CITIZEN RESPONSE TO NATURAL RESOURSE DISPUTES: THE CASE OF THE ARBUCKLE SIMPSON AQUIFER IN SOUTH CENTRAL OKLAHOMA

BY

CHARLES C. PEADEN

Bachelor of Arts in Political Science Oklahoma State University Stillwater, Oklahoma 1994

Master of Arts in Political Science Oklahoma State University Stillwater, Oklahoma 1997

Submitted to the Faculty of the Graduate College of the Oklahoma State University In Partial fulfillment of the requirements for the Degree of DOCTOR OF PHILOSOPHY December, 2006

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Dissertation Approved:

Dr. Tom Shriver
Dissertation Adviser
Dr. Jim Lawler
Dr. Gary Webb
Dr. Ed Arquitt
Dr. A. Gordon Emslie
Dean of the Graduate College

AKNOWLEDGEMENTS

I wish to express my sincere appreciation to my major adviser, Dr. Tom Shriver for his supervision, guidance and inspiration. My appreciation is also extended to my other committee members Dr. Gary Webb, Dr. James Lawler, and Dr. Ed Arquitt for their support and valuable input. I could not have completed this project without the assistance from my committee.

I would also give special appreciation to my wife, Lisa, for her understanding and constant support throughout this long and difficult process. I would like to recognize her as the inspiration for the subject of my dissertation project.

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Community Responses to Natural Resource Disputes: The Case of the Arbuckle-Simpson Aquifer in South Central Oklahoma

Chapter One

The Research Issues

This study examines community responses to a water usage dispute involving the Arbuckle-Simpson Aquifer (ASA), which is the primary water source for approximately four counties in south central Oklahoma. The controversy centers around the right of certain landowners to sell the water on the open market versus the need to protect the future water supply for the larger community. The landowners claim individual property rights as justification for the sale of the water. On the other hand, the larger community disputes this claim, centering their arguments on the future viability of the water for municipal use, the health of the ecosystem, and the continued flow from the aquifer, which supports various recreational activities.

This research will address the nature of community impacts associated with this natural resource dispute. Specifically, I will address the issues around which community residents were divided. In addition, I will examine how the

respective sides of the debate mobilized recourses, garnered political support, and articulated their positions to the broader public.

The ASA is primarily ground water, with relatively small amounts of the ASA emerging from underground as surface water. As a result, the ASA is dependent on surface recharging of the aquifer to maintain acceptable levels for both human use and maintaining the health of the various steams and waterways. It is estimated that the ASA must have at least four to five inches of recharge through rain fall each season to maintain its current levels, or approximately 90 acre-feet of water per year.

The aquifer supplies municipal water for the cities of Ada, Tishimingo, Sulpher, Durant, Davis, Atoka, and various smaller municipalities in the area. The ASA supplies the water needs for approximately 39,000 residents in Oklahoma (OWRB 2004, USGS 2003). According to the United States Geologic Service (USGS) and the Oklahoma Water resources Board (OWRB), the aquifer is considered to be what is termed a "sole source" aquifer. Hence the aquifer is the only source of water that supports the various streams, rivers, and to some degree, lakes in an approximately 500 square mile area (USGS 2003, OWRB 2004).

The water from the ASA is considered "pure" in the sense that it requires very little chemical treatment to meet various health standards (OWRB 2003). As a result, municipalities benefit from the fact that there are virtually no treatment costs for the water. The quality of the water from the ASA has become

a central force in the dispute regarding to municipalities wishing to secure part of the resource for municipal use.

In 2002, the ASA became the subject of a controversial effort to sell the water resource to cities and towns in northern Texas. During this same period of time there were discussions regarding the sale of water to Yukon, Mustang and Chickasaw, Oklahoma. In 2002, the Central Oklahoma Water Resource Authority (COWA) forged an agreement with PESA LLC, a development firm specializing in pipeline construction, to build a pipeline from the aquifer to Canadian County Oklahoma. The pipeline would run approximately 88 miles and cost an estimated two hundred million dollars (See Pippen May 22, 2002).

COWA's interest in purchasing water from the ASA stems from the fact that their current water resource, the Gerber-Wellington Aquifer, has high concentrations of arsenic which exceeds the Environmental Protection Agency (EPA) standards set to take effect in 2006 (Pippen May 21, 2002). PESA LLC claims to have made agreements with five area ranchers for the sale of water to Canadian County (Pippen May 21, 2002). According to OWRB, sixty-one landowners are legally permitted to sell the water from the ASA that is located below their land (OWRB, 2004).

Concerned citizens have organized against the proposed sale of water from the ASA. They fear that if the landowners are allowed to sell the water from the ASA the valuable local resource will be eventually depleted to the point of irrevocable harm. The amount of water that COWA proposes to take from the ASA is considered alarming to residents of the area. According to press reports,

the Canadian County group wants to pipe up to seventy thousand acre-feet of water from the ASA, or approximately twenty three billion gallons of water a year (Pippin, May 23, 2002; OWRB 2004; USGS, 2004). A member of the Ada Water Resources Board recently stated in the Ada Evening News "...the issue of concern is not whether landowners should be able to sell their water. They can. The issue is how much water can be pumped from the aquifer each year without affecting the springs and streams adversely and how much is the proportional share of each water rights owner" (See Pippen May 23, 2002).

A group of concerned citizens "Citizens for the Protection of the Arbuckle Simpson Aquifer" (CPASA) have organized to protect and preserve the ASA. The group was formed almost immediately after the news broke that the landowners were attempting to negotiate a water deal with COWA. The group's primary concern is the protection of the water source and the sustainability of the resource for the future. The group promotes itself as a "grass roots organization made up of farmers, business people, small land owners, and everyday citizens fighting to protect the only sole-source aquifer in the state" (public flyer from CPASA). Most of the organization's membership comes from residents of Ada and Tishimingo, Oklahoma. CPASA flyer information includes a hand written quote attributed to Benjamin Franklin in 1874, "You know the value of water when the well is dry." The group lists fifteen official board members and has a membership base of approximately three hundred.

While CPASA and community members are concerned with preserving the ASA, landowners and COWA are pushing forward with plans to sell the

water. The landowners center their arguments on property rights. The possible sale of the ASA has caused heated controversy between concerned citizens and landowners in the area. This study will contribute to the understanding of natural resource disputes, and will help provide insight into the ASA controversy. The dispute involving the Arbuckle Simpson Aquifer will be examined through the lens of social movement theory.

In Chapter Two I review literature that will guide my research on natural resource disputes. My primary focus will be on the various impacts that might beset a community during a dispute over a natural resource such as water. The impacts could include what is referred to by a rich tradition of literature regarding natural disasters as "therapeutic" in nature, where the community unites over a common cause and gain new identities and perspectives as a community. Other recent literature associated with chronic technological disasters suggests another outcome; the impact to the community may be "corrosive," where the community can become divided and contentious during the process of resolving an environmental disaster in their communities. I will draw from this literature to analyze a natural resource dispute rather than one regarding a natural or technological disaster.

In order to examine the community Impacts associated with this natural resource dispute I will integrate the theoretical literature from social movement theory, including framing, political opportunity structures and resource mobilization. In Chapter Three I will discuss the relevant methodology employed in this study. In Chapter Four I analyze the findings from the data. In Chapter

Five I discuss the relevance of my research and highlight the theoretical and applied implications of this study for natural resource disputes.

Chapter two

Review of the literature

I begin my literature review by outlining relevant natural and technological disasters literature, emphasizing the notions of therapeutic and corrosive impacts on communities. I will then discuss the relevant social movement literature regarding framing, political opportunity structures and resource mobilization. I conclude with a discussion of how I will integrate the literature on the ecological symbolic perspective with social movement theory to study the controversy of the Arbuckle-Simpson Aquifer.

Therapeutic Versus Corrosive Impacts in Environmental Cases

Communities that confront environmental disputes respond in different ways. For example, natural disasters are thought to bring community members together. Thus, analysts refer to the "therapeutic" effects of natural disasters (Quarantelli and Dynes, 1977; Barton, 1969; Kreps, 1984; Fritz, 1961; Webb, 2006). On the other hand, technological disasters are thought to cause community disruption and conflict. Analysts refer to these cases as "corrosive" community impacts (Freudenburg and Jones, 1991).

Thus, the literature suggests that the "nature" of the environmental dispute determines the likely effects on the community. Through my analysis, I will attempt to account for the type of dispute that the ASA falls under, and align the dispute with the relevant implications for the literature regarding therapeutic verses corrosive impacts. The ASA case is unique in that it does not fit neatly into a "natural" or "technical" distinction commonly found in the literature. Kroll-Smith, Couch and Levine (2002) suggest that it is possible to expand the literature regarding corrosive and therapeutic impacts to areas beyond technological or natural disasters. According to these analysts "the distinction between natural and technological agents may unfruitfully divert attention away from a detailed examination of the variables which affect processes and outcomes in any disaster." (Kroll-Smith, Couch and Levine 2002: 295). Following Kroll- Smith, Couch and Levine (2002) I argue that the case of the ASA can be examined through the theoretical perspectives that were previously used to study many natural and technological disasters. I examine the extent to which the ASA case reflects "therapeutic" versus "corrosive" elements, as indicated in the literature. Below I outline the literature on "corrosive community impacts." Next I outline relevant literature on "therapeutic community impacts."

Corrosive Impacts on Communities

As discussed, the notion of corrosive impacts on communities is usually assigned to technical disasters involving chemical spills, toxic releases and the proposed siting of hazardous materials facilities. As Freudenburg and Jones (1991) assert, "while the evidence that has been accumulated to date is only suggestive, it implies that technological disasters create physical ambiguities and social animosities that may create socio-cultural stress, perhaps in part because the consequences also threaten accepted social patterns and accepted social meanings." (p. 1158). Additionally, reflecting on the reactions to such crises, researchers have reported a convergence toward a community response pattern that William R. Freudenburg and Timothy R. Jones (1991) have labeled "the corrosive community" and that Kai Erikson (1994) has attributed to "a new According to Freudenburg (1997) "In communities species of trouble." confronted with this 'new trouble,' the 'ties that bind' neighbors, families, and friends become unglued, setting in motion a patter of intra-community conflict" (Cited in Gunter, Aronoff and Joel 1999: 623).

According to Edelstein (1980), toxic exposure is inherently stressful and arouses anticipatory stress, causing five lifescape changes: (1) a reassessment of the assumption of good heath, (2) a shift to pessimistic expectations about the future, (3) a changed perspective of the environment, (4) an inversion of the sense of meaning of home, and (5) a loss of sense of trust and good will accorded to others, especially to the government, with resulting stigmatized

relationships with family, and others" (cited in Goodman, Vaughan and Gill 1992: 120). Couch and Kroll-Smith (1994) argue that the pattern can be distinguished by the particular dispute that a community faces. Potential hazards such as "locally unwanted land uses, particularly proposals for siting municipal landfills, hazardous waste incinerators or other waste-deposit or storage faculties, are likely to become occasions for the formation of unified public opinion and collective action" (p26).

The "corrosive community" described by Freudenburg and Jones (1991) suggest that the sources of conflict come from competing efforts to define the problem and attribute responsibility for the hazard. Similarly, Albrecht et al (1996) argue that corrosive impacts on communities are caused by divisiveness over who is to blame for the problem, the definition of the problem, and how to go about confronting and solving the problem. Thus, "rather than developing a stronger sense of consensus, interdependence, and the need for mutual support, a dissensus actually emerges that can result in higher levels of local stress and strain that will remain long after the immediate crisis has passed" (Albrecht et al 1996: 669). Couch and Kroll-Smith (1994) point out that the complex nature of certain disputes will create multiple chances for contention. These scholars suggest that the complexity of the environmental problem the community faces can create several opportunities for dissention to arise. Additionally, Kroll-Smith and Couch (1991) note that "the type of conflict that typically emerges when competing interpretations of warning and threat cues become institutionalized in concrete groups is likely to place the basic consensus of a community in

question. One group interprets the warning and threat messages as signals of impending disaster. Another group interprets the messages as remote risks, a potential problem but certainly nothing to warrant the relocation of the settlement. One group charges another with pursuing goals inimical to its members' health and welfare. In turn, the accused group blames its accuser of seeking to destroy its member's traditional way of life by working for relocation. This process of reciprocal blame attribution is critical in anticipating the escalating conflict that may become more debilitating than the hazard agent itself." (Kroll-Smith and Couch 1991: 311-312). The facts presented to the community regarding harm or long term impacts of the disaster, even when understood by the community, may not create a united community. Kroll-Smith and Couch (1993) suggest that unless the facts are presented to the community in a way that an ordinary citizen can comprehend, then the effort to calm the community will most likely fail. There are times that when the facts are presented clearly, the effected community will still respond in a negative way.

There are questions of related impacts regarding the community's continued use of the resource threatened by the disaster. A contentious community response to these disasters has the possibility of creating a "spillover" effect into other political and social aspect of the community. Couch and Kroll-Smith (1994) referred to "secondary impacts" as those specifically dealing with communities that are reliant on natural resources for their livelihood and way of life. These "secondary disasters" tend to occur when the "groups' cultural resources, such as traditional reciprocal exchanges, communal control of natural resources, and

subsistence practices, are threatened. When such basic components of life are disrupted, communities may experience 'cultural chaos' where the rules of normal behavior, or even informal rules for adapting to problems, do not apply" (Gramling and Krogman 1997: 50). With regards to these "secondary disasters," my analysis is especially guided by the issues regarding communal control of the water threatened and subsistence practices. The effects of a community dealing with an environmental crisis may create problems in most aspects of civic and community life. The problems created by the environmental dispute could have lasting negative effect on the community in seemingly unrelated ways including community cohesion, effectiveness in confronting subsequent problems, and quality of life issues (Albrecht et al. 1996; Luloff 1990).

Toxic disasters may also produce a dissensus so fundamental that interneighborhood conflict undercuts a long-standing sense of community. This is precisely the situation described by Couch and Kroll-Smith (1985) (also see Kroll-Smith and Garula 1985; Kroll-Smith and Couch 1984) in their study of Centralia, Pennsylvania. They profile a 'community' (in the sense of municipality) in which the community lacked consensus and the development of groups to confront the problem. The result left a community without a mechanism to develop the means to gain a "therapeutic" effect and the community experienced an increased level of stress as a result. Additionally, the process of assigning blame might deteriorate into a corrosive impact on the community; factors can contribute to the prevention of the corrosive environment from forming. Understanding this process of reciprocal blame attribution is critical in anticipating the escalating

conflict that may, as in the case of Centralia, Pennsylvania, become more debilitating than the hazard agent itself (Kroll-Smith and Couch 1990a). Freudenburg and Jones (1991) argue convincingly for the corrosive effects of these events on communities.

Other factors that seem to contribute to the emergence of conflict and corrosive impacts to communities are the presence of uncertainty and ambiguity concerning the impacts of a hazard. Aronoff and Gunter (1994) argue that scientists inability to provide "clear-cut answer to risk-related questions and the tremendous burden placed on community residents who must endure years of uncertainty in the face of contradictory evidence on the health and environmental risks posed by contaminants are additional reasons why resolutions of these problems should not be left solely in the hands of the 'experts'" (Aronoff and Gunter 1994: 243). This is relevant to my analysis since ASA is currently the subject of a field study regarding the recharge rate of the ASA to determine the amount of water that can be taken from the ASA without harming the resource. The study is being conducted by the OWRB, and its results are yet to be determined, which could lead to contention in the community based on the unknown results of the study, and the ambiguity it brings. As Gramling and Freudenburg (1992) note "even before any physical disturbances take place, a community can experience what we call opportunity-threat impacts. impacts result, to a large extend, from the efforts of interested parties to identify, define, and to respond to the ongoing and the anticipated implications of the development, where as opportunities (to those who see the changes as positive) and/or as threats (to those who feel otherwise). Impacts occur not just when social groups are faced with threats over which they have little effective control, but also when there are conflicts over the extent to which a proposed development represents threats and /or opportunities" (p. 219).

Scholars have argued that the variation of a single type of disaster may create contention for the effected community. Freudenburg and Jones (1991) demonstrate that "technological accidents can vary tremendously – ranging from the sudden and spectacular (e.g., the 1972 flood at Buffalo Creek, West Virginia) to the slow and insidious (the gradual leaching of toxic chemicals at Love Canal). (Freudenburg and Jones 1991: 1157). The dispute over the ASA seems to fit the description of a slow disaster in the making, with the water being not being catastrophically depleted, rather the depletion is slow, without much notice from the general public. In the next section, I outline the literature examining the potential therapeutic elements of environmental disasters.

Therapeutic Impacts on Communities

Some analysts point out that the simple designation of "corrosive" impacts is far too simplistic. For example, natural disasters have most often been associated with what are termed "therapeutic" impacts on communities (Quarantelli and Dynes, 1977; Barton, 1969; Kreps, 1984; Fritz, 1961; Webb, 2006). From this perspective, the community confronting the environmental disaster develops a greater sense of unity and cohesiveness. An important

distinction centers on whether the threat is technologically-based or natural.

Aside from natural disasters, other analysts argue that siting cases tend to bring about some degree of community solidarity. Scholars have noted that "...findings lend support to the thesis that the creation of community solidarity through grassroots mobilization is more likely to be successful in cases of siting disputes than in cases of actual environmental contamination" (Couch and Kroll-Smith 1994; Kroll-Smith, Steve, Stephen R. Couch and Brent K. Marshall 1997: 13). In addition, work by Aronoff and Gunter (1992) suggests that in cases where communities are able to gain political influence and resources to confront the problem, the community is more likely to experience a "therapeutic" impact" and controversy is less likely to overtake the community. The perception that effected community members have of the threat or hazard might also determine to an extent the attitudes and responses that are developed in response. This is also relevant to perceived responses to disasters yet to happen, as with the case of the ASA. The community may regard the dispute as an "opportunity for action," or as a "threat to community, culture or prosperity."

The amount and duration of the efforts of a community seeking a resolution to issues regarding certain technological disasters might also lead to "therapeutic impacts." Aronoff and Gunter (1992a, 1992b) point out that when residents respond to an environmental crisis early and build and maintain a response to the crisis, the communities will more likely experience "therapeutic impacts." Additionally, Aronoff and Gunter (1994) examined communities that were able to marshal out side resources and maintain a consistent front in dealing with the

problem. In their study of Gratiot County, Aronoff and Gunter (1994) argued this community's "involvement in the toxic crisis began quite early and was maintained consistently for more than six years until agreements to contain area contamination were reached. Definitions of the problem reflected a range of experience of harm encountered by different segments of the population, thereby reducing the potential for factional conflict. Local government officials acted on behalf of area residents broadly defined in the context of a commitment to local economic recovery." (Aronoff and Gunter 1994: 238).

Other scholars suggest a need for consensual community responses to emerge when the effected community, having achieved consensus, understands that there is agreement among official decision makers as well. In their study of industrial pollution and toxicant hazards, Zavestoski et al (2002) suggests that "citizens are not likely to accept the decisions of an agency as long as there is disagreement and contention among the agencies and politicians involved. Therefore, consensus among the authorities is required as well." (p. 387). Zavestoski et al (2002) also suggest that government agencies should keep the public informed as to the steps being taken to remedy the problem and involve the community members in the decisions that the government ultimately make. Further, the creation of a consensual response to an environmental hazard is the result of "multiple actors and entities working together to construct a symbolic account of the risk that either upholds or restores the community's patterns of everyday life" (Zavestoski et al.,2002:398).

The geographic place must also be understood as an important factor to movements and cohesive responses to hazards the effect the actual "place". As Albrecht et al (1996) proposes, "The community is more a process of place-oriented social interactions that are reflective of shared interests among participants. From this perspective, a community that becomes united over such controversial issues as radioactive waste facilities may be a community comprised of individuals with a shared perspective or purpose, rather than, more simply, a shared place of residence" (p. 670). But the "on-the-ground" community where people live remains important. The sense of community, social ties and cultural attitudes may change over time. The existence of an environmental hazard that remains in the physical community requires continued monitoring for the emergence of controversy and conflict (Albrecht et al. 1996).

Other scholars suggest that community cohesion may be met without a specific place. Cohesion may be formed when the community is isolated and share a common perspective that they are cut off from other allies in the dispute. In the case of toxic exposures, Edelstein (1988) argues that victims may develop an identity that can transcend other political, social or geographical associations or boundaries. They develop a 'sense of community,' which implies feelings of similarity, interdependence maintained by mutual support, and the sense that they are "part of a structure that is larger and more stable than the individual can ever have in isolation." (Edelstein 1988: 139).

