; NH, $M=42.72$).

Post hoc comparisons demonstrated that New Hampshire was significantly less liberal than all other states (DE, p=.004, r=.21; ME, p=.001, r=.45; VT, p=.001, r=.59; RI, p=.001, r=.69). Delaware was significantly less liberal than Maine (p=.001, r=.24), Vermont (p=.001, r=.38), and Rhode Island (p=.001, r=.49). Maine was also significantly less liberal than Rhode Island (Maine (p=.001, r=.24).

**State Government Ideology**

The long term trend for State Government Ideology from 1960-2013 has followed a consistently similar trend to that of the citizen ideology trend with a modest shift toward a more liberal ideology over time. New Hampshire and Maine Government are now both modestly less liberal than the other three states.
Like citizen ideology, the recent trend in government ideology was impacted by the great recession in several states, but was generally more stable. However, the government response in Rhode Island and Vermont was an increase in liberalism, while Maine and New Hampshire had a decrease in their level of liberalism. Delaware’s government ideology scale shifted very little.

The recent government ideology trend for each state is depicted in Figure 3.

Figure 2. State Government Ideology Trend 1998-2014

The long term trend from 1960-2014 shows considerable shifts in state government ideology, particularly in Delaware and New Hampshire. It is only over
the most recent decades that all five states appear to have converged more closely together on the government ideology scale with predominantly more liberal index scores. On the scale from zero (not liberal) to 100 (very liberal), the government ideology scores for all five states are above 66.

A comparison is made of the citizen ideology of the five states included in this study with remaining states in the U.S. A Mann-Whitney U Test revealed a statistically significant difference in the State Government Ideology Index for period 1960-2013 of the Northeast States included in this study and the remaining 45 states. (Counties in NE States, n=270; Counties in all other states, n=2,430), U = 412,462, z = 6.95, p = .001, r = .14.

The five states were also analyzed for differences in citizen ideology. A Kruskal-Wallis Test revealed a statistically significant difference in the State Government Ideology Index for period 1960-2013 of the Northeast States (DE, n = 55; ME, n=55; NH, n=55; RI, n=55; VT, n=55), $\chi^2 (4, n = 275) = 102.67,$ p = .001. The State of Vermont had the higher median ($M=79.10$) than the other states (RI, $M=3.04$; ME, $M=70.80$; DE, $M=65.36$; NH, $M=44.54$).

Post hoc comparisons demonstrated that the government ideology of New Hampshire was significantly less liberal than all other states (DE, p=.001, r=.31; ME, p=.001, r=.40; VT, p=.001, r=.50; RI, p=.001, r=.55). Delaware was significantly less liberal than Vermont (p=.015, r=.20) and Rhode Island (p=.001, r=.24).

**Social Capital**

Social networks have power to influence public policy. They are a key dimension of social capital or Themetic dimension 6: Social Capital (see p. 50).
compared the social capital indexes in the five study states, using the county social
capital index data as the dependent variable. The county social capital index used was
secondary data acquired from the Northeast Regional Center for Rural Data. The
social capital index data for the most recent year of 2009 is utilized. The data includes
an overall social capital index created using principal component analysis using four
factors. The four factors include an association variable that is an aggregate of a
public participation in a range of associations, voter turnout, census response rate, and
the number of nonprofit organizations.

I compared social capital of the five states included in this study with
remaining states in the U.S. A Mann-Whitney U Test revealed a statistically
significant difference in the State Social Capital Index of the Northeast States included
in this study and the remaining U.S. Counties. (Counties in NE States, n=48; Counties
in all other states & territories, n=3060), U = 100,002, z = 4.62, p = .001, r = .08.
However, due to the extremely small effect size, the practical importance of this
difference is small.

The five states were also analyzed for differences in social capital. A Kruskal-
Wallis Test revealed a statistically significant difference in the County Social Capital
Index values for Northeast States (DE, n = 3; ME, n=16; NH, n=10; RI, n=5; VT,
n=14), χ² (4, n = 48) = 100,002, p = .012.

Post hoc comparisons demonstrated that there was no true difference between
the five states included in this study for the overall social capital index for counties
from each respective state.
**Legislative Professionalism**

Legislative professionalism is an important variable associated with state political culture, a part of thematic dimension 3: State Political Culture (see p. 50). The legislative professionalism dataset contains measures of legislative professionalism components biannually from 1974-2010. Each component is measured separately by biennium and is presented in detail in Bowen and Greene (2014). The data measures legislative expenditures, legislator salary, and session length (both regular and special sessions). The dataset includes an overall professionalism score created through multidimensional scaling, as explained in Bowen and Greene (2014).

Legislative professionalism of the five states included in this study is compared with remaining states in the U.S. A Mann-Whitney U Test revealed a statistically significant difference in the Legislative Professionalism Index for period 1974-2010 of the Northeast States included in this study and the remaining 45 states. (NE States, n=88; other states, n=801), U = 18,640, z = -7.262, p = .001, r = .24. The 5 northeastern states demonstrate to be less professionalized than the remaining 45 U.S. state legislatures.

The five states were also analyzed for differences in legislative professionalism. A Kruskal-Wallis Test revealed a statistically significant difference in the Legislative Professionalism Index for period 1974-2010 of the Northeast States (DE, n = 18; ME, n=16; NH, n=19; RI, n=16; VT, n=19), \( \chi^2 (4, n = 88) = 64.627, p = .001 \). The State of Delaware had the higher median (M= -.240) than the other states (ME, M= -.796; RI, M= -.830; VT, M= -.913; NH, M= -1.725).