While much of the work on natural resource disputes focuses on policy implications at the institutional level, I examine the importance of community

organizing in response to environmental disputes. Drawing from social movement theory, I attempt to bridge the analytical gap between natural resource disputes and community activism by linking framing, political opportunity structures and the resources available to the community to the actual choices made by citizens when reacting to a natural resource dispute (Capek, 1995; Cable and Shriver, 1995, Cable and Cable, 1995). In the following section, I will outline the key perspectives that will guide my research.

Framing and Natural Resource Disputes

Framing has been utilized extensively in the study of social movements in recent years regarding the use of media to propel a group's activities, the use of frames to mobilize group members to action, the role of structures in the success of movements, and the role of contextual setting in competing frames (Gamson, 1993; Entman, 1993; McAdam, 1996; Snow, et al, 1986; Snow and Benford, 1988; McCarthy, 1996; Zald, 1996, McCarthy, Smith and Zald, 1996; McAdam, McCarthy and Zald, 1996; Benford, 1997; Pellow, 1999). Framing was first introduced to sociological literature by Erving Goffman (1974), who defined framing as a way to understand the "schemata of interpretation" that help citizens to "locate, perceive, identify, and label" (p.21) events and happenings that occur to them personally, or that effect the external world. Analysts offer a variety of interpretations of framing in social movement literature. Snow, et al (1986) introduced framing to social movements through their work in analyzing various

movements through the perspective of "frame alignment" (p. 211). McAdam (1982), McCarthy and Zald (1999), and Snow (1992) define framing as the "conscious strategic efforts by groups of people to fashion shared understandings of the world and of themselves that legitimate and motivate collective action" (Snow and Benford p.6). A frame also concerns "an interpretive schemata that simplifies and condenses the 'world out there' by selectively punctuating and encoding objects, situations, events experiences, and sequences of actions within one's present or past environment" (Snow and Benford 1992, p. 137).

Framing is critical for understanding how communities mobilize around perceived environmental injustices. According to Snow and Benford (1992) the first the task is to identify the source of the perceived problem by the effected community or group. Next, the aggrieved group can attach blame to the perceived wrong doer. For example, an impacted community is motivated by the shared experience of the injustice, and then the community acts on the perceived injustice in some way to alleviate the problem. Thus, the injustice is identified and dealt with by the effected community. Similarly, Snow and Benford (1988) argue that after the community has identified the problem and assigned blame to the agent that is affecting the community, then the community assesses the course of action to take. This stage has also been referred to as "consensus mobilization" by Klandermans (1984) and as "agency" by Gamson (1992).

Some analysts have identified an additional stage. For example, Gamson (1992) and Gamson et al., (1997) identify a third stage, which they refer to an

"identity component" (p.7). In this context, the community begins to refer to themselves as "us" or "we" as opposed to "they". In other words, there is a clear demarcation of the responsible party. In short, the community reaches a higher level of collectivization in response to a perceived threat.

Framing can be also considered as a place where action is formed, or where the expression of a grievance by the community is transformed into action. Pellow (1999) argues framing not only involves the "construction of grievances through words, but it also, can include collective action events and the implementation of strategies and tactics" (p.663) (See also McAdam, 1996). The framing process can be understood, then, as an "activity" as well as a "construct." The creation of meaning is central to the frames making process. Meaning, according to Benford (1997) "...is pivotal" (p.410) to the understanding of framing processes. Meaning is the well spring from which,"...grievance construction and interpretation, attributions of blame/causality, movement participation, the mobilization of popular support for movement cause, resource acquisition, strategic interaction, and the selection of movement tactics and targets" (p.411).

According to Benford (1997), it is important to consider the changing nature of the frames-making process as a whole. Meaning, according to Benford (1997) "...is negotiated, contested, modified, articulated, and re-articulated" (p. 410). The frames-making process emerges through the life of the movement. A particular frame may indeed be very different at the conclusion of the movement than it was at its beginning.

Communities develop frames, meanings and grievances through a perspective that may be unique to the community at issue. This may become especially important to my research due to the Native American context of "meaning" in regards to their community, and the use of the resource by the Chickasaw Nation as a way to secure economic again. The Chickasaw Nation owns a significant amount of land above the ASA and continues to purchase land in order to hedge their position in the event that ground water ownership does not change, and therefore the tribe will have secured an important economic resource. Issues regarding tribal sovereignty and their claim to the water may emerge as a competing frame over their community's legitimate right to a portion of the resource.

In recent years, analysts have adopted framing in their analysis of environmental cases. For example, it has been noted that the environmental justice movement engages in a claims making activity geared toward the identifying the source of their environmental problems, as well as solutions to their problems (Capek, 1993). Environmental justice claims in Warren County, North Carolina present a good illustration of framing around environmental issues. McGurty (2000) examined an environmental dispute involving the impact of a waste facility and identified four basic requirements for the emergence of a social movement in the context of these environmental justice claims. McGurty (2000) found that there were certain cultural elements of the case that helped to foster collective action; including: social networks, where organizations are loosely formed and flexible; disruptive action, where potential participants

understand the focus of the action; and political opportunities, where political institutions and allies are made available to the movement's participants (see p. 3). Capek (1993) stressed the understanding of the internal workings of an environmental justice movement, such as the personalities involved, and the leadership style of movement leaders. In other words, it is important to understand the intersection of non-material resources of social movements with the creation and maintenance of a tangible organization and how this interplay between the two influence the social movement's activities. Others analysts have also demonstrated the need to take into account factors contributing to the eventual development of claims and the transformation of these frames into action when determining the nature of a social movement (Ferree and Miller, 1985; Gamson 1988).

Drawing from framing literature, Capek (1992, 1993) sought to demonstrate such a distinction between the concept of "environmental justice" and "environmental injustice." Cable and Shriver (1995) build upon Capek's work by noting that the internal structures of the community "effect the production of meaning through the articulation of grievances. This stage affects the extrapolation of meaning, in which grievances are transformed into a proactive engagement of the community by demanding justice" (p. 412). While environmental justice issues are not at the core of the dispute over the ASA, this literature helps guide this research by determining the perception of wrongdoing by a community.

A particularly useful concept within the framing literature involves "frames disputes, which highlights internal movement conflict (Goffman 1974; Benford 1993; Haines 1996; Ryan 1991; and Hunt et al. 1994). Social movement analysts note a wide variety of framing disputes, including the "representation" of the problem threatening the community, the representation of the problem by the movement to the larger public, and tactical decisions regarding the use of the local or state wide media. In addition, there is often dissension over communicating to those citizens not directly affected by or involved in the dispute.

While the literature is replete with examples of internal cleavages, the notion of framing disputes is also relevant for competing community groups. The concept of frame disputes is especially relevant to my research since there are multiple factions engaged in claims making activities have emerged among various stakeholder disputes groups, including Tribal members, land owners who currently have water rights, land owners that may be adversely effected by water management proposals, municipal water use, environmental and ecosystem health claims and consumer claims to the water. In the next section I provide a brief overview of resource mobilization and political opportunity theory.

Resource Mobilization and Political Opportunity Theory

While the framing perspective shapes the central thrust of this project, two additional social movement traditions also help inform this research. Once a

community develops the frame of a threatened natural resource, how does this framing process effect the subsequent selection of goals, strategies, and tactics that are chosen from an array of options by the effected community? Specifically, what factors affect the perception of political opportunities available to the community? Finally, does the framing process inhibit the identification or perceived usefulness of political opportunities and does the process inhibit those choices? Resource mobilization theory focuses on organization, the use of available tactics and strategies, and the importance of material resources to the movement's success. Political opportunity theory considers the broader political environment in which social movements must operate.

McCarthy and Zald (1977) analyzed the importance a social movement's ability to organize and use resources to gain political power, the calculations of the group in terms of overall goals, and the recruitment of new members to maintain the group's strength in numbers. These analysts emphasized the "interaction between resource availability, the preexisting organization of preference structures, and the entrepreneurial attempts to meet preference demand" (p. 166). In other words, these analysts examine a social movements' ability to take advantage of the resources available to them and the movement's success in capitalizing on those resources. A social movement's ability to address these citizen needs will in large part determine to failure or success of the movement.

I attempt to link the framing process with other theoretical processes, such as the relevant political opportunities available to an aggrieved population.

Political opportunity structure is a concept that attempts to describe the conditions in a given setting that will provide a political avenue for the effected group to pursue an action in one form or another (Tarrow, 1988). The strength of the community in relation to the group's ability to operate successfully given the constraints of the prevailing political climate is a central issue to consider when evaluating the success of a social movement. It is important to understand the external political environment because this context will determine to a significant extent, the "structures and strategies as well as their prospects for influencing policy" (Smith, 1995: 544). The prevailing political environment must at least provide few barriers to the emergence of a social movement. If the prevailing political environment is conducive to the emergence of a movement, and the movement recognizes this condition, it is possible for the social movement to take proactive and aggressive steps to pursue their cause or claim (Tilly, 1978;1984).

Tilly (1978) noted that in an environment where less-powerful groups having limited choices such as the ability to access mass media and pursue recruitment efforts, and these limitations would act to constrain the social movement. This limited environment of choices would therefore determine the success of the movement. This has the potential of influencing the movement when the conflict that is at issue effects primarily groups that is predominantly poor, under-educated an overwhelmingly minority status. Later attempts sought to describe the success of a community when taking steps to raise collective awareness to a problem affecting the community and responding with a new,

useful empowerment. McAdam (1982) contributed to the political opportunity literature with the notion of cognitive liberation, which is a process by which the effected community begins to transform itself from a collective mindset of helplessness to one that perceives the situation as one that demands action and response by the effected community. Some time later, the factors of awareness, resources, political environment began combining for a larger understanding of social movements from a political opportunity perspective (McAdam, 1982). Doug McAdam (1997) identified a number of factors that may determine the success of the movement. First, McAdam notes the importance of political opportunities that will allow the movement meaningful access to government. He notes that the organizational strength of the movement in terms of leadership and communication needs to be effective. He also agrees that there must be the emergence of a shared cognition within the community, where the community understands the basic grievance of the movement must be established. Finally, the movement should be able to shift control responses of emerging groups involved with the larger movement.

McAdam's (1997) concept of political "opportunity structure" clearly links various elements of social movement theory, including cognitive liberation, resources, and the importance of political opportunity. Other notable social movement scholars have emphasized the importance of synthesizing various social movement theories. For example, Tarrow (1994) and Morris (2000) both note that political opportunity structures are related to the external environment of the community. These analysts note that depending on circumstances, it is

possible that the effected group can draw from the external environment by taking advantage of the current power structure. For example, Morris (2000) points out that groups must be able to take advantage of being "...beneficiaries of new external political opportunities that they must exploit" (p.446). Morris (2000) argues for the importance of "cultural agency" which includes factors such as story telling, rituals, and other means of sustaining a movement that are unique to the community. In short, those activities that bring about what is termed "cultural agency" should also be included in an examination of movements (p. 447; Also see Clarke, 1991 and Gale, 1986).

Synthesizing Social Movement Traditions and Natural Resource
Disputes

The recent trend in social movement studies is to synthesize framing with other theoretical traditions, including resource mobilization and political opportunity structures. In this section I highlight some overlapping themes in the social movement literature and I tie these perspectives to natural resource disputes and the case study of the Arbuckle-Simpson Aquifer.

McAdam, McCarthy and Zald (1996) provide direction for the integration of framing with resource mobilization and political opportunity structures. These analysts suggest a need to examine factors such as political opportunities, informal and formal forms of organization, and especially the "collective processes of interpretation, attribution, and social construction that mediate

between opportunity and action" (McAdam, McCarthy and Zald, 1996: 2). They also suggest the need to more fully understand the process of political choices and structures that lead to the identification and the use of resources. understanding of what the dispute means to the effected social movement organization is needed, because this could in turn determine strategies, tactics, group cohesion and the recruitment of new members. Lacking a shared meaning or grievance clearly identified in the community, political opportunities and structures remain "...potential (causes) for action...and are "insufficient to account for collective action" (McAdam, McCarthy and Zald, 1996: 5), and that the social movement will probably not fully develop. Tarrow (1994) pointed out that resources do not guarantee the success of the movement, and it is important that there is a congruence of the frame with the resources available or perceived available by the effected community come about (Moaddel, 1992). In his study of the Italian populist movement, Diani (1996) suggests that the effectiveness of resources and other tangible aspects of movements are enhanced by the extent to which frames are aligned with the "master frame," or the over-arching general themes that connect events and provides what Snow and Benford (1992) referred to as a "pattern or happenings in the world" (p. 460) and how this activity characterizes the opportunity at any given time.

Einwohner (1999) examined protest movements in the context of animal rights disputes and the possibility that the social environment may determine the availability and the effective use of political opportunity structures. She argues that the "frame" that is developed must "resonate through out the community to

be effective" (p.171). Further, the culture of a group must be able be accounted for beyond the national environment by considering local factors as well. This will be an important factor when determining the various perspectives of the community in terms of the environmental impact of the over use of the ASA and the particular local needs of the ASA in a general sense, as they relate to the community.

Valocchi (1996) links political opportunity to framing in his analysis of the civil rights movement. According to Valocchi, the external environment and the understanding of ideology are important to the emergent choices a group may make in regards to political opportunities. The presence of a dominant ideology or competing ideologies that are found in the effected community may shape the character of the social movement itself. Ideology is important to the activity of a social movement because "...since it is from ideology that frames emerge" (p. What may prove useful to this project is Valocchi's assertion that opportunities "had to be perceived, shaped, and seized by the activists within the community..." (Valocchi, 1996: 118). In other words, the frame that emerges from the community and shapes the social movement needs to be a product of the effected community. This frame then is used by the movement, providing means to communicate griebances and complaints. McAdam, McCarthy, and Zald (1988) and Valocchi (1996) focus on resources available to the group, the political environment that the group is embedded, and the external and internal dynamics of the group. Valocchi analyzed these factors and how they play a part in the tactical and strategic choices the group makes during the movement's emergence (see Valocchi, 1996: 119).

Stoecker (1995) used the case of East Toledo, Ohio to examine the effects of integrating collective identity perspectives and resource mobilization as a way to explain the relative success or failure of social movements. Stoecker asserts that the movement's success is hinged on the ability of competing or divergent communities within the environment of the social movement to converge into a coherent whole. The various frames emanating from individuals should be linked up to form a collective identity since "...the more convergence there is between individual identities at each level and between the collective identities across all levels, the stronger and more enduring the community, movement, and organization" (p114).

Most social movements will be influenced by their ability to gain access to important elites and political institutions. Rucht (1995) identifies four areas that influence movement strategy. First, access to the formal policy making process is critical in the successfully pressuring movement claims. In terms of the current study, the ability of Citizens for the Protection of the Arbuckle Simpson Aquifer to make contact with and form alliances with key members of the legislature and executive branches of Oklahoma government will be important to examine. Rucht (1995) discusses "movement alliance structures," where the movement is able to secure symbolic support through "public endorsements...and legitimate movement efforts in the eyes of key political elites, or otherwise draw wider attention to movement goals" (Rucht, 1995: 552). Rucht (1995) also highlights

the need for movements to secure tangible recourses such as a physical place from which to organize, financial contributions from sympathetic members of the larger community, and the success in recruiting volunteers and staff. In addition, Rucht (1995) suggests a movement is influential with regards to the political process and able to gain political support for their cause. From this perspective it will be important to determine CPASA's success in gathering support from the various political leaders in the legislative process, securing funding for the study of the aquifer and other tangible material benefits to the group. As it was noted earlier, CPASA was able to gain legislative support for SB 288 to halt the sale of water form the aquifer until a feasibility study was conducted. Third, Rucht suggests that the management of "movement conflict structures" will be important to utilizing opportunities for political activity by the group. This issue concerns the presence of competitors who seek to undermine the group's efforts or to suppress a social movement. Rucht focuses on the role of oppressive governments or violent counter movements, but in the context of the ASA dispute, this issue concerns the presence of an organized movement to sell the water, or sympathetic members of the state legislature or other political elites.

The social setting in which the movement takes place may also shape the movement and contribute to the relative success or failure of the movement. McCarthy (1995) demonstrates that when people share certain interests, concerns or identities, it is more likely that a social movement will emerge and succeed. In the case of the ASA dispute, the shared interest of municipal use, recreational use, and perhaps a bonding against the few landowners could

provide the basic foundation for a movement to emerge concerning the use of the resource. Further, these social ties could become important for the movement when the movement recruits individuals, other organizations, sympathetic media coverage, and the gathering of political resources for continuing the political struggle (Smith, 1998).

Natural Resource Disputes and Social movement perspectives: The Case of the Arbuckle-Simpson Aquifer

This project will examine community organizing around a critical natural resource dispute: the proposed sale of water from the ASA. In order to understand the dispute, I will examine the framing process and the goals and strategic choices that are being adopted by the citizens of south central Oklahoma over the ASA. Several important issues emerge from the framing literature that will help guide my research on the ASA dispute. An important question that I will examine centers around the social and political climate that emerged in the community during this dispute.

In this section I outline how framing perspectives will be augmented with mobilizing resources and political opportunity structures to examine the case of the Arbuckle-Simpson Aquifer. The dispute over the sell of water from the ASA has clearly caused cleavages in the community and has pitted a citizen's group against land owners and possibly municipalities that sell the water to utility customers. In order to examine this dispute I draw from framing literature to

better understand the emergence of competing community claims. I draw heavily from the ecological-symbolic perspective (Couch and Kroll-Smith, 1994; Kroll-Smith and Couch, 1991, 1993; Shriver and Kennedy, 2005). The ecological-symbolic perspective draws from framing literature and recognizes the importance of economical disruptions caused by environmental problems.

Drawing from ecological-symbolic perspective, Shriver and Kennedy (2005) examined community division in Pitcher, Oklahoma, which is an EPA Superfund site. These analysts note how competing claims within the community crystallized around the proposal to have the federal government buy out and relocate the entire community. Community residents were ultimately divided over health concerns, property rights, property values, and the dislocation of the community. According to Shriver and Kennedy (2005), "the ecological-symbolic perspective joins environmental sociology's assumption that biospheres and social structures are interdependent with a key assumption of symbolic interaction that people act on the basis of the meanings they attribute to events and conditions" (p. 498). "From this perspective, social responses to hazards and disasters are affected by both the nature of the disruption in human/environmental relations and the appraisals people make of those disruptions" (also cited: Kroll-Smith and Couch 1991; Picou et al. 1992) (Couch and Kroll-Smith 1994: 28).

Shriver and Kennedy's (2005) analysis highlight how a community living with a seemingly "objective" environmental condition comes to interpret issues in a contradictory way. These analysts considered the notion that a community

may be divided over the meaning of a disaster or the value of a natural resource. Shriver and Kennedy (2005) observed that "...competing factions within the community and how these groups are divided over the ambiguity of harm, conflicting economic concerns and a variation in attachment to community" (p.2).

Other scholars have considered the influence of symbolic-ecological influences on the presence of a contentious community environment regarding environmental disasters. An important part of their definition is that chronic technological disasters (CTDs) are characterized by "a disruption of ongoing patterns of social and cultural relations" (Freudenburg and Jones 1991: 566). In other words, CTDs tend to undermine the socially constructed symbolic reality that citizens rely upon to make sense of everyday life and to keep social life functioning smoothly. Kroll-Smith and Couch (1991) and Couch and Kroll-Smith (1997) acknowledge this in their ecological-symbolic perspective, which takes the view that community responses to contamination are a function of two interrelated factors: the nature of the ecological threat, and the symbolic meanings, "or socially constructed reality, through which the threat is interpreted." (Zavestoski et al. 2002: 390).

Drawing on framing literature and the ecological-symbolic perspective I will examine how meaning has been constructed on both sides of the ASA conflict. I will also explore the ways that competing groups mobilized resources to establish their respective positions regarding the water dispute. Finally, I will note the importance of political environment in shaping this natural resource dispute. An investigation of the community's ability to marshal resources through

the development of goals, tactics and strategies formulated to respond to the threat will be made. I will also evaluate the effectiveness of these tactics and strategies in reaching goals established by the community.

I will determine if the prevailing political environment provides a climate that is responsive to the needs and the demands of the community. I will explore aspects of the dispute regarding the availability of government and industry representatives to the community, considering the openness and accessibility of government agencies in communicating with the group. I will examine the community's perceptions of their relationship with political agencies and attempt to understand whether the community regards the process as fair, open and representative.

My analysis will be driven by several broad questions. For instance, what steps are taken by the group to rectify a positively identified resource issue? Why are certain steps by the community to deal with the problem chosen over others? To what extent are the group's efforts limited by political, economic and cultural factors that affect the framing process, and who takes the steps needed to protect the community? The following research questions guide my research during this project:

- 1. What was the nature of community impacts associated with this natural resource dispute? In other words, were the effects "corrosive" or "therapeutic?"
- 2. What are the salient issues that divided community residents and the interested groups over the sale of ASA water?

- 3. What factors sparked community residents to mobilize their efforts against the sale of the water?
- 4. Did perceptions of the community's effectiveness, whether positive or negative, influence the strategies or tactics employed buy the community in dealing with the problem?
- 5. How effective have the respective framing strategies been from the two camps (i.e., those supporting versus those against the sale of the water)?
- 6. How effectively have various factions within the community mobilized resources to promote their position on the controversy?
- 7. What role has the broader political environment played in this natural resource dispute?

Chapter Three

Data, Methods and Research Strategy

This section will describe the methods that will be used in this project. I am employing three data collection strategies: document analysis, in-depth interviews, and participant observation. This project will examine the communities of Ada, Tishomingo, Durant, and other communities in South Central Oklahoma, which are most effected by the dispute. The respondents were selected from each of these communities. Below I will outline each of these methods, as well as my approach to data analysis.

Document analysis

The data and methods for this examination involved the use of several secondary sources of information such as newspaper articles, pamphlets, and other community produced information. Document analysis is important to investigate because it provides additional evidence of public and private communication that will supplement observations and interview data (Strauss and Corbin, 1990; Glaser and Strauss, 1967; Emerson, 1983; Van Maanen, 1988). In addition, several inter-industry memos and newsletters from the OWRB were examined. Inter-agency memos and newsletters generated

between the Environmental Protection Agency (EPA), and the Oklahoma Department of Environmental Quality (ODEQ) were examined as evidence to support some conclusions drawn in this investigation. In addition, I examined documents such as newsletters and documents provided at public meetings from the community group CPASA, which organized against the sale of water. Finally, regional and state newspaper articles were examined to provide the broader context for this natural resource dispute.

Participant observation

I participated in community meetings related to the water resource controversy. My past and current involvement with the community through participation and informal discussions with members of CPASA allowed extensive entrée to the organization members. Comments and observations were systematically included through extensive note taking and journal entries (Strauss and Corbin, 1990; Guba and Lincoln, 1993; Glaser and Strauss, 1967). The notes were derived from several community meetings and conversations with community members. I systematically categorized field notes and observations to provide additional context for analyzing and interpreting the in depth interviews conducted with community residents. Public meetings, community-wide educational efforts, and the success of the academic community in working with the local community in dealing effectively with the environmental

issue affecting the community were some of the central themes I examine during my fieldwork (Lincoln and Guba, 1985; Stainback and Stainback, 1988).

Interview Data

In depth interviews were conducted with thirty (n=30) stakeholders involved the ASA dispute. The respondents included community members, community leaders, tribal leaders, and members of business, industry and the appropriate government agencies. Respondents were asked to discuss their perspectives regarding the ASA controversy. I engaged the community in order to elicit responses about their impressions of the proper use of the ASA, and what would be considered a fair and equitable solution to the dispute.

I drew heavily from members of the community activist group CPASA. I interviewed landowners who are attempting to sell the water. I contacted and interviewed agency personnel form OWRB, the Oklahoma Fish and Wildlife Agency, government personnel from the Environmental Protection Agency (EPA) were contacted for interviews. The individual interviews were approximately one to two hours in duration. An interview guide prompted community members and members of government agencies and industry (See Appendix).

There are general disadvantages with conducting field interviews. Recall and the problems with memory present issues of potential error. The availability of respondents that are currently active members of the community, and their willingness to take the time needed for such an effort, will be a question.

The generalizability of findings from a qualitative case study poses some limitations. Since this research is exploratory in nature, the findings are not intended to be generalized to broader problems. This research will inform others communities facing similar disputes over natural resources. Additionally, there are always problems associated with bias, both from the effects of my activities and expectations transmitted to the respondents and the behavior of the respondents changing due to being the object of the study.

Despite the potential limitations associated with qualitative interviewing, it has been well demonstrated that this type of data collection strategy has many advantages (Lincoln and Guba, 1985; Stainback and Stainback, 1992; Strauss and Corbin, 1990; Glaser and Strauss 1967). Interviews allow the researcher and the respondent to have a conversation about the issues and problems that confront the community. This allows a level of trust and confidence to be built between myself and the respondent that allows for rich and detailed discovery of the concerns of members of the community. I allowed for some flexibility in the interviews, which gave the respondent an opportunity to provide new insights to the problem.

Semi-structured, open-ended interviews allowed the respondent to communicate concerns and perceptions in their own words. I was able to take cues from the respondents and probe to further clarify information. There are also times that the respondents communicate in a non-verbal fashion. These non-verbal forms of communication provided additional insights (Strauss and

Corbin 1990; Bailey 1978). Additionally, the direct one-on-one interaction with the respondents allowed me to further develop relations of trust and confidence

The sample for this examination was community members of Ada, Tishomingo, Durant, Sulpher, Oklahoma and the surrounding areas. I made initial contacts with key community leaders and then used a snowball sampling technique to identify additional respondents. At the end of each interview I asked respondents to identify other interested persons in the area. The respondents were anonymous. This research was approved by the Institutional Review Board (# ASO481) at Oklahoma State University.

Data analysis

The interviews were transcribed and coded. I augmented the interview data with field notes taken during my participant observation. I also supplemented interview data with relevant materials collected from document analysis.

Once all of the interview data had been transcribed, I used a cut and paste method to code and categorize the data. After reading the interview materials carefully, I began to recognize and develop emergent themes from the data collected from respondents, documents and during observation. I explored a number of relevant themes, including community resident's perceptions of COWA, the efforts of CPASA, the community's feelings and attitudes regarding the landowners and the environmental impact of depleting the ASA. One general topic of concern was the respondent's attitudes and perceptions regarding the

landowners and various economic interests attempting to sell the water from the aquifer. I also examined the community's attitudes regarding the water as a community resource, as private property rights, and the effect on the long-term health of the community and surrounding eco-system.

Other themes I investigated concerned the community's attitudes regarding the perceived wrongdoing and betrayal the community experienced regarding the attempt to sell the water. I also examined issues that will shed light on the methods that the community chose to employ in response to the wrongdoing, betrayal and health implications of the proposed sale of the water. In other words, once the community had perceived the wrongdoing, what steps were taken and what resources were available to the community to assist in their organizing efforts?

I was able to probe respondents regarding their personal motivations for getting involved in this dispute. I examined whether respondents had a personal stake in the process, such as a family member directly impacted by the sale of the water. I also examined whether the respondents were motivated by the activities of an organized political group.

Summary of Research Methods

I utilized several data collection strategies, including document analysis, semi-structured open-ended interviews, and various artifacts available to me. This "triangulation" of data allowed me to develop a clear picture of the motivating factors associated with this natural resource dispute.

Chapter Four

Analysis

I begin my analysis by providing a broad overview of the ASA dispute. This includes a brief summary of the communities and counties that are most affected by the water dispute. I will then examine a variety of perspectives that emerged around the dispute regarding the proper use of the water resource. These perspectives include those who favor the sale of the water on the open market, and those who oppose the sale of the water. Various perspectives regarding the value of the resource emerged from the data, ranging from those that emphasize the preservation of important ecosystems to those that focused on the importance of preserving the resource from a recreational standpoint.

The Community Context

In order to gain a more comprehensive understanding of the area it is useful to provide a brief description of the cities and counties that are affected by this ASA controversy. The counties that are situated over the ASA are Johnston, Pontotoc, and Murray. The major population centers within these counties are Ada, Durant, Sulphur, and Tishomingo, Oklahoma. Each of these communities share common areas of concern with regards to the ASA, and these cities have

unique issues regarding the health of the aquifer that may affect their well-being and prosperity. The following data is from 2002.

Pontotoc County: Pontotoc County is situated in south central Oklahoma. The county is the home of the Chickasaw Nation, one of the largest and wealthiest Native American Tribes in the United States. The county has a blended economy. Much of the economic activity comes from a combination of oil and gas production and horse and cattle operations. The area's rich deposits of lime stone, sand, silica and clay have led to the development of a major concrete plant, Holcim, located in Ada, Oklahoma. Solo Cup is also located in Ada, Oklahoma, along with East Central University. The Kerr Research Laboratory, an Environmental Protection Agency laboratory specializing in ground water studies is located in Ada, Oklahoma. The county is part of the fourth Congressional district, currently represented by Tom Cole. The county is represented by state house districts 20, 22, and 25. The state senate district is the 13th.

The county's population is approximately 35,143, which reflects an increase of approximately 12,000 persons since statehood. The average per capita income of the county is \$20,633, which ranks 24th of 77 counties in the state. There are female residents account for 52% of the county's population and 48% are males. With regards to the ethnic make up of the county, there are 72% Caucasians, 2.5% African Americans, 15% Native Americans, 2% Asian Americans, and those classified as "other", 10%. There were 356 marriages and

226 divorces in the county, and 478 births and 411 deaths. The unemployment rate in 2003 was 3.9% (See Oklahoma Almanac, 2003-04).

Ada is the location for the county seat of Pontotoc County. The city's population is 15, 820 which is approximately one-half of Pontotoc County's total population. Ada is a regional center for health care with Valley View Regional Hospital and Rolling Hills Psychiatric Hospital. The city provides services for approximately twelve counties and close to 120,000 people.

Major industries located in Ada include the Chickasaw Nation, Holcim cement company, Solo cup, Surgical Specialties, Camrose Technologies, Pre-Paid legal Services and Anderson Quarries. East Central University is located in Ada, and along with the Pontotoc Technology Center provides and educated and skilled work force (Oklahoma Almanac, 2003-04).

Johnston County: Johnston County lies directly south of Pontotoc County, and forms the southern boarder of Pontotoc County. The county was named after Douglas H. Johnston, the governor of the Chickasaw Nation at the time of state hood. Major industries in the county are Meridian Aggregates, Unimin, U.S. Silica, and Sundowner Trailers. Wildlife areas include the Tishomingo National Wildlife Refuge, the Federal Fish Hatchery and Catfish Research Center, and the Blue River Public Hunting and Fishing Area. Blue River hosts trout fishing tournaments and the river is stocked twice a year with rainbow and other trout species. The county is home to Murray State College, a two year junior college located in Tishomingo.

Johnston County is quite poor, with an average income of \$15,338, which ranks 74th out of 77 counties. The unemployment rate hovers around 5.0%. The labor force is approximately 5,160, with 156 business establishments and 11 manufacturing firms providing the bulk of employment opportunities for the citizens of the county. The county receives on the average \$383,090 in public assistance payments per year. There are 624 farms registered in the county, with 334,041 acres of land used for farming purposes.

The county's population is comprised of 45% white, 2% African American, 16% Native American, and 2% Asian Americans. Additionally, there are approximately 50.5% female and 49.5% males. As of 2003, there were 64 marriages, 48 divorces; 124 births with 131 deaths, and the crime rate of 17.22 per 1000 (See Oklahoma Almanac, 2003-04). The county is part of the second congressional district currently represented by Dan Boren. The state house district that covers the county is the 20th, and the state senate district is the 6th.

Tishomingo is the county seat for Johnston County. The city is equally distanced from Oklahoma City and Dallas, Texas. The total population of the city is 3,262. The city is located in the southern part of Johnston County. Pennington Creek, which is fed by the ASA, provides the city with its main water source. Major services and industries located in Tishomingo include Sundowner Trailers, the Chickasaw Nation, and Murray Sate College. There are four health clinics and one regional hospital with fifteen beds, with a six bed nursery.

The unemployment rate for the city is 4.7%, lower than the national average of 5.0% Recent job growth is estimated at -2.85% with prospects for future job

growth placed at -2. 52%. The overall cost of living is measured at 71.9, with the national average being 100. Food costs are measured at 89.4, housing costs at 30.9, utilities at 103.3, health costs at 92.2, and transportation costs were measured at 99.4. Average rents are \$451.00; median home costs are \$63, 100, with 57.30% homes being owned, and 29.76% being rented. There are 12.94% vacated or abandoned homes in Tishomingo (Oklahoma Almanac, 2003-04; Sperling's Best Places 2006).

Murray County: Murray County is located to the south east of Pontotoc County, forming part of Pontotoc County's southeastern border. The County was originally part of the Chickasaw nation, and was created at state hood. The county was named for William H. Murray, president of the state Constitutional Convention and later, governor of the state. The land area of the county is 418 square miles of mountains, valleys and pasture land. The population of the county is 12,535. The population density of the area is approximately 28 persons per square mile. The county is home to several recreational opportunities. The Arbuckle Mountains, Turner Falls, the Chickasaw National Recreational Area, and the 2,400 acre Lake of the Arbuckles are important tourist destinations.

The county's per capita income is \$17,609, which ranks 59th out of 77 counties. The unemployment rate is 4.9%. The labor force of the county is approximately 5,430 with 267 business establishments and 11 manufacturing firms providing employment opportunity. Primary employers of the area include Veterans Center Medical services, School for the Deaf Educational Services,

Arbuckle Memorial Hospital Medical Services, Dolese Brothers Quarry, Davis Public Schools, and Sulphur Public Schools.

The ethic breakdown of the county has 85% white, 2% African Americans, 12% Native American, and .5% of Asian descent. Gender data reveal 6,395 females and 6,228 males. As of 2004, there were 81 marriages and 87 divorces with 153 births and 156 deaths. The county received a total of \$245,806 of public assistance payments in FY 2002. Murray County is represented by the Fourth congressional district. The state house district that represents the county is the twenty second, and the senate district is the fourteenth.

Sulphur is home to 8,067 people. As mentioned, Sulphur serves as the seat for Murray County. The town was originally called Sulphur Springs, due to the Sulphur and bromide springs that became a popular tourist destination early in the twentieth century. The popular springs are now part of the Chickasaw National Recreational Area. Major industries and employers for the city include various retail and service establishments along with the Veterans Center Medical Services, the School for the Deaf, US Silica Glass, and the National Park Service. The unemployment rate for the town is 3.50%, with a 4.29% recent job growth. Future job growth is estimated to be 12.18%. Apartment rents are \$451.00, with 18.59% of properties rented. The percentage for home ownership in Sulphur is 53.92%. The percentage of vacant housing is 27.49%.

The general cost of living index for Sulphur is 72.2. Food costs are indexed at 86.2, housing costs are 34.1 utilities 103.7, health costs are 82.9, and transportation costs are 99.5.

Bryan County: Bryan County is located in far southeastern Oklahoma, with its southern boarder comprising part of the state line with Texas. The county was named after William Jennings Bryant, the famous orator and political figure of the late nineteenth and early twentieth centuries. This was the original home of the Choctaw Indians after their removal from Mississippi. The land area of Bryan County is 908 square miles. Durant serves as the county seat.

The total population of the county is approximately 36,000. The population is composed of 51% females and 49% males. The ethnicity of the county is composed of 53% whites, 3% African Americans, 30% Native Americans, 2% of Asian descent, and 6% Hispanics. The per capita income of the county is \$18,755 which ranks 46th out of 77 counties. In 2002, there were 489 marriages and 275 divorces. For the same year, there were 499 births and 380 deaths.

The unemployment rate for the county is 2.9%, with the labor force totaling 18, 230. There are 579 business establishments and 34 manufacturing firms to provide employment opportunities for the county residents. The major employers for the county are private and wage salaries with 24.2%, government- both state and federal- with 18%, the self employed or not incorporated 8%, and unpaid family work, 1%. The county claims 1,516, with 419,887 acres devoted to farm use. The county is home to Southeastern Oklahoma State University located in Durant, a major employer in the county. The county received \$888,534 in public assistance payments for FY 2002.

The city of Durant began as a relay station for the Butterfield Overland Mail route. The town was named for Dixon Durant, the grandson of Pierre Durant, a

trapper and scout who came to the area in 1832 as part of the Trail of Tears. Durant's total population is 13,549, with a total land area of 19.03 square miles and a population density of 1410 per square mile.

Durant is the economic center of the Bryan County. Southeastern Oklahoma State University has an enrollment of approximately 4,000 students and employs approximately 290 faculty and staff. Durant is also is home to Eaker Air Field, J.C. Potter sausage, the Medical Center of Southeastern Oklahoma, custom Molded Plastics, Indian National Wholesale, Customer Linx, and Big Lots Distribution Center. The area is bordered to the west by Lake Texoma; a major recreation facility with boating, golf courses, camping and hiking opportunities. The unemployment rate for the town is 3.9%. Recent job growth has been estimated to be 1.69% and the future job growth forecast is 14.7%.

The median home cost for the town is \$83,000, with 47.26% homeownership. The rents for the area average \$451 and 44.36% of homes are rented. The overall cost of living index for the area is 75.3. Food costs are indexed at 87.6, housing at 39.8, utilities 101, health costs 99.6 and transportation costs at 98.6.

The Dispute Surrounding the Arbuckle Simpson Aquifer

The central issue surrounding the Arbuckle Simpson Aquifer concerns the sale of the ground water by landowners who claim the right to sell the water as part of a broader individual property rights claim. The landowners attempting to sell the water argue that they have legal rights to sell the water because the

water is under the ground they own. The landowner's argument is similar to those making claims to mineral rights, much like a claim to sell oil that is part of The landowners feel that water should be their ownership of the land. considered in the same way as oil, and that water, like oil, should be sold with little restriction on the open market. The issue over the ASA erupted when the landowners attempted to sell the water to the Central Oklahoma Water Authority (COWA) located primarily in Canadian County, Oklahoma. COWA wanted to purchase the water in order to supply the cities of Mustang and Yukon, Oklahoma. Various citizens voiced concerns and eventually citizen groups emerged in response to the sale of the water to COWA. Several major stakeholders have emerged over the dispute, including landowners, community activists in the form of CPASA, the Chickasaw Tribe, the scientific community, the wildlife community, and the recreational community. While landowners argue that they have the right to sell the water, citizen activists and the Chickasaw Nation are concerned that the sale of the resource could lead to over use and eventually deplete the aquifer. The various stakeholders who wish to protect the ASA vary over the reasons for the protection of the aquifer, but all agree that it is a valuable resource that must be kept safe.

The controversy over the ASA has pitted friends and neighbors against one another and against the various stake holders who claim an interest in the dispute. The dispute over the ASA has become a central theme in local politics and it has become a major campaign issue in local elections. Further, there are emerging cleavages within the respective stakeholder groups. There is

divisiveness among the landowners as to the best use of the aquifer. Similarly, there is disagreement emerging within the citizen activist group regarding the most effective tactics and approaches to be used to save the resource. The issue has become very visible in the local and statewide press, and has become the subject of legislation in the state legislature with the passage of Senate Bill 288. SB 288 placed a five-year moratorium on the sale of the water outside the five county area. The bill also mandated a five-year sustainability study to determine usage rates and recharge rates of the ASA. It is important to note that SB 288 was a highly partisan and divisive piece of legislation which passed by a one vote margin. With the five-year aquifer feasibility study mandated by SB 288 coming to a close, the issue will almost certainly reenergize and return to the forefront of public discussion.

In the following sections, I examine the community division regarding the sale of the water. I begin by examining landowners and others who support the sale of water from the ASA. I then examine those who oppose the sale of the water. Finally, I examine the unique perspective of the Native American community and their role as a sovereign entity and land owner.

Proponents for the Sale of Water

This section examines the groups, primarily landowners and other interested parties that support the sale of the ASA water. In this section I will examine how those supporting the sale of the water frame the resource as a "valuable

commodity," a subject of "individual property rights" and a "necessary resource" for other regions of the state. I will examine the links between the frames that have been established by proponents of selling the resource sale and the justifications that they use to support their position. I will also examine how these groups organized and advocated the sale of the water though accessing political ties, media access, and support from legal and scientific experts.

Support for the Sale of the ASA

The supporters for the sale of the ASA water generally expressed this position through the perspective of "individual property rights" and the need to maximize the utility of the water resource. Importantly, they note that the ground water becomes surface water and, as such, it should be regulated in the same way.

The most salient theme among those that support the sale of the water is centered on "property rights." Proponents simply believe that landowners have the legal right to sell the water. For example, one landowner had a simple perspective regarding the ownership of the water "...because that's property rights, he (the respondent) had the right to sell his property to anyone he wanted." Another landowner agreed that the ownership of the water is tied to ownership of the land "...I want to own the water because that's what I owned the day I bought the ranch." In response to citizens who oppose the sale of the water, the same respondent exclaimed "It's not sitting underneath their land and

when it sits underneath mine, it's mine!" Other landowners concurred with this sentiment. Another landowner explained, "That's an aquifer (and) that's our land. We bought it (and) that's our water rights."