Post hoc comparisons demonstrated that the legislature of Delaware was significantly more professionalized than all other states (ME, p=.001, r=.38; RI,
p=.001, r=.40; VT, p=.001, r=.42; NH, p=.001, r=.86). New Hampshire’s legislature was significantly less professionalized than Vermont (p=.001, r=.43), Rhode Island (p=.001, r=.43), Maine (p=.001, r=.43), and Delaware (NH, p=.001, r=.86).

**State Budgets**

An important factor for considering the political opportunity structure for movements is the size of a state’s budget and expenditures. Larger state budgets and resources present more opportunities for advocates to target their efforts to influence government policy.

Data were obtained from the Census of Governments State and Local Finance series of the U.S. Census Bureau (2013). The series contains detailed revenue, expenditure and debt variables for the United States, each of the 50 states, and the District of Columbia for 1977-2012. For this analysis, total expenditures and the total natural resource expenditures are used for each state during the past five years.

Table 11. Average State Expenditures 2009-2013

<table>
<thead>
<tr>
<th>State</th>
<th>Total Expenditures (TE) (x1000)</th>
<th>Natural Resources Expenditures (NRE) (x1000)</th>
<th>NRE Percent of TE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>$ 8,331,947</td>
<td>$ 89,947</td>
<td>1.08%</td>
</tr>
<tr>
<td>ME</td>
<td>$ 9,361,062</td>
<td>$ 178,963</td>
<td>1.91%</td>
</tr>
<tr>
<td>NH</td>
<td>$ 7,729,826</td>
<td>$ 65,032</td>
<td>0.84%</td>
</tr>
<tr>
<td>RI</td>
<td>$ 8,411,311</td>
<td>$ 51,225</td>
<td>0.61%</td>
</tr>
<tr>
<td>VT</td>
<td>$ 6,040,472</td>
<td>$ 80,369</td>
<td>1.33%</td>
</tr>
</tbody>
</table>
State budgets in all five states have gradually increased over the decades, and all of the states except Delaware have seen a decline in their annual budget or total expenditures since the Great Recession of 2008.

Figure 3. Total State Expenditures in Constant Dollars 1977-2013

A similar trend of a gradual increase in natural resource spending is also observed in each state, at least until up to the Great Recession in 2008.
Figure 4. Total State Natural Resources Expenditures in Constant Dollars 2003-2013

Since 2008, total state spending on natural resources dipped slightly and then rebounded in all states but Delaware that experienced an increase in 2009, followed by the highest percentage decrease of any of the five study states.
Both total expenditures and total natural resource expenditures were compared by State. The annual data from 1977 to 2013 was used to compare the long term average expenditures in each state. The sample size was N=185.

A one-way between-groups analysis of variance was conducted to explore the total expenditures by state for the years 1977 to 2013. This time period is assumed to reflect the long term natural resource expenditure context that likely existed during the structuring of the state environmental movements. There was a statistically significant difference at the p < .001 level for total state expenditures by state $F(4, 185) = 13.563, p = .001$. Despite reaching statistical significance, the actual difference in mean scores between the groups was quite small. The effect size, calculated using eta squared, was .23. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Delaware ($M = 4959960, SD = 2073547$) was significantly lower than Maine ($M = 6483282, SD = 2076834$) and significantly higher than Vermont ($M = 3628305, SD = 1478233$). Maine was also significantly different higher than Delaware, New Hampshire ($M=4846715, SD=1938993$), and Vermont. New Hampshire was significantly lower than Maine, Rhode Island ($M=6083140, SD=1672626$), and Vermont. Rhode Island was significantly different than New Hampshire and Vermont. Vermont was significantly different than Delaware, Maine, and Rhode
Island. Table 13 presents the total state expenditure means and standard variations for the five states.

Table 13. Means and Standard Variation for total State Expenditures in Five States

<table>
<thead>
<tr>
<th>State</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>37</td>
<td>4959960</td>
<td>2073547</td>
</tr>
<tr>
<td>ME</td>
<td>37</td>
<td>6483282</td>
<td>2076834</td>
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<tr>
<td>NH</td>
<td>37</td>
<td>4846715</td>
<td>1938993</td>
</tr>
<tr>
<td>RI</td>
<td>37</td>
<td>6083140</td>
<td>1672626</td>
</tr>
<tr>
<td>VT</td>
<td>37</td>
<td>3628305</td>
<td>1478233</td>
</tr>
</tbody>
</table>

A one-way between-groups analysis of variance was also conducted to explore the total natural resource expenditures by state. There was a statistically significant difference at the p < .001 level for total state natural resource expenditures by state $F(4, 185) = 146.38, p = .001$. The actual difference in mean scores between the groups was considerable. The effect size, calculated using eta squared, was .76. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Delaware (M = 69352, SD=25861) was significantly different from Maine (M = 151432, SD = 33463), New Hampshire (M = 52615, SD = 13799), and Rhode Island (M = 41588, SD = 11688). New Hampshire was significantly different from Delaware, Maine, and Vermont (M=76708, SD = 15315). Maine was significantly different and had higher natural resource expenditures than all four other states. Rhode Island was significantly different from Delaware, Maine, and Vermont. Finally, Vermont was significantly different from Maine, New Hampshire, and Rhode Island.
Table 14. Means and Standard Variation for Total State Natural Resource Expenditures in Five States