Landowners also argued that the sale of water is connected to their generational connection to the land. For example, a landowner noted "It's about property rights. My dad fought and fought for all of this water..."

The landowners who wish to sell the water have taken the fundamental position that the controversy centers around personal property rights. From their perspective, they "own" the land and the ASA is part of that land. As a result, water is part of an overall chain of ownership that clearly affords them the right to sell the water resource on the open market.

Framing the Sale of the Water from the ASA

Landowners and ranchers clearly support the sale of the water. As a result, they have tapped into a series of salient themes around which to frame their arguments for supporting the sale of the water. Below I outline several of these central themes. As noted above, one of the most salient frames among landowners is the importance of private property rights. For example, a prominent rancher was quoted in the Ada Evening News, saying, "My rights should be no different from the city of Ada, the law states individual landowners have rights, and the city of Ada has rights. If Ada thinks it can pump from the aquifer and nobody else can, then the city of Ada is not being fair. My rights

should be no different from the city of Ada." (Pippen, May 28, 2002). Clearly, landowners and ranchers are framing their argument around private property rights. The same rancher also noted, "It's not right to take away the rights of three generations of people who've worked hard to put this ranch together. It will kill the value of real estate if cities and governments can come take our water rights away" (Pippen, May 28, 2002).

Interestingly, the framing of individual property rights is not linked to a broader organized entity. For example, the rancher contends the he is acting alone, "I've offered my water for sale as an individual. I'm not with any group. My water is an asset and my water is for sale. It's nobody's business what I want for it. No one wants his property rights taken away. I feel like everybody will fight if someone tries to take away those rights" (Pippen, May 28, 2002). Clearly, landowners and ranchers see personal property rights as the central theme in their campaign to sell the water. This theme came up in my interviews, document analysis, and in the community meetings I attended. Landowners are using the private property rights frame because it is salient and they believe it resonates with the public.

A second dominant theme that has emerged through the interview data concerns possibly the most emotional and incendiary of all. This perspective puts forth a position that claims private property rights would be violated if the sale of the water is restricted. One interviewee expressed this by saying, "Yeah, and water...I mean water under your land is your right. You know, I think it's unconstitutional and just that's your right." Another landowner agreed and

referenced Senate Bill 288 which placed a moratorium on the sale of the water to regions outside the water basin and included a clear racial bias in his response by saying "Buy a ranch in Oklahoma and have property rights what the end result is going to be is if you think that 288 is right you know who is going to own the water the government and the damn Indians." This citizen was clearly concerned with the possibility that SB 288 would result in a total loss of water rights for the individual citizen.

While a "private property right" was the dominant frame for landowners and ranchers, several additional frames also emerged. The reasons and justifications for the sale of the water range from a direct economic benefit to the need to provide better water for fellow citizens of the state, i.e. "altruistic frame." Other reasons given include the lack of reliable data available to determine the recharge rate of the aquifer and what I refer to as the "appealing to ignorance frame" where the opponents to the sale of the water is mystifying the public by misrepresenting the actual threat to the resource if the sale of the water goes forward.

One of the most often repeated themes for the sale of the water is the idea that the aquifer is actually under used, and the valuable water resource is being "wasted." This "under use frame" was intended to resonate with community members who may also agree that it was a waste of a valuable resource not to use the ASA. One respondent emphatically stated this position "...There is no question that the aquifer is underutilized and that there can be water taken away. The question is 'how much,' not to exceed recharge rates." Another stated,

"We're not disputing anything on surface water. (Name) and I are saying we're going to let our water go down the Red River..." Still another proponent of the sale of the water expressed that "The Blue River... the water goes down to Tishomingo, and Durant. And they take...some of it off. Where's the rest of the water go? It goes in the Red River." One proponent put it simply by suggesting that "there's a surplus of water there." The central notion to this particular perspective is that there is plenty of water, and landowners should not be barred from the sale since a surplus exists.

A third theme emerged centered around the economic loss associated with the restriction of the sale of water. I refer to this as the "financial revenue frame." One respondent conflated the ownership of the water, his own lack of government assistance, and the origination of the water from under his land by saying, "That's mine! When I bought the ranch it was mine. And you know, you can get into all kind of things, saying, 'Oh the government did this to me, and you owe me this much money.' And I look at it that all these springs and streams and all that and that's my water that came out of the ground. Okay, it became surface water. I look at it as my water. It came out of the ground and became surface water and no one's ever paid me for it." Another citizen compared the restriction to other mineral rights landowners traditionally enjoyed by saying, "It's like saying to a farmer 'You can't sell that oil under your house."

A fourth theme emerged which centered on the idea that the public is being "misled" by citizen groups with faulty information. I refer to this theme as the "appealing to ignorance frame." The expression of this perspective from

proponents of the sale of the water ranged from claims that the opponents to the sale are propagandizing and fear mongering to an intentional misuse of scientific information.

As one proponent explained, "Well from my standpoint, the fear factor and the ignorance of the nature of the aguifer in terms of its recharge rates and recharge capacity, drainage, and drainage is extremely important to understand not only geologically but topographically is the biggest problem." This respondent argues that the opponents to the sale were simply "wrong" in their assessment of the potential damage to the aquifer based on specific sciencebased claims. Another citizen who supported the sale of the water explained that, "Several people in opposition say that this aguifer is like a bowl with a bunch of rocks in it. Now with respect to recharge rates, if you drill a well it's going to drain the whole thing, the total aquifer. That is totally incorrect from a geological The respondent makes further science-based claims that the opponents are wrong about the basic geological make up of the aquifer. One respondent questioned the study that he claimed was the source for much of the misrepresentation by saying, "The recharge is in question because the best study we had was a stream study. It was not a geological study." Another concurred, and questioned the accuracy of the claim that the water actually came from the ASA by saying, "I feel like as a matter of fact the 1990 study...there have been many previous studies that indicated the water going into the springs in and around Sulphur. That water came from the south in the east which would not be in Arbuckle Simpson aquifer because it's primarily east and northeast."

One respondent pointed out that the "misinformation" and "fear mongering" has been transmitted to the general public. This respondent strongly believed that the public is now acting on the basis of the "incorrect information" being provided to them. As a result, he believes that citizens are basing much of their opposition on ignorance. A respondent explained that opponents to the sale of water publicized this issue with misleading information. A respondent used this illustration to explain the misuse of information, "One man went inside the city council and the newspaper and said 'you can kiss the Arbuckle lake goodbye.' Well, the Arbuckle Lake doesn't come from the aquifer. It doesn't so that was just an uniformed position and pointing fingers…"

The accusation of "appeals to ignorance" became a central theme highlighted among proponents for the sale of the water. For example, a respondent stated this perspective simply, "There is tremendous ignorance and fear from residents that the water sale would deplete the aquifer. And the opponents are saying the opposite, that there is a good chance that it won't. I'm definitely saying that the sale will not." Proponents routinely charged opponents with strategically using misinformation to purposefully mislead the public.

A fifth theme that emerged from the interview data was the general concern that other communities were suffering by not being able to purchase the water from the ASA. I refer to this as the "altruistic frame." From this perspective, proponents argue that they would bring a "public service" to the rest of the state by selling the water. This perspective was motivated in part by the EPA ruling on the arsenic content of the water sources currently being used by COWA. As

previously noted, the EPA issued new arsenic standards to be adhered by communities in Central Oklahoma. These new standards are to take effect in 2006. This was the issue that prompted COWA to attempt to build a pipeline from South-Central Oklahoma and begin pumping water from the ASA. This attempt was made in large part to avoid the need to further treat the water supply from central Oklahoma, which would be an expensive program for the municipalities affected by the new arsenic standards.

While the theme of "public service" emerged less frequently than other frames, it did come up periodically in data collection and formed an important part of the broader position being articulated by proponents of the water sale. For example, one respondent offered her concern for other communities by saying, "You know, we're sitting on it and the other towns don't have it. But we're being very selfish with ours!" Another respondent addresses the arsenic problem specifically, "You know we have billions of gallons of water. Other people are drinking bad water." Yet another respondent concurred, stating "Other people need water. I mean, other people are drinking water with arsenic in it." Proponents argued that the solution should be science-based, and that the fear generated by the opponents should be downplayed in order to provide water to needy citizens of the state. For example, a proponent noted, "However it's managed I think it just needs to be done in a scientific way and not just say, 'Oh gosh the sky is falling and we're going to dry the aquifer out'. You know, get the facts and do what can be done because other places need water."

Organizing the Sale of the ASA

This section will identify and describe the methods and strategies that were used by those wishing to sell the water from the ASA. I will identify some of the relevant political, scientific, and financial allies related with this group of stakeholders. I will address the degree to which these organizational efforts were successful. The strength of political ties that this group enjoyed will be especially important. I will structure this within the context of the relevant literature on environmental disputes and social movement theory.

There are some conditions that must be met by the landowner prior to the sale of the water. According to Mike Mathis, chief of the planning and management division of the Oklahoma Water Resources Board (OWRB), the first step is the public request to gain a permit for the sale of water. This is usually done though the use of the county newspaper. Those making the request must give notice to other landowners within 1320 feet of their wells by certified mail. If there are protests, OWRB sets a hearing date where all relevant facts are provided by the protestor and the landowner, and after deliberation, the OWRB issues an order on whether to allow the permit to the landowner. According to a representative from OWRB, there are four basic criteria the must be met for the permitting process to go forward. First, the applicant's permit must overlie a

ground-water basin. Second, the applicant must own or have lease use of the water. Third, the water must be put to beneficial use. Fourth, waste must not occur by depletion or pollution (See Pippen, May 28, 2002; OWRB, 2003). The OWRB allows, under special circumstances, temporary permits to sell or otherwise use two acre-feet of water a year (OWRB, 2003).

An important finding that emerged from the data collection was that there

was very little organized activity surrounding the campaign to promote the sale of the ASA. The respondents noted that there was only a very "loose" degree of organization among proponents. Several respondents only had a vague understanding of the existence of a group organized for the sale of the water. When asked about the extent of organizational efforts, a landowner explained, "... Loosely. There is an organization and I do not honestly know who is in it." Several landowners argued that they chose not to be part of any organized group in support of selling the ASA. For example a landowner noted, "I don't feel that I should do that. Other wise I have no legal tie or membership to any other party. But there is a federation, one out there but I am not a part of it. I was asked to be and I declined." Other landowners also explained that they refused to join an organization to promote the sale of water. A respondent who was asked if he was a member of a group responded by saying, "No. Now are there disputes as what should be done. No, because three of them... the principals, I guess, are in the original 35,000 acres of ownership. And three of those people already had temporary permits. I didn't have a land permit and neither did another land

owner. We are in a different boat to begin with. And they needed your permit to complete the deal at the beginning of the year."

There were divisive issues among the proponents for the sale of the water that hindered their ability to successfully mobilize their efforts. However, there were attempts made to organize various supporters for the sale of the ASA. A respondent explained, "Yeah right, HTO Oklahoma. We organize under that name, and these members are landowners with an interest in the sale of the water or the use of the water." It is also interesting to consider the perception of those opposed to the sale with regards to the level of organization dedicated to the sale of the water. As one opponent put it, "But, you know, they got to together and went in and had the water resource lawyer in Oklahoma City. That was a joint effort. They went to the capital and lobbied all together. The ones that wanted to sell... they were pretty organized". While on one hand the interview data suggest that there is an organized effort to pursue the sale of the water. On the other hand, landowners that were interviewed were unaware of the existence of any organized effort to sell the water. There seems to be a difference of opinion on the scale and effectiveness of the proponent group.

While the level of official "organizing" was "limited" among proponents, they did engage in organized efforts to promote their position. Their strategies included both individual and collective efforts to cultivate political and legal allies and garner resources. They obtained legal representation, and they made numerous efforts to lobby state government. As one landowner explained, "I found out that there was a potential for selling the water. We found this out

through the Kerr Law firm and (name) ended up wanting us to try and get the water down there, (name) came back to us because he is the guy who used to run the Oklahoma Water Resources Board." As noted by this respondent, landowners were at least able to connect with legal resources and key former members of state agencies responsible for the regulation of the resource being sold. Proponents also attempted to engage in political lobbying activity. One respondent explained, "(name) and I did the best we could. We went up to the State Capitol trying to lobby against 288." Another landowner indicated that there were definite efforts made to lobby state government, "You don't make an appointment. You walk the halls and you try to find somebody that's in their office at a certain time. Don't try to pull them out of anything cause they won't come out and talk to you if they don't know your name...so (name) and I and (name) walked those halls. There were five of us and we finally found a Senator...The landowner added, "I wanted him to know that there are people who have the guts to fight against 288!"

The Effectiveness of the Pro-Sale Campaign

The campaign to support the sale of the ASA can be characterized as a small number of loosely organized landowners who attempted to access political and legal resources in order to advocate their position. As stated earlier, the level of organization was limited. In fact, some landowners did not even acknowledge there was an "organized activity". These stakeholders had no

identifiable headquarters, newsletter or web site, and they were not able to expand their membership beyond those who had a direct economic claim to the water. Most of the attempts to access legal and political resources from the pro sale side came from individual landowners, or from loosely organized individuals that coordinated lobbying efforts.

Despite their efforts to frame the sale of water in terms of personal property rights, the larger public was not persuaded to join their campaign. The first obvious defeat to the pro-sale camp was the passage of Senate Bill 288. SB 288 was a direct attempt by the legislature to limit the sale of water out- side the five-county basin. The bill was aimed directly at those who attempted to organize the construction of the pipeline for the sale of water to central Oklahoma. SB 288 also provided a provision that would begin a five year study to determine the recharge rate of the ASA, and thus determines the amount of water that could be piped out of the aquifer with out harming stream flows, ecosystems, and all other concerns mentioned heretofore. Despite this loss by the pro-sale camp, it should be noted that SB 288 was only narrowly passed. In fact, the bill passed by a single vote. As the political climate changes it is conceivable that SB 288 could be repealed during the next state legislative session. A political change of this magnitude could serve to reenergize the pro sale group in the future.

The interview data did reveal attempts by the pro sale group to access legal and political contacts, and the data demonstrate that proponents were clear in their concerns about the importance of SB 288. Loosely coordinated efforts of landowners did attempt to lobby against SB 288 on the basis of it being

"unconstitutional." The data reveal that the landowners understood the tactic they should take, but challenging the constitutionality of the bill would be difficult. One landowner described a meeting between legislators and a representative for the pro-sale group discussing the constitutionality of the bill, "And so (name) starts off saying like an attorney would. He said, 'You know, it's like this, SB 288 is unconstitutional. You can't tell (name) over here that he can only sell his cattle to Ada, that he can't go out of the four counties to sell his cattle." One landowner stated simply they should, "Fight the constitutionality of 288 and say it's unconstitutional!" Landowners understand that the repeal of SB 288 is critical to their campaign, but they recognize that it could be a long fight. For example, one landowner noted, "I think we will it'll be a long fight." Other landowners were in agreement with this goal, but recognized, "It's not going to happen within the next two weeks, or two years or maybe five years. But, when you go into that you still have another fight you can go through." A few of the landowners expressed skepticism about other mandates of the legislation. When it came to the five -year study mandated by SB 288 to determine recharge rates and sustainable use rates, one landowner felt that the study would be of little use, stating, "A five million dollar study will do nothing more than we already do, or very little."

The pro-sale camp recently suffered another set back when the Oklahoma Supreme Court ruled that SB 288 was "constitutional," and would go forward with the moratorium on the sale of the water. On May 23rd, 2006, the State Supreme Court handed down a ruling that supported the constitutionality of SB 288. In the

ruling, the Court held that SB 288 would continue until the water feasibility study

was completed.

The ruling was well received by the governor's administration, further

demonstrating the pro sale group's inability to gather sufficient support from

influential political actors. Miles Tolbert, the Secretary of the Environment for the

State of Oklahoma, issued a public statement noting, "The court's decision is

very gratifying. The statute in question was hard-fought, and so am I very

pleased that the Supreme Court agreed with the legislature and upheld the

statute" (Hinton, 2006).

The Seller's Perspective: Corrosive Impacts

In order to gauge the corrosive community impacts of the ASA dispute, it is

important to consider relations between the supporters and the landowners who

want to sell the water. As stated, the landowners and the pro-sale faction of the

area perceive the dispute and subsequent blocking of the sale of water to be very

damaging and corrosive.

One common theme that emerged from the interview data concerned the

perception that CPASA and other opponents to the sale of water used "under-

handed tactics" to pursue the goal of blocking the sale of the water. As one

proponent for the sale of the water stated, "Well, that group, CPASA, is the

source of our fear about this." Another proponent criticized CPASA as a group

that uses misinformation to draw attention to the problem. This person stated,

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"CPASA has blown the problem out of proportion and the group uses scare tactics to concern the broader public." A proponent argued that the misinformation has affected the broader social and political landscape of the community. This person stated "Yeah, they were trying to make assertions without very many facts." Yes. One man went inside the city council and the newspaper and said, 'You can kiss the Arbuckle lake goodbye.' Well the Arbuckle Lake doesn't come from the aquifer. It doesn't so that was just a uniformed position and pointing fingers and people and you know it's just like oil under your land you're gonna sell it, of course."

A proponent of the sale of the water voiced concerns about the manner in which CPASA went about gathering support for SB 288. This person explained that, "I think in the beginning it was really irresponsible. They went out, and I know, I have talked to one of my friends who worked in town. She said that someone just came up and said will you sign this petition. And she had no idea what it was. It was a petition to stop the sale of the water that went to the state legislature. And she said I didn't know what was going on. They didn't tell me." Another proponent made the claim that opponents of the sale of the water were being unfair and caused strain on her family as a result by explaining "They are going to drain our land and all of this. And we have had to learn the other side. When it first began it was very heated. I mean it was rough on our family and on the other landowners. Everybody was like 'Oh my gosh what are they doing'? We were more defensive, I guess. Now we have kind of learned to be laid back

about it. We're calm and don't get so mad. We realize people are going to have their own opinion."

Opposing the Sale of the ASA: CPASA and Other Concerned Citizens

In this section I will outline the perspectives of citizens opposed to the sale of the ASA. Most of the coordinated efforts have come through the organization, "Citizens for the Protection of the Arbuckle-Simpson Aquifer" (CPASA). I will describe the conditions under which the group formed and I will outline the group's activities. I will discuss the general organizational features of the group and I will examine the framing strategies they used to garner support. I will also discuss some of the citizens opposed to the sale of the ASA who are not directly involved with CPASA, or any organized response to the issue.

An Overview of CPASA

In September, 2003, the Oklahoma State legislature passed Senate Bill 288, which placed a five-year moratorium on issuing temporary water permits to sell water from the aquifer for five years. Further, SB288 mandated a five-year hydrologic study of the aquifer to determine the maximum annual yield of the aquifer with out reducing the natural flow of water from streams and rivers (See SB288, 2003). The passage of SB288 is largely the result of CPASA's efforts. Clearly, the passage of this legislation is considered a major victory for CPASA. Soon after the passage of SB288, a group of ranchers challenged the legislation

in the state courts. The case was eventually appealed to the Oklahoma Supreme Court in the fall of 2004. The Oklahoma Supreme Court up held the Constitutionality of SB288, representing another important victory for CPASA (See Busby, November 2, 2004). Again, the extent of CPASA's involvement in defeating the suit will be discussed later.

The OWRB has been given the authority through SB288 to conduct a five-year study of the ASA. Part of the conditions set out in SB288 is that a moratorium be in effect that prohibits municipalities and other political subdivisions from contracting for the water until the study is complete. The study's main focus is to determine the maximum allowable yield of the aquifer that will not reduce the natural flow of the aquifer (See OWRB 2003, 2004). SB 288 also requires that the groundwater permit approval must be within the basin, and that the use of the water, if approved and permitted, will not degrade or interfere with rivers or streams emanating from the aquifer (See OWRB 2003, 2004; SB 2008 2003). This addition to the requirements represents a departure from current Oklahoma water law, and is a new precedent in the OWRB's approval process. The study has been appropriated \$500, 000 from the State of Oklahoma's gross production tax to match funding from the Bureau of Reclamation, which allocated \$632,000 in 2003.

CPASA began as a local group of concerned citizens which formed in 2003 in response to landowners attempting to gain permits from the OWRB to sell the water to locations outside the basin. The group draws support from the surrounding area, with most of the membership coming from Tishomingo, Ada,

and Sulphur, Oklahoma. The group has a diverse membership base including hydrology experts, political experts, activists and non-activists. The group has no formal meeting place or headquarters, but the traditional "home" of CPASA is Sulphur, Oklahoma. During the data collection phase of this project it was clear that most of the leadership of the group came from Sulphur. CPASA has a rotating system of meeting places, usually divided between Tishomingo, Ada, and Sulphur Oklahoma.

Interview data shed some important light on the formation of CPASA. One member of the group related a story of the origins of the group by referring to the beginnings of rumors that later turned into a "movement." The respondent explained,

"(Name) told me that he had heard something. That was maybe four years ago. There were people buying up water rights. He did some checking around and so did I and neither of us found anything out. We thought it was just a rumor going around. Then in June of '02, I got news of how there was a plan to sell water to Oklahoma City or to Canadian county and things were moving forward. There would be a meeting in Davis, OK. If you were interested in what this might do to our water, you should go to it. So it was June of '03. That I first time I became aware of it."

Other citizens also noted that the threat of selling the water to central Oklahoma was the precipitating factor in the group's formation a reason to form a group in opposition. One citizen traced the first formation back almost five years at a city council meeting in Norman, Oklahoma

"That is when I become aware of water needs. Then just almost immediately thereafter and possibly as early as February, 2002, we where made aware of the PESA group out of Canadian county. And in particular the city manager at Yukon who wanted to put in an 88 mile pipeline that cost \$220,000,000 to buy water rights and pump the water uphill to Canadian county, or the city of Yukon. No one remembers this, but about five years ago... the city of Norman city council I believe there are 13 members... held a vote on whether to pursue buying water. At the time I thought 'How interesting'... this is not a waste of time. It is no longer the city of Norman who gets their water from Lake Thunderbird. Now it includes Yukon, Piedmont, and Chickasha and other towns in the Canadian county."

Specific rumors continued to circulate and citizens gathered additional evidence as an organized group. As one group member related,

"We made a lot of contacts. People from Tishomingo came there. It

started getting some press. We decided we needed to get a bunch of people together and protest these permits. In Davis, they said they were about to be issued. Everyone signed this letter in protest. I didn't sign those. I formed my own and submitted my own to a lot of resource boards. It was evident there was going to be a hearing. If there were protest then they have a hearing and a judge would come in and talk to the applicant and protester and asks' 'What's the beef here?' We wanted to get involved in that. We decided we needed to have a community meeting and discuss it. And we did in the summer of '03."

Another opponent described the overarching concern of depleting the resource as the genesis for the formation of the group by saying "...The stream flow would be reduced and wells would dry up. And you know, we would be left without something we've always taken for granted. And so, with that, motivation for the local organization was formed: 'Citizens for Protection of the Arbuckle Simpson Aquifer'."

Membership estimates actually range from two-hundred to five-hundred. As one group member explained "I could tell you pretty specifically because my wife kept the records of that. I would say it grew to over 400 members." Another member added, "If we needed 200 people in two weeks we could do it." Others were still more optimistic in their ability to mobilize support. A member stated, "If we need 500 people tomorrow I'd say that we could have 500 people up there."

Framing the issues: the Citizens for the Protection of the Arbuckle-Simpson Aquifer

This section will highlight the various frames that emerged from the campaign to oppose the sale of the ASA. Several salient frames emerged from my analysis of the data, including "greed from the landowners," "ecosystem health concerns," "recreation," and "municipal use of the water." Below I outline how CPASA successfully used these frames to garner support for their campaign against the sale of the water.

Greed and Economic Gain for the Landowners

The most salient frame used in the campaign against the sale of the ASA was the frame of "greed" and economic gain for the landowners. This frame was nearly universally expressed by the members of CPASA and other concerned citizens. Simply put, this perspective argues that landowners are greedy and selfish. One citizen put it rather bluntly, stating "Why do they want to do it? For money!" Another respondent agreed and linked the ownership and sale of the water to what he termed "damage" to the broader community. He explained, "Yeah, we're talking about damage as far as economic damage...the more you owned the more would be damaged." Another respondent identified a conspiracy between the scientific community and the landowners for the purposes of profiting from the construction of the proposed pipeline and the subsequent sale of the water. Referring to an expert he considered to be

cooperating with the landowners, the respondent explained, "I guess he went along to all these ranchers and said, 'sell me your water rights. I will build a pipeline...I will pump this water to Oklahoma City and you will be rich.' 'You will get millions of dollars...' he really worked at that." The respondent continued, "And I think there is money to be made with the damn company financing that \$220,000,000 pipeline...that is what I honestly think. And the hydrologist has been tainted or bought out, whatever the term is. But the hydrologist...the lady has given the report showing that we can take water out of that aquifer forever and it would not impede it. It's just not true!" Another respondent echoed this concern by stating "There is a lady that sold them, in my opinion, a bill of goods on the fact that that Arbuckle Simpson Aquifer cannot be emptied. That is not It can be emptied, but the people bought it hook, line and sinker." true. Members of CPASA believe that the landowners should not be able to profit at the expense of the broader community. For example, a respondent noted, "I don't think you should hurt an area to benefit yourself. Hurt a ton of people, you know, just so you can make a buck or profit your town. You shouldn't hurt another community. You shouldn't hurt a community by helping yours. We should try to help each other, but not by putting one in danger in the long run by helping yours in the short term." The frame of "landowner greed' remains the most salient theme in the on-going water resource dispute. It came up time and time again among citizens opposed to the sale of the ASA. Importantly, this frame resonated with the broader public and with some members of local and state polity.

Preservation and Recreational Usage

Another salient frame used in the campaign to oppose the sale of the ASA was the "preservation of recreational usage frame." The geographic region around the ASA is well known for its recreational usage. The area is home to Turner Falls, the Chickasaw National Recreation Area, and to various summer camps and golf courses. All of these recreational opportunities are believed to be "threatened" through the sale of the water.

Many of the members of CPASA emphasize the importance of recreation on local tourism. For example, a respondent notes, "You know, you have a lot of fish and fishing is like huge in this area. It's also tourism. It helps the economies and that sort of thing. So, if our waters are depleted from the lake, that creates less, you know, of the fish and not just that, but the plant life and other things in general..." Another respondent agreed, stating "In my opinion the fisherman alone they would be, if they knew what was going on, they would be up in it (involved in the effort to oppose the sale)." This respondent continued by expressing a more general concern for recreation by adding, "You've got Turner Falls over there. Turner Falls is an icon! It doesn't come from this area, but if you can't protect one part of it you can't protect the other area. Sooner or later someone will pump that out!" Another respondent noted that there is a "Downstream Nazarene Church Camp on the river. A Boy Scout camp. Devils Den used to draw tours. A Golf Course is there, which is there because of access to water." These sources of tourism and recreation would be damaged if

the ASA were to be depleted. Other members of CPASA emphasized threats to protecting these recreational uses if the sale of the ASA becomes a reality. One respondent explained, "I want to see the national wildlife refuge continue to operate. I want people to continue to use the Blue River recreation area. I want to see Chickasaw national recreational area survive. I want to see Turner Falls survive. I want to see the two major Boy Scout camps in the country survive. I want to see four major church camps survive..."

Diminishing Culture

A third salient theme in the campaign against the sale of the ASA is the frame of "diminishing culture." Within this context, respondents highlighted cultural ties to the land, Native American cultural traditions and values and the loss of a cultural centerpiece in the region.

While respondents acknowledged that the area would "survive" with the sale of the water, they noted that the "culture" and "sense of place" would be forever damaged. A respondent explained, "I'm sure it would survive but the area's special aspects would be diminished greatly. There wouldn't be anything to define the area. You know the cultures around here have also used this running water as a food source for decades and without it could not have thrived as they did." Another respondent concurred, emphasizing the future by saying, "Yeah, I see us living, those that are fighting to save this river. I see us living in the future, but we're trying to preserve a place to live for our children and grandchildren.

Without that water we're history. And this is a desert down here..." The unique history of the native tribes and their settling of the area were pointed out, "It (ASA) is the reason Tishomingo exists. It is because of the water. Without that flow of water of course the Chickasaw would not have settled there. They built their whole culture around this area. Tishomingo is there because of the Indians."

Some respondents also noted the practical impacts of depleting the ASA. A respondent argued, "Its kind of the life line of the community. It is the main water supply for several communities in this region." Another person agreed stating "Well, it's the lifeline of the community. It is literally our sole water source and without a water source we cannot survive." The frame of "community health" emerged. One respondent explained, "I'm kind of passionate about water quality because I don't know how you can have a healthy community if you don't have healthy water." The culture, sense of place, and the concern to preserve these desirable features of life as a result of the ASA were emphasized repeatedly as salient frames around which to characterize this dispute.

Scientific Arguments – Ecosystem Health and Natural Beauty

The fourth salient theme centers on the frame of, "eco-system health and natural beauty." Within this context, supporters for preserving the ASA emphasize the scientific arguments associated with the preservation of the ASA. The perspective of ecosystem health and the maintenance of natural beauty were commonly emphasized, especially among the wildlife and water specialists interviewed for this project

Respondents repeatedly noted the importance of the eco system and natural beauty. A respondent noted,

"Well it is the guts of the ecosystem that we have here. If the water were to dry up sure we would still have an environment, but it would be drastically different than what it is today. I understand that we are in a cross timbers area where you have hills and prairies. You have a lot of forested land and of course you've got the water...you've got the running water which is the key to the beauty of the area."

Another respondent concurred, by stating,

"It's essential, it's natural. You can't have this part of the world without the aquifer. It's native. It's like taking the Grand Canyon out of Arizona. It's what holds this ecosystem together as far as I know. You want to talk about it in other terms I just think there are kinds of practical reasons. If you affect a natural system there is never a positive result of that."

Several of the respondents who had an expert background in stream health ecosystems focused on the technical aspects of the problem. A respondent who is a scientific expert provided a step-wise description of the natural processes

that would be effected by the over use of the ASA,

"Well, the technical issue is pretty simply this. There's probably lots of water stored in the aquifer, but there are lots of springs that emanate from the aquifer and those springs ultimately end up in rivers, streams, so forth. Virtually everyone in this area gets their water from those springs, rivers and streams. As you know, what the ranchers want to do is pump large volumes of water from the aquifer. When you do that you lower the water table, and when you lower the water table. That will ultimately deplete the springs, which in turn will deplete the rivers and streams."

Individual Rights versus the Collective Good

Another salient theme in the campaign to preserve the ASA was the frame of "individual rights versus the collective good." This frame of individual rights versus the collective good emerged regularly and often during data collection. In summary, this perspective argues that while the landowners may have an economic claim to sell the water, that "claim" cannot be fully utilized to the detriment of the broader community.

A respondent explained, "...It seems to be a battle over individual usage of the resources instead of the collective good. It seems to me a battle between individuals who want to use it the way they want to against the whole community. See what I mean?" Another respondent added,"I understand it boils down to a conflict of ownership, seeing water as a commodity." Another agreed adding "I think the ranchers are of the opinion that that's a private property right and they are able to do whatever they want to with the water they have a permit for."

Many respondents linked the idea that the landowners are using a valuable resource, such as water, in the same way one might regard other mineral rights attached to landownership, such as oil. One respondent explained the issue by saying, "The dispute, as I understand it, was that some of the landowners on top of the aquifer felt that they have the same right as someone would have to drill for oil, that they owned the water. I don't think any of us own the water. I think that it's there for its use and that's in how it's used and the people that live in the basin and closest to the basin of that aquifer." Several respondents emphasized the issue of sustainability. For example, one respondent explained "I believe you have the right to take what you need from it but I don't believe that you have to right to convert it and sell it to someplace else."

Clearly, members of CPASA and other concerned citizens opposed the sale of the water on the grounds that there is a greater "good" associated with this valuable natural resource. Simply put, they argue that no one really owns the water. They believe that it belongs to everyone and that the sale of the water would not only adversely effect the immediate area, but the entire water system over the ASA. As one respondent explained, "The point I want to make is that even if someone doesn't own property in the wilderness he or she still has a right and need for that water to exist out there, because it is part of a system. It is not

someone's little creek out there." Others noted the "temporary nature" of the water being "part of" the land.

The opponents to the sale of the water identified the out-dated Oklahoma water law as contributing to the dispute. According to opponents to the sale of the water, the water law in Oklahoma needs to be reformed in order to recognize that the water in the ASA is directly connected to the surface water.

As one citizen explained,

"The problem is we have a different set of laws for ground water and a different set for surface water. The Oklahoma laws do not recognize the interaction between the two. You have two different sets of laws that are opposed that are trying to legislate the same water."

Another respondent agreed and explained, "The aquifer produces springs and rivers and streams and, you know, there is a direct connection. And, I mean it's clear, technically it's clear that there's a connection between the two and everyone knows that. It's simply that Oklahoma law does not recognize that."

Organizing the Opposition to the Sale of the ASA

This section will describe and analyze the strategies, tactics, and resources used to organize against the sale of the water. I will draw from social movement

literature, specifically resource mobilization and political opportunity structures, to better understand the organized strategy of CPASA.

I begin with an overview of the movement and their early efforts to organize against the sale of ASA. I will then examine the leadership structure of CPASA, mobilization efforts the retention of members, their efforts to publicize the campaign, and their efforts to educate the public. I will then examine the group's effectiveness in gaining support from political allies and the broader public. I will describe and analyze the group's access to political actors, the state legislature and other political institutions. I will also examine the scale and effectiveness of the group's lobbying efforts, especially with regards to SB 288.

Mobilizing support: CPASA

As noted, citizens for the Protection of the Arbuckle-Simpson Aquifer (CPASA) Is a local, grassroots organization that formed in response to the possible sale of the water from the ASA. The group formed in response to the sale of the water to a water cooperative in Canadian County, Oklahoma. As discussed, plans were revealed that a small number of landowners entered into an agreement with the water cooperative to sell the water. Subsequently, an eighty-eight mile pipeline was proposed to be built to pump the water from the area to central Oklahoma. The amount of water that the landowners proposed to sell the water cooperative is somewhat controversial. CPASA feared the worst in terms of depleting the ASA. As one community resident explained "It started out

as a Johnson County group and... we have several hundred members. And what happened is we'd hold monthly meetings and we'd try to keep people informed to know where we stood in the courts in the water board. And we continued to grow and raised funds over these past several years and just 6 months ago we retained an attorney." Landowners were positioned to make a great deal of money in the project, a point that was not lost among CPASA members.

CPASA's formation was the primary work of several individuals from the surrounding communities of Ada, Tishomingo, and Durant. It included local government officials, individuals connected to state government through various capacities, hydrologists from the nearby Kerr Research Laboratory, and other concerned citizens previously had not been involved in activist activities. Aided by the local and state wide print media, the issue became well known to the area, and membership in CPASA grew. CPASA use a variety of methods to garner attention, including, letters to the editor, articles informing the public, a door to door campaign, and word of mouth. As a result, they began to attract allies from both the political and scientific communities. CPASA has produced a fifteen minute video narrated by Dennis Weaver, the former television and movie actor. The video outlined the central concerns of CPASA and has been outlining the issues and broadcast on local access television. CPASA has also created a web site and a newsletter. As member described the development of CPASA, "We finally got enough money...but I didn't have any trouble getting volunteers. I'd put up a column in the newspaper and I'd say, 'You know, we're leaving out from

the community center here in Tishomingo We're leaving out from this place in Sulphur, we're leaving out from this place in Ada,' and I had people helping from Durant. And we finally wound up having lots of active people and having lots of support to get people mobilized." The group continues to meet on a regular basis and they rotate the meeting location between the various towns involved in the controversy. CPASA has played a prominent role in publicizing the natural resource dispute and, as a result, the issue has become a salient issue in local political campaigns.

Leadership

Leadership is vital to the formation, maintenance, and success of any social movement. The ability of leaders to consolidate members, maintain a concise message, and preserve unity is an important resource to be mobilized by a social movement organization. My research into CPASA revealed a pattern of very strong and effective leadership within the organization. The skills of these leaders to organize, develop a message, effectively mobilize members and other resources, and effectively link with governmental actors and institutions are all themes that emerged from the data. The data also indicated that the leadership of the group adopted specific roles and duties, ranging from getting the word out, to organizing meeting places, taking the lead during public meetings, and lobbying the state legislature.

Initially, the organization was only loosely organized. Concerned citizens made word of mouth contacts. For example, one of the group's early leaders explained, "I called (name) and he and I had been talking about this for a while. I said, '(name) I really need your help!' I said, 'I am gonna call a meeting.' I said 'We just can't sit here' and we built quite an organization. We had over 500 people in the gallery when they voted on Senate Bill 288."

One respondent stressed the importance of individuals taking the lead in the early efforts to organize public meeting, a phase that was crucial to the success of the group. A respondent explained, "It was really at that little meeting that we sort of drew the circles around and formed and said, 'Okay we're going to get an organization here we've got to get organized.' That was in February and so the second meeting was in Tishomingo and I think that was probably in May. And the new hearing judge came down and basically read us the things from the Oklahoma Water resources board, things that say it's not a groundwater issue, you know." Other members praised the effectiveness of the group's leadership, especially their efforts to keep the group informed on legislative For example, a respondent described how one leader, "Knows every bill that is filed and could alert us of any bill that had water or water issues in it. I think that four brought it to the attention, and the group again mobilized. Some of the leadership would go and say you know there's a language in this bill that has potential...ground to be gained this time."

One respondent expressed deep admiration when discussing the skill of certain leaders in conducting public meetings. For example, the respondent noted, "It's just electrifying to see the unity with those people. (Name) is just inspirational. People really admire him and...they still call him their leader." Another respondent concurred with this glowing assessment of the group's leaders "I believe they are very well organized, I believe they are very well led. They have people on their board that I have great deal of respect for. They really have a confident board and they have been aggressive." An important aspect of the leadership of CPASA is that several of the leading figures in the group are also public figures. As a result, they have strong political ties and significant political influence.

Group members also identified the leaders who were most effective in the role of lobbying the state legislature to pass SB 288. The vote was very close and divided evenly along partisan lines. SB 288 passed by a single vote and several members of CPASA credit the leadership of the group for the passage of the bill. As one respondent explained, "Let me tell you something. After we got that one vote victory ... I mean the moment that that thing was gaveled down we were out in the hallway. Guess who was in there shaking hands with (name)" One leader of the group had professional experience to draw upon when lobbying the state government. As one person said when describing this leader "At one time (name) was the interim head of the Department of Corrections in Oklahoma he had about five years experience of going to the capital and working to get the Department of Corrections budgets and issues." The leadership of CPASA was quite experienced and placed in positions that suited their particular talents.

Political Connections

As noted in political opportunity theory, the importance of political allies is critical to the success of social movements. This was certainly the case with the success of CPASA. The members of CPASA enjoyed a high degree of political support. As already demonstrated, the group had a leadership structure comprised of politically experienced individuals. As suggested in Political opportunity theory, access to decision makers with the appropriate institutions and organizations is vital to the success of a social movement. CPASA was able to access the state legislature, the Oklahoma Water Resource Board, and various other local water resource boards. The group actively lobbied state government and was quite successful in their efforts. The interview data is rich with accounts that support the political linkages of the group, the group's general high degree of activity, and evidence of the group's political acumen with regards to strategies, tactics, and gaining political allies in the campaign.

As a Non-leader of the group explained, "...Let's, see last year was when the lobbying in the spring semester was going on very heavily. In fact, as soon as I turned in my final grades for the next two weeks basically all I did was go back and forth to the capital." One member described the group's ability to mobilize members to engage in direct lobbying efforts, "If we need 500 people tomorrow I'd say that we could have 500 people up there."

Over time CPASA evolved from a local group of concerned citizens to an organization that was extremely active and politically connected. Individual

members were keenly aware of the need to develop useful relationships with members of the state legislature. One member explained, "You know...we had a way of talking to them that didn't alienate them. We didn't put 'em out, and it was just a matter of counting the heads and having a couple of people in our leadership positions who were politically savvy." Members of CPASA learned the importance of developing political tactics, including developing ties with local officials which ultimately contributed to effective lobbying. A respondent explained, "... It was a combination, I think, of a set of troops that carry the task and that carry the message and stay on task and stay focused in a pretty controlled way. And a combination of folksy but also canny leadership who understood you got to smile and you got to shake people's hands. But you also got to know how to grind sausages." Other group members expressed an awareness of the difficult political landscape and the complicated issues involved in the dispute. For example, one member explained, "Legislators that I have talked to say it's really an uphill pull. And this was the republican. It was mostly republican objections to Senate Bill 288, because they claimed there will be a legal challenge to it."

Political opportunity theory also emphasizes the importance of access to key members of various political institutions. The importance of political access was clear through CPASA's connection to the state legislature. The interview data reveal a keen awareness of this imperative. As a result, CPASA members expended considerable resources to gain access to key members of the legislature.