<table>
<thead>
<tr>
<th>State</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>37</td>
<td>69352</td>
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<tr>
<td>ME</td>
<td>37</td>
<td>151432</td>
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<td>52615</td>
<td>13799</td>
</tr>
<tr>
<td>RI</td>
<td>37</td>
<td>41588</td>
<td>11688</td>
</tr>
<tr>
<td>VT</td>
<td>37</td>
<td>76708</td>
<td>15315</td>
</tr>
</tbody>
</table>
Appendix G

EXPLORATION OF THE UNDERLYING CONSTRUCTS OF ADVOCACY TACTICS & STRATEGIES AND ISSUE FOCUS OF ORGANIZATIONS WITH FACTOR ANALYSIS
Exploration of the Underlying Constructs of Advocacy Tactics & Strategies and Issue Focus of Organizations with Factor Analysis

Exploratory factor analysis (EFA) rather than confirmatory factor analysis (CFA) was chosen to identify integral constructs underlying the Advocacy Tactics Index. Empirical work has provided evidence that CFA may be a less desirable technique for determining the number of factors measured by a data set. For instance, MacCallum and colleagues found that specification searches in covariance structure modeling often do not uncover the correct population model (MacCallum, 1986; MacCallum, Roznowski & Nowrowitz, 1992). Likewise, Gorsuch (2003) reported that whereas EFA results nearly always replicate during first-order CFAs; the reverse is not true when CFA is employed to uncover first-order factors and then used to replicate results with a second sample. Therefore, EFA was employed because of the uncertainty surrounding the underlying structure of the Advocacy Tactics & Strategies Scale (Brown, 2001; Weschsler, 1991) and the potential for stronger structural evidence to emerge during later, CFA replications (Goldberg & Velicer, 2006).

Principal component analysis was employed given its relative tolerance of multivariate nonnormality and its superior recovery of weak factors (Briggs & MacCallum, 2003; Cudeck, 2000; Fabrigar, Wegener, MacCallum, & Strahan, 1999). Communalities were estimated through squared multiple correlations and were iterated to produce final communality estimates (Gorsuch, 2003). For both theoretical and empirical reasons, it was assumed that retained factors would be correlated. Consequently, a Promax rotation was employed with $k = 4$ (Tataryn, Wood, & Gorsuch, 1999).

One of the more critical decisions in an EFA is to determine the correct number of factors to retain and rotate (Fabrigar et al., 1996; Tabachnick & Fidell,
The most common rule is to retain factors when eigenvalues are > 1.0. This solitary criterion is the default procedure in most statistical packages. The shortcoming is that implementation of solitary criteria tends to under- or overestimate the number of true latent dimensions (Gorsuch, 1983). Accordingly, each model was evaluated against the following five rules: (a) eigenvalues greater than 1.0 (Kaiser, 1960); (b) scree (Cattell, 1966), (c) Glorfeld’s (1995) extension of parallel analysis (Horn, 1965), (d) minimum average parcels (Velicer, 1976), and (e) interpretability (Fabrigar et al., 1999; Gorsuch, 1983). Results from several investigations demonstrated that MAP and PA are the two best methods for determining the correct number of factors to accept and that the scree test is a useful adjunct (Buja & Eyuboglu, 1992; Glorfeld, 1995).

**Results**

**Advocacy Tactics & Strategies**

Table 12 presents means (Ms) and standard deviations (SDs) for the 42 advocacy tactics variables submitted to the EFAs. Results from Bartlett’s Test of Sphericity (Bartlett, 1954) indicated that the correlation matrix was not random ($\chi^2 = 41842.2; \text{df} = 741; \text{p} = .001$). The Kaiser-Meyer-Olkin (KMO; Kaiser, 1974) statistic was .882 and it was well above the .60 minimum suggested by Kline (1994). A six-factor and an seven-factor solution were rotated. Kaiser’s criterion and parallel analysis suggests that nine factors be retained. Cattle’s Scree test has a gradual tail with very similar eigenvalues with a slight inflection at six factors; however the point of inflection for the scree could easily be interpreted to include seven, eight, or nine factors. MAP indicates that five factors are likely but this is open to interpretation due to the small differences between Velicer’s average squared correlations for factors five through a nine, respectively 0.010, 0.010, 0.011, 0.011, and 0.012. Similarly,
parallel analysis did not show a clear separation between factors, with the Random and observed eigenvalues very close together for factors six through nine due to the small difference between the eigenvalues of the actual and random data, but no intersection. The six-factor solution satisfied requirements for simple structure in that all variables showed appreciable factor loadings and each variable loaded on only one factor (Field, 2005; Tabachnick & Fidell, 2007). By contrast, the seven-factor solution revealed that four variable; lobbying expenditure disclosure records, news media, micro-blog, and social networking site did not load on these factors. The six-factor solution was accepted, given the substantive and statistical considerations just above.