A group member described the need to remain in contact with certain key members of the legislature by explaining, "I think the feeling is as long as he's (a key state senator) there, the feeling is we will have a voice. We will have an open ear and a voice to express our views as long as ours' are reasonable." Other members explained that they were able to motivate members of the legislature to act in their behalf. One group member explained, "And I just said, 'You know, I need your help." And he got out on the floor and walked the floors and helped me. I'll be forever in his debt and the people in this country...if it hadn't been for him we wouldn't have got the bill passed. It was only passed by one vote." Members of CPASA clearly demonstrated that they should maintain and continue to develop relationships with key members of the state legislature

Another important aspect to political opportunity theory is the ability of a group to respond to fluctuating political conditions. During the deliberations on SB 288, the members of CPASA were faced with what appeared to be changing fortunes when the passage of the bill was in jeopardy. However, the members of CPASA were able to respond to these threats. One member related the story of a possible withdrawal of support by members of the state senate. The issue had to do with members of the state senate attempting to attach a controversial amendment to SB 288, a common tactic when challenging a piece of legislation. The respondent explained, "...At this point we're just sitting around there stunned. He said 'Well is there anything we can do?' So we started going to the offices of the five senators to say 'You know this is good, and that is bad.' You know we'll help you try to fight for this bill but you gotta vote for this. So finally we

went to the leadership and got him to intervene...I cried and I begged." This legislative environment was especially complicated when the group was forced to deal with members of the state senate who represented a constituency that would benefit from the sale of the water. Another member explained, "He had been saying, you know, I don't control it and if I try to control it...it would be political suicide because this is part of my constituency here that I am trying to kill. So, he had tremendous pressure trying to control something that was out of his hands. He just found himself in one of those legislative binds..."

Gaining Allies and Assisting Other Efforts

An important part of CPASA's strategy was their ability to reach out to other groups to form political alliances in order to assist them with achieving success at the state capitol. CPASA reached out to various lobbyists and environmental groups throughout the campaign. This activity is important in the context of political opportunity structures. The literature suggests that the way in which groups seek out other groups and access their resources is important to the success of the group. The leadership and other members of CPASA were mindful of the need to connect with other groups, but the group was also aware of some of the dangers in allying itself in an overt manner. CPASA engaged in a delicate balancing act when it came to building political alliances with other groups.

A member of CPASA explained, "We got some help from some others, the Oklahoma City/Norman Sierra Club." Another member related the common goals of these groups with the goals of CPASA, and the Sierra Club's willingness to become involved. The respondent explained, "Water, ecology and environment is an issue that they can support. You know, they helped with producing handouts for us after the first successful vote..." One member related the hiring of a professional lobbyist to assist in their effort "Yeah and they helped us with their lobbyist. A guy named (name)." In cultivating relationships with other groups, CPASA was wary of becoming an "overt" ally. The concern came primarily from the leadership, because they wanted to avoid a "perceived association" that the broader public could identify CPASA with a controversial environmental group. As one member explained, "It's the politics...the practical outcome. And that's one of the things that (name) said, 'We'll help the other people behind the scenes, but we will not, as CPASA, take a public issue of other items of controversy."

Some members of CPASA were also interested in taking the issue to a broader stage. The idea arose in part as a way to broaden the support network for the group. There were concerns that emerged form the interviews in regards to the need to begin thinking about the water problem as a state-wide problem. As one member suggested, "I've been arguing for a long time now that we need to get past this thing as an issue stage and we need to be promoting the idea of the statewide water (plan)." Another member concurred and suggested that CPASA has become a model for movements that could be mobilized in state-

wide efforts. The respondent added, "Well, the Arbuckle Simpson is clearly the poster child, if you will. We are riding a lot of coat tails on the momentum we have gained. There is a lot of interest expressed in how we manage water in the Arbuckle Simpson. That allows us to take a step forward in a lot of different areas."

Scientific and Legal allies

CPASA successfully garnered broad support for their efforts to save the ASA from the legal and scientific communities. CPASA was able to persuade key members of these communities to support their campaign. The data clearly demonstrate that the scientific community supported the group's efforts. The most significant reason these groups support CPASA was the provisions in SB 288 that called for a moratorium of the sale of the water. Specifically, the five year study to determine recharge rates for the ASA was regarded as critical to the scientific community. Other members of the scientific community were clearly opposed to any plan that would lead to the destruction of ecosystems and wildlife habitats.

The legal community was supportive due to CPASA's ability to highlight the flaws in Oklahoma water law. The legal community was ready to deal with the problem associated with the lack of a distinction between ground and surface water and the legal omission dealing with the relationship between ground water and surface water. CPASA's successful efforts to pass SB 288 and the defeat of

additional legal challenges will now provide a basis to further define water laws in Oklahoma.

In terms of CPASA's ability to get the issue of ground water depletion on to the agenda, ground water experts are now appreciative of the group's efforts. Many experts readily acknowledge that the group was instrumental in the issue. As one expert explained,

"We have known about this a long time. I use to be the chief of the ground water division. We were responsible for the studies. We tried to get funding for the Arbuckle study for over 20 years and were unsuccessful in getting the study because there wasn't any money. Now that the controversy comes up we can actually get our study done."

Another water expert concurred by adding, "The Arbuckle master conservancy district, there was a number of them, did lobby. And some of them lobbied individually. Some of them lobbied as a group. And that group certainly made in important for the legislature to pass laws. We were able to get appropriations for the study and without that effort I don't believe that we would have been able to do that." A water expert also commented on CPASA's ability to change focus and alter their tactics regarding how best to lobby government for protection of the ASA. This expert noted that, "The reason I say that is the

people finally understood that the water board wasn't the place they need to go, the legislative route is. So they did and got 288 passed."

Other experts interviewed also expressed general support for the CPASA's efforts, but despite their support, many could not publicly validate the group's efforts because their institutional positions within government. As one wildlife expert explained, "From a federal standpoint, as a manager, you know, we're not supposed to get involved. And I have not gotten involved in that. I think that as a citizen they're doing the right thing, I mean we need to do a study before one person or a group of people sells the water that's going to affect so many." The central reason for the support from the wildlife conservation perspective is that the efforts of the group will possibly lead to protection of eco-systems and flora and fauna. One wildlife expert provided a detailed account of the need to protect a certain species of tree that will only grow near streams that receive water from the ASA. This wildlife expert explained,

"You do away with Pennington Creek and Blue River; both those water sources are providing different unusual types of habitat. You know the sea side alder occurs above the fish hatchery there and that's pretty much the only place in Oklahoma that it grows. And, if that creek dries up, you know, that tree species is probably going to be in jeopardy and, you know, there are other things that depend on the water. Other types of plants that depend on the water to be there and if it's not there then they're going to be impacted."

Other experts noted that CPASA has been able to successfully bridge several municipalities, experts, and communities in their efforts. As one expert explained, "Yes, we have sent down a hydrologist and we have worked with state organizations. I think they worked with the Oklahoma Water resources board, so we're definitely on board. The Chickasaw National Recreation Area, I believe their superintendent was putting out training forms about the aguifer. I believe that the Chamber of Commerce in Sulphur and Davis is aware of the problem and how it could possibly affect them. I think from a federal standpoint, you know, the people have asked for us to help since we do have a vested interest. We have Brad Carson, our US representative, who has got on board and came up with \$500,000 for a study, I believe." Another expert noted that there has been an increase in activity from the scientific community in gathering data for the recharge study of the ASA. This activity is related to the passage of SB 288, and as mentioned, the scientific community suggests that this would not have been possible without CPASA's involvement in the issue. As one expert suggested, "I think the national park service, USGS, OK department of water resources are involved. I know they have begun to put some monitoring stations on creeks. USGS put one on our property. National Park of Sulphur is doing something ..."

The legal community has also shown support for CPASA, mainly due to the group's success in highlighting the ground water law in the state of Oklahoma. Of course, the legal experts who were interviewed tend to be supporters of the group's efforts due to their representation of the group. But even with this

sampling bias, the legal issues are neutral in the sense that there are technical realities of the ground water in the ASA that seem to be incongruous with Oklahoma water law. The first technical reality that does not seem to be recognized by Oklahoma water law is the fact that the ASA is directly connected to the surface water in the form of rivers and streams. As one legal expert argued,

"Well, the technical issue is pretty simply this: is there lots of water stored in the aquifer? But there are lots of springs that come from the aquifer, and those springs ultimately end up in rivers, streams so forth. And virtually everyone in this area gets their water from those springs, rivers and streams. And as you know, the ranchers want to pump large volumes of water from the aquifer and when you do that you lower the water table. You lower the water table and that will ultimately deplete the springs which in turn will deplete the rivers and streams."

Another perspective revealed that SB 288 will be very important to settling the issue of the relationship between ground water and surface water, and reconciling the current conflict in the law. As a legal expert explained, "Right now they're really two sets of laws that cover water. One set that covers surface water and one that covers ground water. There was really no inter-connection to it really up until 288. In addition to adding a moratorium on selling, there was one

critical issue that was added. That was in order to get a permit, now you have to show that if you want to withdraw that water by pumping, won't impede on the springs, rivers and streams. That's really the first connection between ground water and surface water." This expert continued by arguing, "Where the aquifer produces springs and rivers and streams and, you know, there is a direct connection and I mean, it's clear."

Examining the Effectiveness of CPASA

This section will provide an analysis of the effectiveness of CPSA as an organization with regards to meeting their objectives. I will discuss a broad range of activities engaged by the group. The group's efforts will be evaluated on the basis of the resources they were able to mobilize, including their recruitment efforts, communication outreach efforts, and education programs. The group's success in accessing the relevant political institutions and actors will also be evaluated. The group's lobbying efforts, personal contacts and the utilization of political experience will also be examined.

The interview data reveal many instances of activities that were successful in motivating group members and the general public to act against the sale of the ASA. The data suggest that CPASA's efforts were influential in changing attitudes and beliefs regarding the sustainability of the aquifer and guided the public in its thinking about the proper use of the aquifer. CPASA was also able to effectively challenge the campaign to sell the water.

Ultimately, the success of CPASA can be measured by the passage of SB 288, where a moratorium on the sale of the water from the basin was secured and the beginning of a five-year study to measure the sustainability of the aquifer was achieved. Quite simply, this single accomplishment suggests a high degree of success on the part of CPASA.

General mobilization of people, getting the word out, educating the public

CPASA has a strong record of being very active and engaged with the public, organizing meetings, gaining membership and educating the public. CPASA can claim a broad array of activities to support their activities. A news letter points out that CPASA has been successful in mobilizing twenty thousand signatures to protest water permits. CPASA was able to employ an attorney in order to defend SB288 in the courts. CPASA hosted a water conference at Murray State College in May 2004 and several local leaders attended the conference. CPASA monitored legislation and lobbied the state legislature on behalf of protecting the aquifer. CPASA was very active in distributing brochures and materials regarding the health of the aquifer. CPASA paid for newspaper ads to appear in local newspapers which are part of COMWT (See Newsletter from CPASA Fall, 2004).

Public meetings/out reach efforts

The group's activities and communication efforts were successful in changing the awareness and attitudes of the public in disputing the sale of the ASA. The group has also been able to create a sense of "community" that spans the entire region given that the ASA covers a significant area of the state. Organizing public meetings was considered important prior to the formation of CPASA. As a member explained, "It started out as a Johnson County group and we have several hundred members. And what happened is we'd hold monthly meetings and we'd try to keep people informed to know where we stood in the courts. And we continued to grow. We raised funds over these past several years and just six months ago we retained an attorney."

As one member involved in the early process of organizing to dispute the sale of the water explained, "Initially, I think at our first meeting we had a lot of people. We got the word out as to what was going on. Early on the attitude was, 'Ah, hell nobody is going to wanna take it two-hundred miles.' Then it was, 'Well there is nothing we can do about it. Money always wins.' Then you go back to who put their head in the sand. A lot of attitudes have changed..." One respondent described a related a story about the use of a famous local eatery to attract attention, "There is just a nucleus of people. We had a meeting at the Pontotoc Technology Center and I said, 'we have got to get people to come.' At previous meetings at Ardmore and Durant, there was just a hand full of people. We have got to get people to come here. I went to Bob's Barbeque, which is very

good barbeque to get people to come, and I asked how many people do you think we will get. So I said 'Barbeque for a 100 people.' We got over 250."

When asked to evaluate their effectiveness, another respondent explained,

"I would say in two ways. One, what it's done is get tremendous community involvement, bringing together of a lot of people in the same space in the same place with a shared sense of mission. And, so that in itself is constructive. It just has created a kind of life and kind of vitality in the community, but in a very directed kind of way. We had subcommittees that would work on briefing papers so there would be a story in the Daily Oklahoman or something on the news. We would produce handouts that presented our side of the story, and then there would be an effort to go to the legislature and put those documents in the hands of everybody. And coaching of people on how to affect the legislature."

The use of organized public meetings served the function of educating the public. According to the data, the meetings were seen as successes with regards the goal of educating the public. As one respondent explained, "Yes, because they had speakers come in. One in particular came from a different part of the country and talked about the aquifer in their area. And so, just hearing that these are kind of unusual circumstances was helpful. Most of the people, when you talk of getting water from the aquifer, have no idea what you're talking

about." Another citizen agreed, pointing out specific persons within the group being especially influential and informative by suggesting, "Further education...I know (name) was head of two programs. Further education creates a good turnout, especially when they are in Tishomingo, the turnout is reasonable. We have had one regional wide meeting here in Ada on March 10, 2003. It was a very good turnout." Another respondent agreed by explaining, "But...knowledge is growing. And I tell you what, it's growing more because of the CPASA group out of Tishomingo and the Ada Water Resource Board. Those people at Tishomingo are very active, very dedicated and their mission and their message are spread over all seven counties. They have been effective." A respondent summarized CPASA's effectiveness, "I think they've been very positive as far as their message and what they want to do and why they think it's important."

Using media and other means to get the message out

CPASA was very effective at using the media to get the message out. The group took advantage of both the local and state-wide media contacts to help frame their campaign. As one member explained, "We made a lot of contacts. People from Tishomingo came there. It started getting some press. We decided we needed to get a bunch of people together and protest these permits. Other members also emphasized the importance of the press to getting the message out. As one member explained, "We didn't have any trouble getting volunteers. I'd put up a column in the newspaper and I'd say, you know, 'We're leaving out

from the community center here in Tishomingo. We're leaving out from this place in Sulphur; we're leaving out from this place in Ada'. And I had people helping from Durant. We finally wound up having lots of active people and having lots of support to get people mobilized." Other members agreed that the media was very responsive and ultimately helped crystallize the group's message. As one respondent explained, "Our editor at the newspaper has been phenomenal. I mean, he has really worked to keep people informed and it's quite unusual to see that kind of information put out week after week after week, and many times at great expense to him." Another group member agreed, saying "It was getting close to time for the hearing and nobody seemed to be doing anything. I went down and told the newspaper editor that I was going to call a public meeting. I asked if I could I run a piece in the paper? And I did."

The group also produced a video that was aired on local television. The video appears to have resonated with the local public. One respondent directly referred to the video when asked about how she heard about the issue. She explained, "Matter of fact, today I actually saw a video of theirs. It was very to the point, you know. It's like you don't want to hurt industry or things from growing, but at the same time you don't want to hurt the communities that depend on such a vital source."

CPASA also took advantage of the internet to disseminate their message.

Drawing upon technical resources within their organization, CPASA developed a web site, www.arbsimaquifer.net. The web site contains current information on the activities of CPASA and provides links to government agencies, members of

the state legislature, and other relevant information regarding the movement.

The website also has information regarding future meeting times and places.

The group also relied on basic door-to-door activities to get the massage out. A member describes how they engaged the local community in the fight to save the ASA stating, "When I told her what we were trying to do to save the aquifer she was all for it, and so people would come into her little gift shop and she would sit down with them. She would tell them what they had to do and what they had to fill out." This person continued with an account of the success of this simple approach to reaching out to the general public and disseminating information through reaching out to local businesses, "I could find some businesses here in Ada that would be willing to put these forms out and get people to sign them." This person continued by explaining, "And he left me 500 forms to get out to these businesses. And I think we probably got more than that filled out because...because there was a lot of interest and a lot of participation..."

Other interviewees pointed out efforts to educate students and other younger members of the community as an important component to the movement. CPASA made efforts to influence those groups that may not be voters or political participants. The group was attempting to inform members of the public who are not yet participants, with the goal of changing attitudes regarding the use of the resource in the future. One group member explained how a leader of CPASA took charge this activity

"He has been working very hard and he has been working with the students. He seems to motivate the students. They where at this particular meeting and they have the t-shirts. Yeah, and they where really influenced and I think that is good. I think you need to involve the young people because this is their future."

CPASA's efforts have also been able to reach out to other communities and bridge their activities over a common cause. The water issue has had the effect, according to group members of providing a common theme around which to mobilize. As this member explained, "There is activity from each community. It's the level that differs. Ada, I think, is very active with CPASA. Durant is not near as active as a lot of us wish they could be. Ardmore has an interest and Ardmore's interest is growing because of Turner Falls. Then you have the people that are sitting right on top of the aquifer, which would be Davis, Sulphur and Wynnewood. So, the interest is growing, the cooperation is growing, the knowledge is growing, but believe me, it's interesting!" Thus, the threats to the ASA have effectively mobilize various community members around a common cause.

Working Within the Political System

This section examines the effectiveness of CPASA in accessing and influencing the local and state political structure. The ability to effectively access and utilize the political opportunity structure through direct contact with policy

makers is an important aspect of a social movement's eventual success. I highlight the effectiveness of the group in marshaling and mobilizing resources to this end, an important aspect of a social movement's success in achieving their goals. The political focus of the group was the passage of SB 288. Most of this section will deal with the group's political activities in the context of this legislative issue. Other political outcomes were considered to be related to the passage of SB 288. These outcomes will also be discussed in the context of CPASA's ability to gain favorable access to the political environment.

CPSA has been able to contact and cultivate positive relations with several political actors and their lobbying efforts have been documented in this study. The ability to mobilize members and use the leadership of the group to access and influence relevant state lawmakers has been a key tool of the group in realizing the goals of the group. The group was able to go beyond the state and local political structure, and create an environment for federal involvement in the dispute.

The first and perhaps the most important aspect of the group's activity that I will discuss is the group's ability to mobilize members and directly lobby state government. The second area to consider will be the willingness, responsiveness and assistance of members of the state government gave to the group as a result of the group's efforts. A third area to be examined will be the effect the group had on policy makers and other influential policy experts in bringing the issues to light, and the policy makers opinion of the effectiveness of the group in doing so.

Lobbying Government

CPASA was very active in lobbying the state legislature in support of SB 288. The group was led by a few members who had extensive experience with direct contact and actual face to face meetings with members of state government. The interview data clearly indicate that key members were able to gain access to the political establishment. The group worked diligently with the resources they had available to influence key politicians. As one member described the group's efforts, "Well their resources are not what we all wish they where. I guarantee you when Senate Bill 288 came up, CPASA were standing on the marble floors in the state capitol. I mean we split up into groups of three. There was not an office...not a representative or senate office that we didn't cover." Another member highlighted the group's success in garnering political support, "I think it is a great group... it seems to be really well organized. They have a lot of political They can get some things done. They got this legislation passed in a matter of minutes, which to me was totally amazing." Another respondent notes the combination of skills and approaches the group employed that helped the group become quite formidable in lobbying the state legislature. In regards to the organized response to legislation, the interview data reveal that the group relied heavily on key leadership positions within the organization to inform the other "rank and file" members on the on-going need to mobilize and lobby politicians.

Gaining access to the political establishment required extensive commitment from CPASA members. As one respondent explained, "I've done a little bit of

politicking in the past, mostly intercity yard signs and going to rallies and managing some phone banks and things like that. But this is the most intense, hands on, day to day kind of experience. It really consumed us for a year and half. Another group member added that the experience, while exhausting was fulfilling and raised his awareness by saying, "Yeah right, and it was very time consuming and very absorbing but really very rewarding. I mean in the sense of my awareness, into the way the political system works. And the way the process works that I'd never had before." CPASA also brought in other groups to support their political campaign. As one respondent explained, "I didn't ever go up with CPASA. I know someone had to because if any group, whether it be a group of concerned citizens or like my Pontotoc County Retired Educators, we're going up there in a few days to lobby. Water would always be part of that discussion. When I had 50 of them with me the other day at the Elks Lodge, you'd ask them about the water, and they would say, 'Yeah I'm concerned about the water,' and whether we're going to have good clean water. Most of them are locals and they get water from the aquifer."

Responsiveness of Policy Makers

The findings suggest that CPASA regarded the state legislature to be critical to their campaign. The data suggest that members were willing to negotiate SB 288 through the legislative process that proved to be difficult and at one point, efforts were made that threatened to kill the legislation. But, through their on-

going efforts they managed to secure the passage of SB 288. As a result, CPASA was also able to create an environment that allowed for federal involvement in the dispute.

CPASA successfully tapped into key members of the state legislature who were instrumental in the passage of SB 288. The data also suggests that the most responsive members of the state legislature were those who represented districts that were directly tied to the ASA. As one member explained, "The representative that we have here and the representative in Sulphur/Davis area were particularly responsive. (Name) was quite a leader, quite a follower, he was quite formidable...I mean he was a very intelligent man, very honest. He was the Speaker of the House. I don't think he ever did a thing to gain a penny in his The data also suggest that members of the state legislature who did not represent districts with a direct connection to the ASA were responsive as well. One member of CPASA explained, "I believe it probably didn't help him in any way. He just did it because it was the right thing to do." Other members of the group also felt that through their efforts and contacts within state government they were able to gain bipartisan support for SB 288, which is no small achievement in the state legislature. This member argued that, "We didn't have much trouble. We got Republicans and Democrats to vote for us. I don't know what you could attribute that to, but regardless I had a great response. We didn't the have votes for this bill on the morning before they voted on it. I went and talked to (name). I have known him for years and years as former director of parole board."

Members of CPASA explained that certain state legislators who were directly involved in the legislative process were able to effectively navigate the difficulties regarding opponents to SB 288. One attempt to sabotage SB 288 attaching centered on attaching abortion language to an amendment to the bill. As one respondent explained, "Well, in a deal he gave it to a group and they put some pro life language in it. When that hit the schedule and that was going to come to the floor he had Oklahoma City, African American, Liberal, Democrats who came to (name) and says you either kill that bill or we're gonna vote against your 288." CPASA members argued that leaders of CPASA were mindful of the need to be "careful" as the legislative process unfolded. They understood that the political landscape was tenuous, and that the vote count was close. The perception that CPASA was aligned with "liberal" issues was a concern. As a member explained, "Because this is what we are here for. We don't want to dilute our purpose. We don't want to cause them to see us as being "pro" something else." Another member realized that support from certain outside groups might serve to undermine the passage of SB 288. This respondent, referring to a well known lobbyist argued, "And you know (name) said you got to be careful. I don't know whether he helps your case or not. He pushes some kinds of issues. And the Sierra Club too has sort of aligned itself with. This is a sort of a 'Liberal Politics' and you have to be careful in this state legislature." CPASA members understood the need to be sensitive to the "interests" of legislators in other regions of Oklahoma where water usage could be of great importance in the future. The interview data indicate that this concern was part of the broader

strategy of the group. As one member argued, "And at the last meeting (name) basically took us to task for saying you cannot be politically centered. You've got to understand the political concepts, and we cannot afford to lose support of the Democrat representatives in Western Oklahoma. You know they need water."

CPASA and its leadership demonstrated a high level of political acumen during the legislative process. In addition, they able to secure votes, successfully lobby members of the state legislature, and avoid being associated with what are considered "extremist" groups. In addition, they and successfully dealt with legislative tactics designed to undermine the passage of SB 288.

CPASA was able to go beyond the state government and attract members of the U.S. Congress to become involved in the passage of SB 288. One of the features of SB 288 was a feasibility study. The study would be quite expensive, and funding became an immediate issue. An Oklahoma congressman responded with securing the necessary dollars to underwrite the feasibility study

While CPASA celebrated a tremendous victory with the passage of SB 288, they realized how tenuous the political process can be in Oklahoma. Members of CPASA expressed caution regarding the continued success of the group and getting legislation passed in their favor. They acknowledged the reality that the composition of the state legislature may be different in composition in the near future, and this could have a negative impact on the fate of the ASA. This respondent warned, "I think that politics are going to enter into it and that concerns me. The other thing that really concerns me is the fact that. We have limited terms now. And we do not have any 'institutional memory' and it scares

me. I can see that we are sending people to the house and to the senate in Oklahoma that plan on being there for twelve years and then they're going someplace else. The immediate kind of decisions that they make, what plays, what becomes bigger to them. Things like money. Groups that are organized and give electoral assistance might influence things. It makes you think, 'What am I going to do at the end of that twelve years'. Well, I got to look down the line and I want to be sure I have a job over here with _____ Oil or ____ Energy or whoever. I start thinking...all I mean that's something that bothers me."

A CPASA member tied the future success of the campaign to the legal interpretation of SB 288. Depending on how the courts interpret the bill, a negative response may come from a newly constituted state legislature. A respondent suggested that, "If the Supreme Court kicks out Senate Bill 288 it'll be very interesting to see whether they still have that tilt in our direction... The respondent continued by stating, "But at least for this issue, for the first time, in Oklahoma history there is now a legal connection between groundwater and surface water that can be considered when making those decisions." As the respondent notes, the success in the passing of SB 288 centered not only on the ASA, but the ultimate interpretation that ground water is connected to surface water.

Chapter conclusions

This chapter sought to describe and analyze the competing perspectives regarding the sale of the water from the ASA. Various viewpoints, concerns, claims, and disputes emerged through the investigation. The interview data has been rich with information regarding the positions taken by the primary stakeholders in this dispute. I will briefly summary the successes and failures of the two main groups involved in the dispute: the landowners wishing to sell the water and the community activists that organized to oppose the sale of the resource.

The landowners presented a clear and simple position regarding their right to sell the water. Their position was based on the belief that the water is theirs by virtue of land ownership, and that and attempts to sell the water for financial gain are part of their individual "property rights." The landowners were not successful, however in articulating this to the broader general public. The landowners lacked an effective organization to marshal resources in order to press for the sale of the water. In addition, the landowners were not able to mount a successful effort to defeat SB 288.

Those opposed to the sale of the water from the ASA were organized primarily around CPASA. This organized group articulated a series of effective frames around which they opposed the sale of the ASA. These themes resonated with the public. The group successfully garnered political support and

their lobbying efforts led to the passage of SB 288, which placed a moratorium on the sale of the ASA.

CPASA demonstrated a high degree of organization. They established effective leadership within the group and they capitalized on existing political ties. They worked tirelessly to lobby state and local political officials, and these efforts paid off in the end. The group also capitalized on various media outlets to get their message out to the broader public. As a result, they garnered support from key politicians, members of the scientific community, and the general public.

Through out this on-going dispute, evidence of "corrosive impacts" on the broader community is mixed. There are definite corrosive impacts in terms of the division between the landowners and the opponents to the sale of water. The acrimony between these two groups is obvious and it is not likely to subside in the near future. On the other hand, there appears to be serious therapeutic impacts within the broader community. As noted, residents from various counties and cities came together in their common struggle with the landowners. Residents forged alliances with other organizations (i.e. environmental groups) and with local and state politicians. In the next chapter I explain these issues in greater detail.

Chapter five

Conclusion

Major Findings

The dispute involving the sale of water from the ASA splintered community residents into two factions: the proponents for the sale of the water and those who wished to preserve the resource. The dispute involving the ASA is on-going and the impacts are not likely to be fully realized for several years. However, this study reveals several themes regarding natural resource disputes. Importantly, there are implications for the debate regarding "community impacts." I first summarize the major findings from each side of this debate. I then discuss broader implications for the literature on natural resource disputes and for social movement theory. Finally, I discuss some of the study's limitations.

The opposition

Those who opposed the sale of the water formed a social movement organization, Citizens for the Protection of the Arbuckle Simpson Aquifer (CPASA) to protect the aquifer. This group started as a small, local group but evolved into a powerful organization with political allies. The group grew to an

estimated five-hundred members during the course of this investigation. They expanded their geographic recruiting base, successfully used the media to articulate their positions, developed a web site, and effectively mobilized resources for their campaign. The group was able to take advantage of skilled and experienced leaders with professional backgrounds in hydrology, agriculture, wildlife and politics. Additionally, the group had large numbers of rank and file members who honed their skills under the tutelage of experienced leaders. They were able to effectively lobby the state legislature to stop the sale of the water from the ASA. The group's major success was the passage of SB 288, which placed a moratorium on the sale of the water to areas outside the five-county basin.

The opposition to the sale of the water was framed in several ways. The claims made by the opposition included: "ecosystem health and beauty," "economic greed" and "diminishing culture." The "recreational use" frame addressed threats important to recreational issue associated with the ASA, the Chickasaw National Recreation Area and Turner Falls. Both are icons of Oklahoma tourism, and they could both be negatively affected by the sale of the ASA. The frame of "diminishing culture" emerged through concerns regarding threats to "way of life" or "quality of life" tied to the ASA. An important frame developed regarding the "collective good." This perspective held that the ASA was a "public" or "common" resource that should be preserved for the benefit of the broader public These framing strategies were effective in garnering much needed public and political support for their opposition to the sale of water.

The proponents

Those who supported the sale of the water were a small group of landowners with Arbuckle-Simpson Aquifer water under their land. This group also attempted to frame the sale of the water in a way that would resonate with the broader public, but they were only able to garner limited support from the general public.

The dominant theme that emerged from my analysis regarding the sale of the water was relatively simple: the water was their property, and therefore restrictions on the sale of the water were in violation of basic individual property rights. I termed this the "private property rights" frame. Other frames emerged as well. Proponents also used the "valuable resource" frame, which argued that it was irresponsible to restrict the resource and in effect harm other citizens. Proponents also evoked the "financial revenue frame," which focuses on the profits that could be brought into the region. Proponents used the "appeal to ignorance frame" to explain how opponents are misleading members of the general public regarding the threats related to the sale of the ASA. Proponents also used the "under use frame," which argued that it was essentially wasteful not to sell the valuable resource. Finally, proponents used an "altruistic frame" to argue that other communities needed the water from the ASA.

The pro-sale group had limited formal organization. The landowners did attempt to lobby members of the state legislature, but most of this was done as individuals rather than as an organized group. The proponents of the sale of water lost in their bid to defeat SB 288, although it passed by a very slim margin.

The group did marshal legal resources to sue the state of Oklahoma on the grounds that SB 288 was unconstitutional. However, these efforts also failed.

Implications of this Study Regarding the Literature on the Community Impacts of Natural Resource Disputes and Social Movements

In this section I will discuss some of the implications of my study regarding the literature on the community impacts of natural resource disputes, and social movement analysis. The case of the ASA is highlights several important aspects of the community impacts of natural resource disputes. In addition, my analysis of the ASA dispute reveals several features found in social movement literature.

Community Impacts and Natural Resource Disputes

The ASA dispute centers on the world's most valued natural resource, water. The idea that "you can't drink oil," and by implication coal, gold, or any other valuable resource was a recurring theme throughout my investigation. The sale of water from the ASA is currently being blocked, but this is consistent with historical tradition in the region. In fact, the water from ASA has never sold to parties outside the basin. Most often, natural resource disputes involve a more acute threat to a resource. With the ASA dispute, this is not the case. The communities mobilized in an effort to protect the resource prior to it being sold. The manner in which the citizens developed and expressed positions regarding

possible negative impacts due to the sale of the water provided a rich insight into the citizen's awareness of the need to protect the ASA.

The literature on corrosive or therapeutic impacts has primarily developed in the context of chronic technological disasters or naturally occurring disasters. Interestingly, the case of the potential sale of water from the ASA doesn't fit neatly into this category of events. However, I believe that the literature regarding corrosive and therapeutic impacts is made applicable to a "potential" environmental crisis, such as the possible depletion of the ASA as a result of the sale of the water.

The dispute regarding the ASA, as with other conflicts over natural resources, has the potential to produce either "therapeutic" or "corrosive" impacts on the effected community. These disputes have the potential to factionalize a community. The emergence of a complex array of claims regarding a "potential threat" caused a fracture within the community. Disputes over a "potential threat" to a resource may also have some therapeutic elements, as was seen in the case of residents forming an active and effective social movement organization, CPASA.

The notion of corrosive impacts on the community argues that communities are torn and disrupted based on competing claims. The presence of competing interpretations of the problem, conflicting ideas over solutions to the problem, and debates over who to blame are all opportunities for disputes and dissension. In the case of ASA, the policy solutions that have been mandated by SB 288 have certainly not been free of criticism. The study that was commissioned by

SB 288 that will form the basis of a long-range plan is perceived by some to be excluding citizens from the process. The perception that the process was not satisfactorily inclusive was repeated throughout my investigation. Other responses from the interview data indicated that the process was overly complicated. A lingering problem that the entire area will have to deal with at some future time is the outcome of the five-year study currently in progress that is being conducted by the OWRB regarding recharge rates of the aquifer. The five-year study is nearing the end of year three, and the findings of the study may lead to more divisiveness between community members, municipal and residential users, and members of CPASA. Thus, there is certainly strong potential for additional disputes and animosity in the future.

An issue that came to light late in the investigation of this dispute concerns a new threat to the resource. The threat comes from a mining operation that has leased land over the ASA to drill and quarry limestone from the area. This threat may contribute to new and emerging disputes over the resource. In the quarrying process, vast amounts of water will be pumped out of the ASA to make way for equipment to retrieve the limestone. There is widespread concern that the quarrying process will be much more harmful to the ecological health of the ASA than the landowner's attempts to sell the water for profit.

While the community impacts associated with the ASA are largely corrosive, there were some therapeutic elements. As mentioned, the community did come together to form a strong alliance in their opposition to the sale of ASA. They formed a successful social movement organization, CPASA, and they effectively

mobilized a large support base. Interestingly, by identifying a "common foe" in the landowners attempting to sale water they developed a strong sense of "collective identity" and a common set of goals to accomplish.

An interesting finding regarding natural resource disputes emerged from this research. This dispute could be viewed as a variation of the "Not in My Back Yard" (NIMBY) phenomenon, which is often found in environmental cases. With the case of the Arbuckle Simpson Aquifer, the dispute involves the potential removal of a resource from the "backyard" of a community. Community resistance to the removal of a valued resource may be referred to as the "Taking Out of My Back Yard" (TOMBY) phenomenon. Future research can determine the extent to which TOMBY cases exhibit similar characteristics and community responses regarding potential threats to their valued resources.

Implications for Social Movement Theory

This research also has implications for social movement theory. Most importantly, it highlights the importance of the framing perspective in cases when communities are divided over natural hazard disputes. Additionally, this research demonstrates an important link that exists regarding communities in framing grievances, mobilizing resources, and accessing political institutions. This research demonstrates that these three perspectives are integrated and in many ways interdependent. The successful framing of issues on the part of CPASA led to garnering important resources to press their campaign to stop the sale of

the water. The successful mobilization of resources allowed the group to be influential in affecting the political process. This study also demonstrates that it is important to consider movement framing as an important "resource" in shaping social movement outcomes.

The framing of the ASA by the respective competing groups was critical in shaping community support and recruiting membership to CPASA. Framing played a large role in attracting new supporters, attracting attention from political actors, and influential members of the scientific community. The opponents of the sale of water effectively framed the threat the sale posed to the broader community. The loss of the water and the "greed" of the landowners attempting to sell the water were the perspective that CPASA relied on the most. These frames enabled the opponents to accomplish almost all of their goals in shaping the social and political agenda. The framing project of the opponents was able to elevate the issue to the point that the ASA has become a central plank in all local political campaigns.

The frames developed by the proponents of the sale of the water were not well-developed. The most common frame offered by the proponents was that the water was part of an "individual property right." However, this frame did not resonant with the broader community. The proponents were not able to gain adherents, expand membership, or accomplish most of the goals of a successful framing project.

While both sides of the debate attempted to frame the sale of the water in order to gain support for their respective positions, clearly CPASA was far more

successful. In particular, the frames of "economic greed," "diminishing culture," and "ecosystem health and beauty" resonated with members of the broader public and with elected officials. Despite their efforts, proponents failed to convince the public that the sale of the ASA have collective benefits for the region. In the end, many people simply saw this issue as one of greed on the part of landowners.

This research also highlights the relevance of resource mobilization theory and political opportunity perspective. In terms of resources, the opponents of the sale of the ASA were clearly able to garner more resources. CPASA was effective in building a significant membership base. They were highly organized and they solicited a skilled group of leaders within the group, who were able to successfully mobilize support. In addition, the members effectively lobbied members of the state legislature. CPASA was able to orchestrate large-scale public meetings, create and maintain an effective web site, and use the local media for getting their message out to the broader public. The proponents of the sale of the ASA were not able to mobilize resources on the same scale as CPASA. Importantly, proponents were unable to organize a formal group. As a result, they were not able to garner resources or present a "unified" position to the general public. As noted, most of their organizing was done on an individual level. Therefore, they lacked the much needed support base and they received far less media attention.

CPASA was also able to garner significant political support, which proved to be critical in shaping their campaign. The leadership of CPASA had members who were very skilled and experienced in operating within the political environment. One leader in particular served in state government for several years, and had extensive experience as a lobbyist. This experience and access to the political system proved to be absolutely critical in advocating the passage of SB 288. CPASA was also able to gain allies amongst other political groups, notably the Oklahoma chapter of the Sierra Club. This alliance connected CPASA to other lobbyists at the state capital, which while not a central part of the group's tactics in contacting state government, represented the group's ability to expand their access to political structures. CPASA was able to cultivate and capitalize on relations with several members of the state legislature, and these relationships were able to improve the group's effectiveness in passing SB 288. Additionally, CPASA was successful in using the courts to advance their agenda. As noted, this success was highlighted when legal challenges to SB 288 were negated.

Proponents for the sale of the water were much less effective in accessing the political system. The proponents did attempt to lobby the state legislature, but they were not successful in defeating SB 288. Proponents did attempt to use the courts as a way to defeat SB 288, but as mentioned, these efforts failed.

Limitations of the Study

While the findings of this study offer several contributions to the literatures on social movements and natural resource disputes, there are limitations. Most

important, the study examines a single case study: the dispute over the sale of water from the Arbuckle Simpson Aquifer. While the findings are certainly "relevant" for other similar cases, the findings are not generalizable. The political and social environment of southeastern Oklahoma cannot necessarily be generalized to other regions that may be dealing with a similar dispute.

Other limitations include the relatively small sample size gathered for this study. While the interviews were in-depth and provided rich data, the sample size was limited. In addition, the findings of the study could be bolstered by an extended period of data collection. Data collection for this project took part over a twelve month period. However, the controversy is on-going. Some form of longitudinal data collection could add further insight.

Future Research

As noted above, there is considerable research to be done on the Arbuckle Simpson Aquifer dispute. For instance, what will be the impacts on the community when the five-year study is completed and policy decisions are made? What will be the future impacts associated with the mining operation in Mill Creek? Will the pro-sale group be reenergized if the political landscape changes? Importantly, a survey research project using a representative sample could illuminate additional insight into the case. For example, what percentage of the regional population supports the sale of the water? This qualitative case study could provide a solid foundation upon which to build a quantitative

assessment of the dispute. Another direction for further research could be the development of a comparative study between the ASA and other similar natural resource disputes. This comparative analysis would allow us to look for consistent themes which may emerge in natural resource disputes cases.

Bibliography

- Aronoff, Marilyn and Valerie Gunter. 1994. "A Pound of Cure: Facilitating Participatory Processes in Technological Hazard Disputes." *Society and Natural Resources* 7: 235-252.
- Aronoff, Marilyn and Valerie Gunter. 1992. "Defining Disaster: Local Constructions for Recovery in the Aftermath of Chemical Contamination." *Social Problems* 39 (4): 345-365.
- Barton, Allen. 1969. Communities in Disaster: A Sociological Analysis of Collective Stress Situations. New York: Doubleday.
- Beasley, Lone'. 2004. "Water use Planning is Vital to our Future" *Ada Evening News* Editorial May 26th.
- -----. 2004. "Water Woes". Ada Evening News May 24th.
- Benford, Robert D. 1997. "An Insider's Critique of the Social Movement Framing Perspective." *Sociological Inquiry* 67 (4) pp. 409-430.
- Benford, Robert D. and Scott A. Hunt. 1992. "Dramaturgy and Social Movements: The Social construction and Communication of Power." Sociological Inquiry. 62: pp. 32-55.
- Berkenbus JN, Peretz JH, Rubin JD. 1996. "More on the Agenda". *Social Science Quarterly* (77), pp. 516-519.
- Busby, Phillip. 2004. Letter to the Editor. Ada Evening News. November 2nd,
- Cable Sherri, Cable Charles. 1995. Environmental Problems and Grass Roots Solutions: The Politics of Grassroots Environmental Conflict. St. Martins Press, New York.
- Cable, Sherry and Thomas E. Shriver. 1995. "Production and Extrapolation of meaning in the Environmental Justice Movement." *Sociological Spectrum* 15: 419-442.