Table 13 presents the rotated pattern matrix for the six-factor solution. The six factors were interpreted according to the magnitude and meaning of their salient pattern coefficients. All coefficients greater than .41 were considered appreciable and satisfied standards for loadings with larger sample sizes (Stevens, 2002; Field, 2005). The first factor was characterized by variables describing high levels of Legislative Bill Tracking, Participation in Legislative Budget Hearings, Analysis of Legislative Proposals, Having a Registered Lobbyist, and Testifying at Legislative Hearings, and Talking with Elected Officials. This factor aligned with theoretical expectations for direct legislative policy action. Consequently, the first factor was named Legislative Action Index. The second factor was defined by appreciable loadings from use of Government Databases & Websites, use of Nongovernment Publications & Websites, Citizen Data Collection, use of News Source Information, and Conducting Education Programs and Workshops. As a result, the factor was named Research & Information Sharing and this factor also aligned with theoretical expectations for non-confrontational data uses for policy advocacy. The third factor was defined by appreciable loading from Electronic Advocacy Alerts, Social Networking Site use,
Organizing Events in Support or Opposition to legislation, promoting participation in protests, encouraging the public to contact policymakers, and conducting online advocacy campaigns. As a result, this factor was named Grassroots Advocacy Index and is also aligned with the theoretical expectations. Factor 4 was defined by appreciable loadings from use of Infographics, Digital Storytelling, Microblogging, and release of research reports to the media and policymakers. This factor was named the Science and Digital Information Sharing Index. Factor 5 was defined by appreciable loading from Supporting or Opposing Candidates for Office, Conducting Get Out the Vote Activities, Conducting Voter Registration Drives, Hosting Candidate Forums, and Utilizing Lobbying Expenditure Disclosure Reports. This factor was named the Political Action Index. Finally, Factor 6 was defined by appreciable loading from Freedom of Information Requests, Filing Legal Actions, and working with Civic Minded Former Government Officials. As a result, this factor was named the Accountability Demand Index.

**Issues Addressed by Organizations**

Table 14 presents means (Ms) and standard deviations (SDs) for the 11 advocacy tactics variables submitted to the EFAs. Results from Bartlett’s Test of Sphericity (Bartlett, 1954) indicated that the correlation matrix was not random ($\chi^2 = 1195.9; df = 66; p = .001$). The Kaiser-Meyer-Olkin (KMO; Kaiser, 1974) statistic was .754 and it was well above the .60 minimum suggested by Kline (1994). A three-factor solution and four factors was rotated. Kaiser’s criterion and parallel analysis suggests that three factors be retained. Cattle’s Scree test has a sharp inflection at three factors. MAP also indicates that three factors are likely. The three-factor solution satisfied requirements for simple structure in that all variables showed
appreciable factor loadings and each variable loaded on only one factor (Field, 2005; Tabachnick & Fidell, 2007).

Table 12 presents the rotated pattern matrix for the three-factor solution. The three factors were interpreted according to the magnitude and meaning of their salient pattern coefficients. All coefficients greater than .42 were considered appreciable and satisfied standards for loadings with larger sample sizes (Stevens, 2002; Field, 2005). The first factor was characterized by variables describing high levels of engagement in issues including land protection and conservation, land use & development, outdoor recreation, and wildlife preservation and protection. This factor aligned with theoretical expectations for traditional habitat conservation organizations. Consequently, the first factor was named Habitat Conservation Orientation. The second factor was defined by appreciable loadings on issues including environmental health, pollution abatement and control, and environmental justice. As a result, the factor was named Health and Environmental Protection Orientation and this factor also aligned with theoretical expectations of environmental protection groups. The third factor was defined by appreciable loading from Energy and Climate Change issues. As a result, this factor was named Energy and Climate Change Orientation and is also aligned with the theoretical expectations for the more recently emerging organizational focus on global warming and renewable energy.
Table 12. Means and Standard Deviations for the Advocacy Tactics subtest scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Collected by Citizens</td>
<td>2.78</td>
<td>1.36</td>
</tr>
<tr>
<td>Civic Minded Former Government Employees</td>
<td>2.01</td>
<td>1.25</td>
</tr>
<tr>
<td>Freedom of Information Act Requests</td>
<td>1.33</td>
<td>0.86</td>
</tr>
<tr>
<td>Calling Government Officials</td>
<td>3.13</td>
<td>1.45</td>
</tr>
<tr>
<td>Government Databases</td>
<td>2.95</td>
<td>1.41</td>
</tr>
<tr>
<td>Government Website</td>
<td>3.21</td>
<td>1.47</td>
</tr>
<tr>
<td>Legislative Bill Tracking Website</td>
<td>2.49</td>
<td>1.47</td>
</tr>
<tr>
<td>Legislative Budget Hearing</td>
<td>1.87</td>
<td>1.14</td>
</tr>
<tr>
<td>Legal Discovery</td>
<td>1.21</td>
<td>0.62</td>
</tr>
<tr>
<td>Lobbying Expenditure Disclosure Records</td>
<td>1.27</td>
<td>0.84</td>
</tr>
<tr>
<td>News Media</td>
<td>3.58</td>
<td>1.37</td>
</tr>
<tr>
<td>Nongovernmental Publications or Services</td>
<td>3.22</td>
<td>1.49</td>
</tr>
<tr>
<td>Nongovernmental Websites (that may package gov. data)</td>
<td>3.02</td>
<td>1.44</td>
</tr>
<tr>
<td>Peer Review Scientific Studies &amp; Data</td>
<td>2.70</td>
<td>1.43</td>
</tr>
<tr>
<td>Host candidate forums or candidate scorecards</td>
<td>1.10</td>
<td>0.32</td>
</tr>
<tr>
<td>Support or oppose candidates for office</td>
<td>1.09</td>
<td>0.41</td>
</tr>
<tr>
<td>Conduct get out the voter activities</td>
<td>1.05</td>
<td>0.27</td>
</tr>
<tr>
<td>Conduct voter registration drives</td>
<td>1.04</td>
<td>0.21</td>
</tr>
<tr>
<td>Conduct educational programs, workshops, or conferences about</td>
<td>2.79</td>
<td>1.36</td>
</tr>
<tr>
<td>Encourage the public to call, write, or email policymakers</td>
<td>2.20</td>
<td>1.21</td>
</tr>
<tr>
<td>Conduct on-line Advocacy Campaigns</td>
<td>1.46</td>
<td>0.99</td>
</tr>
<tr>
<td>Organize events in support or opposition to proposed legislation,</td>
<td>1.41</td>
<td>0.76</td>
</tr>
<tr>
<td>Hold, attend, or promote participation in public protests to bring</td>
<td>1.42</td>
<td>0.84</td>
</tr>
<tr>
<td>Draft &amp; propose environmental legislation</td>
<td>1.34</td>
<td>0.63</td>
</tr>
<tr>
<td>Provide analysis of legislative or regulatory proposals</td>
<td>1.80</td>
<td>1.09</td>
</tr>
<tr>
<td>File a law suit or a friend of the court brief</td>
<td>1.14</td>
<td>0.43</td>
</tr>
<tr>
<td>Having a registered lobbyist</td>
<td>1.35</td>
<td>1.03</td>
</tr>
<tr>
<td>Release research reports to the media, public, or policymakers</td>
<td>1.73</td>
<td>0.93</td>
</tr>
<tr>
<td>Serve on planning or advisory committees with government</td>
<td>2.27</td>
<td>1.29</td>
</tr>
<tr>
<td>Talk to elected public officials</td>
<td>2.94</td>
<td>1.36</td>
</tr>
<tr>
<td>Testify at legislative or administrative hearings</td>
<td>1.88</td>
<td>1.17</td>
</tr>
<tr>
<td>Tracking legislation</td>
<td>2.42</td>
<td>1.45</td>
</tr>
<tr>
<td>Digital Storytelling</td>
<td>1.21</td>
<td>0.68</td>
</tr>
<tr>
<td>Discussion Group (like Google Groups, Yahoo Groups, or a list)</td>
<td>1.51</td>
<td>1.11</td>
</tr>
<tr>
<td>Electronic Action Alerts (email, text messages, social media).</td>
<td>2.12</td>
<td>1.47</td>
</tr>
<tr>
<td>Infographics</td>
<td>1.24</td>
<td>0.73</td>
</tr>
<tr>
<td>Micro-Blog (like Twitter, Plurk, Tumblr, etc.)</td>
<td>1.67</td>
<td>1.43</td>
</tr>
<tr>
<td>Social Networking Site (like Facebook, Instagram, etc.)</td>
<td>2.99</td>
<td>1.74</td>
</tr>
<tr>
<td>Video sharing (like YouTube, vimeo)</td>
<td>1.58</td>
<td>1.14</td>
</tr>
</tbody>
</table>

*Note: M = mean, SD = standard deviation, N = 221. All values rounded to second decimal position for convenient presentation.*
Table 13. Rotated Pattern Matrix from the Advocacy Tactics Factors

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Collected by Citizens</td>
<td>0.61</td>
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<tr>
<td>Civic Minded Former Government Employees</td>
<td></td>
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<td>0.44</td>
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<tr>
<td>Freedom of Information Act Requests</td>
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<td></td>
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<tr>
<td>Calling Government Officials</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Databases</td>
<td>0.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Website</td>
<td>0.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legislative Bill Tracking Website</td>
<td>0.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legislative Budget Hearing</td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Legal Discovery</td>
<td></td>
<td></td>
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<tr>
<td>Lobbying Expenditure Disclosure Records</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.48</td>
</tr>
<tr>
<td>News Media</td>
<td>0.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nongovernmental Publications or Services</td>
<td>0.66</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nongovernmental Websites (that may package gov. data)</td>
<td>0.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer Review Scientific Studies &amp; Data</td>
<td>0.62</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Host candidate forums or candidate scorecards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.63</td>
</tr>
<tr>
<td>Support or oppose candidates for office</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.77</td>
</tr>
<tr>
<td>Conduct get out the voter activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.86</td>
</tr>
<tr>
<td>Conduct voter registration drives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.72</td>
</tr>
<tr>
<td>Conduct educational programs, workshops, or conferences about environmental issues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.45</td>
</tr>
<tr>
<td>Encourage the public to call, write, or email policymakers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.65</td>
</tr>
<tr>
<td>Conduct on-line Advocacy Campaigns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.65</td>
</tr>
<tr>
<td>Organize events in support or opposition to proposed legislation,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.56</td>
</tr>
<tr>
<td>Activity</td>
<td>Coefficient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Hold, attend, or promote participation in public protests to bring attention to issues</td>
<td>0.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Draft &amp; propose environmental legislation</td>
<td>0.44</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide analysis of legislative or regulatory proposals</td>
<td>0.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>File a law suit or a friend of the court brief</td>
<td>0.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having a registered lobbyist</td>
<td>0.74</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Release research reports to the media, public, or policymakers</td>
<td>0.46</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Serve on planning or advisory committees with government officials</td>
<td>0.44</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talk to elected public officials</td>
<td>0.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Testify at legislative or administrative hearings</td>
<td>0.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tracking legislation</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital Storytelling</td>
<td>0.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussion Group (like Google Groups, Yahoo Groups, or a list serve)</td>
<td>0.55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronic Action Alerts</td>
<td>0.45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-line Petitions</td>
<td>0.65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email Blast</td>
<td>0.43</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infographics</td>
<td>0.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micro-Blog (like Twitter, Plurk, Tumblr, etc.)</td>
<td>0.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Networking Site (like Facebook, Instagram, etc.)</td>
<td>0.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Videosharing (like YouTube, vimeo)</td>
<td>0.66</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eigenvalue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of var.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cum. % of var.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Advocacy Strategy Index. N=292. Pattern Coefficients Greater than 0.41 are considered salient. Interpretation was simplified through the presentation of only salient coefficients. All coefficients rounded to the second decimal position for convenient presentation.
Table 14. Means and Standard Deviations for the Advocacy Tactics subtest scores.