- Cable, Sherry, Edward W., & R. Warland. 1988. "Differential Paths to Political Activism: Comparisons of Four Mobilization Processes after the Three Mile-Island Accident." *Social Forces* (66), pp. 951-969.
- Campbell, Brian. 2004. "Water Critical to Ada Area." *Ada Evening News* editorial. August 22nd.
- Capek, Stella M. 1993. "The Environmental Justice Frame: A Conceptual Discussion and Application." *Social Problems*. 40:5-25.
- Citizens for the Protection of the Arbuckle-Simpson Aquifer. 2004. "Annual Report from the President". Internal newsletter.
- will we get Our Water in 2010?"." Brochure material.
- Couch, Stephen R. and Steve Kroll-Smith. 1985. "The Chronic Technical Disaster: Toward a Social Scientific Perspective." Social Science Quarterly 66: 564-575.
- Stephen R. Couch and J. Stephen Kroll-Smith, Eds. New York: Peter Lang. Pp. 83-111.
- Diani, M. 1996. "Linking Mobilization Frames and Political Opportunities: Insights from Regional Populism in Italy." *American Sociological Review* (61), pp. 1053-1069.
- Editorial. 2003. "No Rush to Judgement" July 14th.
- Edelstein, Michael R. 1988. Contaminated Communities: The Social and Psychological Impacts of Residential Toxic Exposure. Boulder, CO: Westview Press.
- Emerson, Robert M. 1983. Contemporary Field Research A Collection of Readings. Waveland Press, Prospect Heights, Illinois.
- Erikson, Kai. 1994. A New Species of Trouble: Exploration in Disaster, Trauma, and Community. New York: W.W. Norton.
- Erikson, Kai. 1991. "A New Species of Trouble." Pp. 11-29 in *Communities at Risk*: *Collective Responses to Technological Hazards*, edited by Stephen R. Couch and J. Stephen Kroll-Smith. New York: Peter Lang.
- Ferree, M. M. & F Miller. 1985. Mobilization and Meaning: Toward an Integration of Social Psychological and Resource Mobilization Perspectives on Social Movements. *Sociological Inquiry* (55), pp. 38-51.

- Fairchild, Roy W., Ronald Hanson, and Robert Davis. 1990. "Hydrology of the Arbuckle Mountains Area, South-Central Oklahoma." Oklahoma Geological Survey: Circular 91. The University of Oklahoma Press.
- Freudenberg, William. 1997. "Contamination, Corrosion and the Social Order: An Overview." *Current Sociology* 45 (3): 19-39.
- Freudenberg, William and Timothy R. Jones. 1991. "Attitudes and Stress in the Presence of a Technological Risk: A Test of the Supreme Court Hypothesis." *Social Forces* 69: 1143-68.
- Freudenberg, William. 1997. "Contamination, Corrosion and the Social Order: An Overview." *Current Sociology* 45 (3): 19-39.
- Fritz, Charles. 1961. "Disaster". In: *Contemporary Social Problems*. Robert Merton and Robert Nisbet, eds. New York: Harcourt, Brace and World.
- Gale, R. P. 1986. "Social Movements and the State: The Environmental Movement, Countermovement, and Government Agencies." *Sociological Perspectives* (29), pp. 202-40.
- Gamson, William A. and Gadi Wolfsfeld. 1993. "Movements and Media as Interacting Systems." *The Annals of the American Academy of Political and Social Science* (528) pp. 114-125.
- Gamson, William 1992. "The Social Psychology of Collective Action." In *Frontiers of Social Movement Theory*. Aldon Morris and Carol Mueller, eds., Yale University Press New Haven Connecticut. (pp. 53-76)
- Gamson, William, B. Fireman, & Steven Rytina. 1982. *Encounters With Unjust Authority*. Homewood: Dorsey Press.
- Glaser, Barney G. and Anselm L. Strauss. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Aldine De Gruyter, New York.
- Goffman, Erving. 1974. Frame Analysis. Cambridge: Harvard University Press.
- Goodman, Patricia G., C. Edwin Vaughan and Derek Gill. 1992. "Relocation or Proximity? Major Factors Associated with Prolonged Impact Following Dioxin Contamination and Flooding in Missouri." *International Journal of Mass Emergencies and Disasters* 10 (1): 115-132.
- Gunter, Valerie J., Marilyn Aronoff and Susal Joel. 1999. "Toxic Contamination and Communities: Using an Ecological-Symbolic Perspective to Theorize Response Contingencies." *The Sociological Quarterly* 40 (4): 623-640.

- Hinton, Mick. 2006. "State Supreme Court Upholds Law Limiting Water Sales." *Tulsa World.* May 24.
- Israel, Barbara A., Amy J. Schultz, Edith A. Parker, and Adam Becker. 1998. "Review of Community-Based Research: Assessing partnership Approaches to Improve Public Health". *Annual review of Public Health*. 19: 173-202.
- Klandermans, Burt. 1984. "Mobilization and Participation: Social-Psychological Expansions of Resource Mobilization Theory." *American Sociological Review* (49) pp. 583-600.
- Kreps, Gary A. 1984. "Sociological Inquiry and Disaster Research." *Annual Review of Sociology* 10:309-30.
- Krogman, Naomi T. 1996. "Frame Disputes in Environmental Controversies: The Case of Wetland Regulations in Louisiana." *Sociological Spectrum* 16: 371-400. Levine, Adeline G. 1982. *Love Canal: Science, Politics, and People*. Lexington, MA: Lexington Books.
- Kroll-Smith, Stephen R. Couch and Adeline G. Levine. 2002. "Technological Hazards and Disasters." Pp. 295-328 in *Handbook of Environmental Sociology*, edited by Riley E. Dunlap and William Michelson. Westport, Connecticut: Greenwood Press.
- Kroll-Smith, Stephen R. and Valerie J. Gunter. 1998. "Legislators, Interpreters, and Disasters: The Importance of How as Well as What s a Disaster." Pp. 160-176 in *What is a Disaster?: Perspectives on the Question.* New York: Routledge.
- Levine, Adeline G. 1982. Love Canal: Science, Politics, and People. Lexington, MA: Lexington Books.
- Lincoln, Yvonna S. and Egon G Guba. 1985. *Naturalistic Inquiry*. Newbury Park, California.
- Luloff, Al E. 1990. "Communities and Social Change: How Do Small Communities Act?" Pp 214-277 in *American Rural Communities*, edited by A.E. Luloff and L. Swanson. Boulder, CO: Westview Press.
- McAdam, Doug, John D. McCarthy, and Mayer N. Zald. 1996. "Introduction: Opportunities, Mobilizing Structures, and Framing Processes-Toward a synthetic, Comparative Perspective on Social Movements." In McAdam, Doug, McCarthy, John D., and Zald, Mayer N: Eds Comparative Perspectives on Social Movements: Political opportunities, Mobilizing

- Structures, and Cultural Framings; Cambridge University press: England, pp. 1-20.
- McAdam, Doug. 1996. "Movement Strategy and Dramaturgic Framing in Democratic States: The Case `of the American Civil Rights Movement." Research on Democracy and Society (3) pp. 155-176.
- McCarthy, John D. 1996. "Constraints and opportunities in Adopting, Adapting, and Inventing." In McAdam, Doug, McCarthy, John D., and Zald, Mayer N: Eds Comparative Perspectives on Social Movements: Political opportunities, Mobilizing Structures, and Cultural Framings; Cambridge University press: England, pp. 141-151.
- McCarthy, John D., Jackie Smith, and Mayer Zald. 1996. "Accessing Public, Media, Electoral, and Governmental Agendas." In McAdam, Doug, McCarthy, John D., and Zald, Mayer N: Eds Comparative Perspectives on Social Movements: Political opportunities, Mobilizing Structures, and Cultural Framings; Cambridge University press: England, pp. 291-311.
- McCarthy, John D. and Mayer N. Zald. 1977. "Resource Mobilization and Social Movements: A Partial Theory". *American Journal of Sociology* 82 (6): pp. 1212-1240.
- McCarthy, John, Doug MacAdam, and Mayer Zald. 1996. Comparative Perceptions on Social Movements. Cambridge, New York.
- Moadell, M. 1992. 'Ideology as Episodic Discourse: The Case of the Iranian Revolution". *American Sociological Review* (57) pp. 353-379.
- Money, Jack. 2003. "Aquifer Answers Sought." The Oklahoman. July 9th.
- Morris, A. 2000. "Reflections on Social Movement Theory: Criticisms and Proposals". *Contemporary Sociology* 29 (3): pp. 445-454.
- Mueller, Carol. 1999. "Claim "Radicalization?" The 1989 Protest Cycle in the GDR". *Social Problems.* 46 (4): pp. 528-547.
- Oklahoma Water Resources Board. 2004. "Arbuckle-Simpson Hydrology Study". Newsletter, July.
- ----- 2004. "Arbuckle-Simpson Hydrology Study". Newsletter, January.

- Pellow, David. N. 1999. "Framing Emerging Environmental Movement Tactics: Mobilizing Consensus, Demobilizing Conflict". *Sociological Forum* 14 (4): pp. 659-683.
- Picou, J. Steven, Duane A. Gill, Christopher L. Dyer, and Evans W. Curry. 1992. "Disruption and Stress in an Alaskan Fishing Community: Initial and Continuing Impacts of the Exxon Valdez Oil Spill." *Industrial Crisis Quarterly* 6: 235-57.
- Pippen, Tony. 2002. "Ranchers Want Fair Treatment: The Role of the OWRB". Ada Evening News. May 28.
- ----- 2002. "Alternative Water Supply Explored for City of Ada". *Ada Evening News*. May 24.
- ----- 2002. "Byrd's Mill Spring Supplied Ada's Water Since 1911". *Ada Evening News*. May 23.
- ----- 2002. "Piping Water: How much is too much". *Ada Evening News*. May 23.
- ----- 2002. "Water Controversy: Who owns it and who wants it". *Ada Evening News*. May 21.
- ----- 2002. "Fresh Water: Are There Ample Supplies?" *Ada Evening News*. May 20.
- Pontotoc County Democrats. 2003. "Resolutions for Precinct Meetings" March 13th.
- Quarantelli, E.L. and Russell Dynes. 1977. "Response to Social Crisis and Disaster." *Annual Review of Sociology.* 3: 23-49.
- Rucht, David. 1995. "The Impact of National Contexts on Social Movement Structures: A Cross-National Comparison." In *Political Opportunities, Mobilizing Structures, and Framing: Social Movement Dynamics in Cross-National Perspective*, edited by Doug McAdam, John McCarthy, and Mayer Zald. Cambridge, MA: Cambridge University Press.
- Ryan, Charlotte. 1991. *Prime Time Activism: Media Strategies for Grassroots Organizing.* South End Press; Boston.
- Scalf, Dick et al. 2004. "Recommendations for Assuring the Water Supply of Ada." Draft memorandum. Ada Water Resources Board.

- Shriver, Tomas and Dennis Kennedy. 2006. "Contested Environmental Hazards and Community Conflict over Relocation." *Rural Sociology*, 70 (4) pp. 491-513.
- Smith, Jackie. 1995. "Transnational Political Processes and the Human Rights Movement". In *Social Movements: Perspectives and Issues.* Steven M. Buechler and F. Kurt Cylke, Jr., Eds. Mayfield Publishing, California.
- Schock, Kurt. 1999. "People Power and Political Opportunities: Social Movement Mobilization and Outcomes in the Philippines and Burma". *Social Problems*. 46 (3): pp. 355-375.
- Snow, David and Robert Benford. 1988. "Ideology, Frame Resonance, and Participant Mobilization." *International Social Movement Research* (1) pp. 197-217.
- Snow, David A. and Robert Benford. 1992. "Master Frames and Cycles of Protest". In: *Frontiers in Social Movement Theory.* Aldon Morris and Carol McClung, Eds. New Haven, CT: Yale University Press.
- Snow, David A., E. Burke Rochford, jr., Steven K. Worden and Robert Benford. 1986. "Frame Alignment Process, Micromobilization, and Movement Participation". *American Sociological Review*, 51 August, pp. 464-481.
- Spector, M, & J. Kitsuse. 1997. *Constructing Social problems*. Hawthorn, New York: Aldine de Gruyter.
- Stainback, Susan and William Stainback. 1988. "Understanding and Conducting Qualitative Research." Kendall/Hunt Publishers, Dubuque, Iowa.
- Strauss, Anselm and Juliet Corbin. 1990. Basics of Qualitative Research: Grounded Theory Procedures and Techniques. Sage Publications, Newbury Park.
- Stoecker, Randy. 1995. "Community, Movement, and Organization: The Problem of Identity Convergence in Collective Action. *The Sociological Quarterly.* 36 (1): pp. 111-130.
- Tarrow, Sydney. 1994. Power in Movement: Social Movements and Contentious Politics. Second edition. Cambridge University Press: New York.
- Tilly, Charles. 1978. From Mobilization to Revolution. Addison Wesley, Reading MA.
- United States Geologic Survey. 2003. "Arbuckle-Simpson Hydrology Study". Newsletter, November.

- Vallocchi, Steve. 1996. "The Emergence of the Integrationist Ideology in the Civil Rights Movement". *Social Problems.* 43 (1): 116-130.
- Walsh, Emmit. 1981. "Resource Mobilization and Citizen Protest in Communities Around Three Mile Island". *Social Problems* 26: 1-21.
- Webb, Gary R. 2006. "The Sociology of Disaster". In *The Handbook of 21*st *Century Sociology*. Clifton Bryant and Dennis Peck, eds. Beverly Hills, California: Sage.
- Yeager, Paul. 1987. "Structural Bias in Regulatory Law Enforcement: The Case of the U.S. Environmental Protection Agency". *Social Problems* 43: 330-44.
- Zald, Mayer N. 1996. "Culture, Ideology, and Strategic Framing." In McAdam, Doug, McCarthy, John D., and Zald, Mayer N: Eds Comparative Perspectives on Social Movements: Political opportunities, Mobilizing Structures, and Cultural Framings; Cambridge University press: England, pp. 261-274.
- Zavestoski, Stephen, Frank Mignano, Kate Agnello, Francine Darroch and Katy Abrams. 2002. "Toxicity and Complicity: Explaining Consensual Community Response to a Chronic Technological Disaster." *The Sociological Quarterly* 43 (3): 383

APPENDECES

Interview Guide

Introductory information

How long have you lived in South Central Oklahoma? Do you work in the community? Please describe your occupation. Do you have family that live and work in the area? How long has your family lived in the area?

General environmental issues

How would you describe the importance of the aguifer to the area?

When did you first learn about the water dispute?

How did you learn about the water dispute?

To the best of your ability, how would you describe the nature of the water dispute?

Do you believe that the resource should be managed? Please explain

How should the resource be managed?

Which part of the community will be affected the most by this dispute?

What do you consider to be the most important issues that have to be resolved regarding this dispute?

Community responses

Are community residents concerned about the water dispute? Please explain.

Are you a member of a group organized to respond to the dispute?

Have you attended any community meeting regarding the dispute? Please explain.

If you have, please describe the meetings.

Has there been any cooperation within the community to address water resource concerns?

Are certain groups at odds within the community over how to handle water resource issues? If so, please describe and explain these groups.

What are your preferences with regards to the management of the resource?

Resource management and responses to problems

Do you think local government officials have been responsive to water resource concerns? Please explain.

Do you think that state governmental officials and departments have been responsive to local concerns? Please explain.

How would you assess the responsiveness and the work of the Oklahoma Water Resources Board in resolving this dispute?

Are you aware of any management plans developed to address the problem? If so, please explain your assessment of the plan(s). Has the government, both state and local, been timely in response to your

concerns?

General background

Age Gender Race Level of education Marital status

INFORMED CONSENT TO PARTICIPATE IN STUDY

"Citizen Response to Natural Resource Disputes: The Case of the Arbuckle-Simpson Aquifer in South Central Oklahoma

Charles C. Peaden
Oklahoma State University
Environmental Science
580-310-5422

Email: cpeaden@mailclerk.ecok.edu

I have been asked to participate in a research project being conducted Charles C. Peaden, a PhD student at Oklahoma State University. The purpose of this study is to gain an understanding of community responses to environmental issues regarding the Arbuckle-Simpson Aquifer. As a participant in this research project, I will be asked to complete an interview that will last between 45 minutes and one hour. I will be asked to answer questions regarding my knowledge of and experiences with environmental conditions in the Ada/Tishomingo area.

The information I give during the study will be completely confidential. All materials gathered such as interview recordings, notes and other relevant information will be kept in a locked filling cabinet. Access to the material will be limited to Mr. Peaden and Dr. Tom Shriver, Mr. Peaden's adviser during the project. After the study is completed, the materials gathered during the investigation will be destroyed.

I understand that the study will produce important benefits for the community by providing insight, suggestions and assistance for the community in resolving the proper use of the Arbuckle-Simpson Aquifer.

I understand that no one will be able to connect my name or any other type of personal identification with the information I provide during the interview. The information I furnish will remain confidential. I understand that participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time without penalty after notifying the project director. I may contact Charles C. Peaden at 508-310-5422 or email cpeaden@mailclerk.ecok.edu for questions about the research project. For information regarding subjects' rights I may contact Dr. Sue C. Jacobs, Institutional Review Board Chair at 415 Whitehurst, Oklahoma State University, Stillwater, OK 74078; telephone 405/744-1676.

I certify that I have personally e that the participant sign it.	explained this document before requestingSignature of researcher Date
Name (please print clearly) of part	Date: ticipant
	the consent form. I understand that it will learning it is some freely and voluntarily.

Recruitment Script

For

"Citizen Response to Natural Resource Disputes: The Case of the Arbuckle-Simpson Aquifer in South Central Oklahoma."

Project PI: Charles C. Peaden

My name is Charles C. Peaden and I am a PhD student in the department of Environmental Science at Oklahoma State University, Stillwater. I would like to invite you to participate in a study I am conducting entitled, "Citizen Response to Natural Resource Disputes: The Case of the Arbuckle-Simpson Aquifer in South Central Oklahoma." The purpose of this study is to gain information on how are residents are responding to environmental issues in the community.

As a community resident, you have been identified as a possible participant in this study. Your participation is completely voluntary. If you choose to participate in this research you will be asked a series of questions related to your involvement in the community and your reaction to local environmental issues. Your participation will include at least one interview that will take approximately 45 minutes to one hour.

Oklahoma State University Institutional Review Board

Date

Friday, April 01, 2005

Protocol Expires:

3/31/2006

IRB Application No:

AS0481

Proposal Title:

Citizen Response to Natural Resources Disputes: The Case of the

Arbuckle-Simpson Aquifer in South Central Oklahoma

Reviewed and

Exempt

Processed as:

Continuation

Status Recommended by Reviewer(s): Approved

Principal

Investigator(s):

Charles Peaden

Thomas E. Shriver

1016 S. Belmont

006 CLB

Ada, OK 74820

Stillwater, OK 74078

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modifications to the research project approved by the IRB must be submitted for approval with the advisor's signature. The IRB office MUST be notified in writing when a project is complete. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

oxtimes The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

Signature:

Sue C. Jacobs, Chair, Institutional Review Board

Friday, April 01, 2005

Date

Oklahoma State University Institutional Review Board

Protocol Expires: 3/30/2007

Friday, March 31, 2006

Date

IRB Application No:	AS0481				
Proposal Title:	Citizen Response to Natural Resources Disputes: The Case of the Arbuckle-Simpson Aquifer in South Central Oklahoma				
Reviewed and Processed as:	Exempt				
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Status Recommende	d by Reviewer(s): Approved				
Principal Investigator(s) :					
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Candidate for the Degree of

Doctor of Philosophy

Thesis: CITIZEN RESPONSE TO NATURAL RESOURSE DISPUTES: THE CASE OF THE ARBULCKLE SIMPSON AQUIFER IN SOUTH CENTRAL OKLAHOMA

Major Field: Environmental Science

Biographical:

Personal Data: Born in Oklahoma City, Oklahoma January 22, 1961, the son of Lewis and Barbara Peaden.

Education: Graduated from Northwest Classen High School in May, 1979; received Bachelor of Arts degree in Political Science from Oklahoma State University, Stillwater Oklahoma in May, 1994; completed the requirements for the Master of Arts degree in Political Science at Oklahoma State University in August, 1995; completed requirements for the Doctor of Philosophy degree in December, 2006.

Experience: On faculty at East Central University as an instructor of Political Science since August, 2001.

Professional Memberships: American Political Science Association, Oklahoma Political Science Association, Oklahoma Sociological Association