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Protection and Welfare</td>
<td>2.28</td>
<td>1.47</td>
</tr>
<tr>
<td>Global Warming/Climate Change</td>
<td>2.48</td>
<td>1.46</td>
</tr>
<tr>
<td>Energy (Renewable Energy, Fossil Fuel Reduction, Nuclear</td>
<td>2.07</td>
<td>1.42</td>
</tr>
<tr>
<td>Environmental Health (Chemical and Toxic Waste, Brownfield,</td>
<td>2.15</td>
<td>1.32</td>
</tr>
<tr>
<td>Environmental Justice</td>
<td>1.85</td>
<td>1.18</td>
</tr>
<tr>
<td>Land Protection &amp; Conservation (Wetlands, Habitat Restoration)</td>
<td>3.84</td>
<td>1.31</td>
</tr>
<tr>
<td>Land Use and Development</td>
<td>3.12</td>
<td>1.41</td>
</tr>
<tr>
<td>Oceans and Marine Life</td>
<td>2.04</td>
<td>1.46</td>
</tr>
<tr>
<td>Outdoor Recreation</td>
<td>3.36</td>
<td>1.47</td>
</tr>
<tr>
<td>Pollution Abatement &amp; Control</td>
<td>2.66</td>
<td>1.48</td>
</tr>
<tr>
<td>Wildlife Preservation or Protection (Biodiversity)</td>
<td>3.52</td>
<td>1.39</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>1.47</td>
<td>2.12</td>
</tr>
</tbody>
</table>

*Note: M = mean, SD = standard deviation, N = 289. All values rounded to second decimal position for convenient presentation.*
Table 15. Rotated Pattern Matrix from the Issue Focus Factors

<table>
<thead>
<tr>
<th>Variable</th>
<th>Component 1: Habitat Conservation</th>
<th>Component 2: Health and Environmental Protection</th>
<th>Component 3: Energy &amp; Climate Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Protection and Welfare</td>
<td>.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Warming/Climate Change</td>
<td></td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td>Energy (Renewable Energy, Fossil Fuel Reduction, Nuclear)</td>
<td></td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td>Environmental Health (Chemical and Toxic Waste, Brownfield, Lead abatement, etc.)</td>
<td></td>
<td>.84</td>
<td></td>
</tr>
<tr>
<td>Environmental Justice</td>
<td></td>
<td>.68</td>
<td></td>
</tr>
<tr>
<td>Land Protection &amp; Conservation (Wetlands, Habitat)</td>
<td>.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Use and Development</td>
<td>.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oceans and Marine Life</td>
<td></td>
<td>.42</td>
<td></td>
</tr>
<tr>
<td>Outdoor Recreation</td>
<td>.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pollution Abatement &amp; Control</td>
<td></td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td>Wildlife Preservation or Protection (Biodiversity)</td>
<td>.91</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Eigenvalue | 3.45 | 2.61 | 1.01 |
| % of var.  | 28.79| 21.72| 8.40 |
| cum. % of var. | 28.79| 50.51| 58.91 |

Note: Issue Focus Index. N = 289. Pattern Coefficients Greater than 0.42 are considered salient. Interpretation was simplified through the presentation of only salient coefficients. All coefficients rounded to the second decimal position for convenient presentation.
Appendix H

INTERNAL REVIEW BOARD: HUMAN SUBJECTS REVIEW
DATE: November 7, 2014

TO: David Carter
FROM: University of Delaware IRB

STUDY TITLE: [667236-1] The Structure of Environmental Movements in Small U.S. States and Implications for Environmental Policy

SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF EXEMPT STATUS
DECISION DATE: November 7, 2014

REVIEW CATEGORY: Exemption category # (2)

Thank you for your submission of New Project materials for this research study. The University of Delaware IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will put a copy of this correspondence on file in our office. Please remember to notify us if you make any substantial changes to the project.

If you have any questions, please contact Nicole Farnese-McFarlane at (302) 831-1110 or nicolefm@udel.edu. Please include your study title and reference number in all correspondence with this office.
HUMAN SUBJECTS PROTOCOL
University of Delaware

Protocol Title: The Structure of Environmental Movements in Small U.S. States and Implications for Environmental Policy

Principal Investigator
Name: David B. Carter
Department/Center: School of Public Policy and Administration
Contact Phone Number: 302-270-6816
Email Address: Davidctr@udel.edu

Advisor (if student PI):
Name: Dr. John McNutt
Contact Phone Number: (302) 831-0765
Email Address: mcnuttjg@udel.edu

Other Investigators: N/A

Investigator Assurance:
By submitting this protocol, I acknowledge that this project will be conducted in strict accordance with the procedures described. I will not make any modifications to this protocol without prior approval by the IRB. Should any unanticipated problems involving risk to subjects occur during this project, including breaches of guaranteed confidentiality or departures from any procedures specified in approved study documents, I will report such events to the Chair, Institutional Review Board immediately.

1. **Is this project externally funded?** □ YES ✗ NO
   If so, please list the funding source:

2. **Research Site(s)**
   ✗ University of Delaware
   □ Other (please list external study sites)

   Is UD the study lead? ✗ YES □ NO (If no, list the institution that is serving as the study lead)
3. **Project Staff**

Please list all personnel, including students, who will be working with human subjects on this protocol (insert additional rows as needed):

<table>
<thead>
<tr>
<th>NAME</th>
<th>ROLE</th>
<th>HS TRAINING COMPLETE?</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Carter</td>
<td>Principle Investigator – Interviewer &amp; Survey Administrator for Project</td>
<td>YES</td>
</tr>
</tbody>
</table>

4. **Special Populations**

Does this project involve any of the following:

- Research on Children? No
- Research with Prisoners? No
- If yes, complete the Prisoners in Research Form and upload to IRBNet as supporting documentation
- Research with Pregnant Women? No
- Research with any other vulnerable population (e.g. cognitively impaired, economically disadvantaged, etc.)? please describe
  - No

5. **RESEARCH ABSTRACT**

Please provide a brief description in LAY language (understandable to an 8th grade student) of the aims of this project.

This research seeks to understand whether or not state level environmental movements differ significantly among small U.S. states. If these movements differ, this research will seek to identify how well our mainstream social movement theories and models explain these differences in environmental movements, collective action, mobilization, and advocacy.

This research aims to provide valuable insights into environmental advocacy in a new context. Understanding how environmental movement organizations may collectively influence or be hindered from influencing state policy may confirm or refute that state
environmental movements exist and are effective in a small state context. It may also provide insights on the efficacy of existing tactics, describe needed changes in movement structures and organization, and lead to development of new approaches to influencing policy by those marginalized from much of the policy making process. The research will provide a better understanding of socio-political conditions, resource needs, and other factors needed for mobilization on environmental policy issues in specific state contexts. It will help enable advocacy groups to better plan and develop effective strategies to ensure environmental improvements at the state level, particularly for small states that may face significant challenges.

6. PROCEDURES Describe all procedures involving human subjects for this protocol. Include copies of all surveys and research measures.

This study will use two procedures involving human subjects. These include semi-structured interviews of 1-3 key leaders of environmental organizations in the five selected U.S. States and a more comprehensive fixed form survey of the broad population of environmental organizations in each of these states. The survey instruments for each are included with this IRB submission.

Interviews will be selected based on the identification of organizations documented as being highly active on state policy based on state lobbying records, recommendations from contacts in state government in each of the states, review on media reports, and other sources. Interviews will be based on the attached semi-structured survey and will be digitally recorded. They will be conducted in person whenever possible, but may be conducted as telephone interviews if scheduling, travel requirements, or other logistical problems prohibit an in person interview.

Fixed form survey recipients will be based on the most comprehensive list of organizations that can be developed and confirmed to exist via telephone calls and/or e-mail correspondences. The survey primarily be administered through the internet using Qualtrics, but will be conducted as a mixed mode survey that includes the potential for administration as a mail survey (hardcopy) for any participant identified to not utilize web based surveys and in some cases a telephone survey. The mixed mode will be used to increase survey response rates and to ensure accommodation of recipients with any special needs.

Priority will be given to the web based survey. Implementation will include a carefully and strategically timed schedule for contact to recipients. This will include an initial e-mail invite, followed by e-mail reminders to non-respondents after 3 days, 10 days, 21 days, and a final reminder after 28 days. For the remaining non-responders, a telephone call reminder will be placed, confirming receipt of the electronic survey, resending the survey web link upon request, of confirming the potential recipient does not wish to participate. For those identified as preferring a hard copy survey or a telephone survey, the alternative survey mode will be utilized. A second phone call will be placed to non-respondents after 14 days and 28 days.
7. STUDY POPULATION AND RECRUITMENT
Describe who and how many subjects will be invited to participate. Include age, gender and other pertinent information.

The study population includes the most complete and representative sample of environmental organizations that can be developed for each of the study states. The subjects will be the executive directors, policy advisor, board members, or designated person identified as knowledgeable and able to represent the organization in a survey or interview. The sample of organizations will be developed from existing secondary data sources including several national directories (Internal Revenue Service Master Business file of tax exempt organizations, Encyclopedia of Organizations, Grey House Publishing database of environmental organizations, OpenSecrets database, Guidestar database, Charity Navigator database, web searches, available rosters of environmental organizations, state lobbying registration lists, and consultation with environmental organization representatives in each State. Based on an initial review, the lists range from 59 to 354 potential organization recipients in the five states with a potential total survey population of 934. This is an initial estimate that may change based on confirmation that the organizations are still active and screening of the groups based on selection criteria.

Recipients will be contacted by phone, a post card notice that an internet based survey will soon be sent, and/or an e-mail. This does not include recruitment, but mailing of a request to participate in the survey work in accordance with the informed consent conditions.

Attach all recruitment fliers, letters, or other recruitment materials to be used. If verbal recruitment will be used, please attach a script.

N/A

Describe what exclusionary criteria, if any will be applied.

The inclusion/exclusion criteria for constructing the sampling frame or population of environmental organizations are 1) location; the group has a mailing address and/or documentation of activity in the specific state, 2) organizational structure, which includes subunits or chapters of organizations, 3) organization values; the actions are for public benefits in contrast to private interest claims such as those conducted by for profit entities, 4) non-state actors or non-government organizations, 5) have language in their mission or a specific project task that addresses a natural resource conservation or environmental protection objective, or 6) have a lobbyist registered with the state.

Describe what (if any) conditions will result in PI termination of subject participation.

Subject is unwilling to approve acceptance of terms in informed consent form or decides not to participate at any point.
8. RISKS AND BENEFITS
List all potential physical, psychological, social, financial or legal risks to subjects (risks listed here should be included on the consent form).

There is the potential for organizations that conduct advocacy to be concerned about retribution from opponents for statements provided as part of an interview or survey responses. These may have real or perceived implications to respondents.

In your opinion, are risks listed above minimal* or more than minimal? If more than minimal, please justify why risks are reasonable in relation to anticipated direct or future benefits.

Minimal.

What steps will be taken to minimize risks?

In order to reduce the minimal risks, all interview and survey response information will be kept confidential. Safeguards for protection of data will be included such as only storing transcripts, data, and notes on a personal computer and backup drives accessible to only the principle investigator, carefully filing written notes and records in a locked filing cabinet accessible only to the principle investigator, and shredding or deleting outdated draft materials and data that are not required to be stored in accordance with IRB procedures.

All sensitive data files from interviews and the survey will stored in a single folder and encrypted using AES Crypt software. AES Crypt is recommended for use by the University of Delaware’s Information Technology department and available at no cost to students. A strong password will be utilized and periodically updated for the encrypted data to ensure it is kept secure.

Care will also be taken in presentation of findings to protect confidentiality of participant.

Describe any potential direct benefits to participants.

An increased understanding of environmental movements in each interviewee’s state context will provide insights into the most effective approaches to overcoming challenges to influencing environmental policy; potentially leading to improvements in environmental policy and environmental quality.

Describe any potential future benefits to this class of participants, others, or society.

An improved understanding of the structure and role of environmental organizations may improve the understanding of the public policy process, leading to improved environmental policy at the state level that would benefit the health, safety, and welfare of the public.
If there is a Data Monitoring Committee (DMC) in place for this project, please describe when and how often it meets.

N/A

9. COMPENSATION
Will participants be compensated for participation?

No

If so, please include details.

10. DATA
Will subjects be anonymous to the researcher?

No.

If subjects are identifiable, will their identities be kept confidential? (If yes, please specify how)

Yes. There is no need to identify specific participants in this study. In the event than any quotes are used in the reporting, they will only be presented as part of a group of organizations or using pseudonyms to maintain confidentiality. Pseudonym lookup list files will be kept separately and encrypted. Similarly, no personal names or identifying content will be used in presenting fixed form survey data, and the fixed form survey data will be statistically analyzed in a manner that does not consider individual responses.

How will data be stored and kept secure (specify data storage plans for both paper and electronic files. For guidance see http://www.udel.edu/research/preparing/datastorage.html)

Safeguards for protection of data will be included such as only storing transcripts, data, and notes in a directory that is encrypted and on a computer drive & backup drive accessible to only the principle investigator.

Written notes, consent forms, and other records will be carefully filed in a locked filing cabinet assessable only to the principle investigator. Once no longer needed, files will be shredding or deleted unless the fall in the category of data required to be stored in accordance with IRB procedures.

How long will data be stored?

Data will be stored for a minimum of three years. Data retained beyond this point will adhere to the same safeguards outlined in this proposal and be utilized only for research.
and educational purposes.

Will data be destroyed? □ YES  X NO (if yes, please specify how the data will be destroyed)

Will the data be shared with anyone outside of the research team? □ YES  X NO (if yes, please list the person(s), organization(s) and/or institution(s) and specify plans for secure data transfer)

How will data be analyzed and reported?

It will be analyzed and reported in accordance with my approved dissertation proposal. The final report will be my PhD dissertation. It may also include reporting of sub-elements in shorter peer review publications in the future.

11. CONFIDENTIALITY

Will participants be audiotaped, photographed or videotaped during this study?

Yes.

How will subject identity be protected?

All digital recordings will be kept only on a computer and/or back-up drive accessible to the primary investigator. If any quotes are used, name pseudonyms will be used in all written text with care to ensure it does not identify a specific individual.

Is there a Certificate of Confidentiality in place for this project? (If so, please provide a copy).

Confidentiality will be included as part of the informed consent form.

12. CONFLICT OF INTEREST
(For information on disclosure reporting see: http://www.udel.edu/research/preparing/conflict.html)

Do you have a current conflict of interest disclosure form on file through UD Web forms?

No.

Does this project involve a potential conflict of interest*?

No.
If yes, please describe the nature of the interest:

13. **CONSENT and ASSENT**

   ___ Consent forms will be used and are attached for review (see Consent Template under Forms and Templates in IRBNet)

   ____ Additionally, child assent forms will be used and are attached.

   ____ Waiver of Documentation of Consent (attach a consent script/information sheet with the signature block removed).

   ____ Waiver of Consent (Justify request for waiver)

14. **Other IRB Approval**

   Has this protocol been submitted to any other IRBs?

   No.

   If so, please list along with protocol title, number, and expiration date.

15. **Supporting Documentation**

   Please list all additional documents uploaded to IRBNet in support of this application.

   Semi-Structured Survey Instrument

   Informed Consent Form for Semi-Structured Survey

   Fixed Form Survey Instrument (Question #1 is the Informed Consent Form)

   Human Subjects Curriculum Completion Report (For David Carter)

   Rev. 10/2012