

THESIS

“IT’S MY SOUL’S RESPONSIBILITY”: UNDERSTANDING ACTIVISTS’ GENDERED
EXPERIENCES IN ANTI-FRACKING GRASSROOTS ORGANIZATIONS IN NORTHERN
COLORADO

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ABSTRACT

“IT’S MY SOUL’S RESPONSIBILITY”: UNDERSTANDING ACTIVISTS’ GENDERED EXPERIENCES IN ANTI-FRACKING GRASSROOTS ORGANIZATIONS IN NORTHERN COLORADO

Previous research highlights the relationship between gender and activism in various environmental justice (EJ) grassroots oriented contexts, including but not limited to: the coalfields of Central Appalachia, Three Mile Island, and the Pittston Coal Strike movement. However, little research examining the relationship between gender and activist’s efforts in relation to hydraulic fracturing exists, primarily because this movement itself is relatively new. From 2012-2014, four communities and one county collectively organized in an effort to ban or enact a moratorium on the practice of hydraulic fracturing, commonly referred to as fracking. Anti-fracking activists in Northern Colorado deem this technological advancement as poorly controlled and dangerous to public health and the environment. On the other hand, pro-fracking activists argue that this process is highly engineered, adequately controlled, and necessary to boost and sustain local oil and gas development in Colorado and the United States. Historically, grassroots environmental justice organizations are often created and lead by poor and minority communities as these communities experience the brunt of problematic industry practices. The setting of Northern Colorado is unique in this sense because the communities trying to halt oil and gas development are opposite of what one might expect, as they are predominately white, middle class, and educated. Thus, my study fills current gaps that exist in the literature and adopts an intersectional approach to address the subsequent research question broadly: how do

gender, race, and class intersect and impact the nature and extent of activist's efforts in Northern Colorado's Hydraulic Fracturing movement? Ultimately, I find that gendered and raced identities, such as "mother" or "steward to the earth" play an imperative role in explaining women's entry into the fracking movement, while men pull on a spectrum of identities. Furthermore, I find that traditional gendered divisions of labor help to elucidate the differing rates of participation among men and women in the movement, as well as the roles that activists fulfill in grassroots anti-fracking organizations. Ultimately, I argue that exploring gender, in conjunction with race and class on various analytical levels, contributes to a broader understanding of the nuances of activism in environmental justice movements.

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Chapter 1: Introduction

Social movements are one of the key drivers of modern history and geography. They lead to sweeping changes in human society and they are often led by ordinary people, referred to as activists, in an effort to change some aspect of society (Jasper & Goodwin 2003). The effects of social movements surround us every day but often we fall short of acknowledging the direct and indirect impacts they have on our lives and the rights, freedoms, and securities that are the direct result of collective movements for social change.

Environmental justice movements, a distinct kind of movement due to their focus on social justice and environmental protection, emerged from the principles behind the Civil Rights Movement and the environmental movements of the 1960's and 1970's (Dunlap & Mertig 2014; Schlosberg 2013). More specifically, environmental justice movements seek social justice for those that live, work, and play in the most polluted environments in the world and stress the significance of participatory justice, speaking for oneself and having a seat at the table when it comes to environmental justice concerns in one's community (Cole & Foster 2001; Schlosberg 2013). Past research exploring environmental justice movements traces the origins of the movement (Bullard & Lewis 1996; Bullard 2000; United Church of Christ 1987; Pellow 2003) and highlights that those who historically participate in and lead environmental justice movements are typically low-income, less educated, and often of racial/ethnic minority groups because these communities are often the targets for the siting and growth of harmful industry practices (Pellow & Brulle 2005; Wilson, Fraser-Rahim, Zhang, Rice, Svendsen & Abara 2012; Evans & Kantrowitz 2002). Furthermore, environmental justice movements note that not only are environmental bads unevenly distributed but that environmental benefits and amenities—like

outdoor recreational sites—are unevenly distributed (Schlosberg 2013). As industries continue to expand and new industrial practices are created, middle-class communities are beginning to feel the potential impacts of industry practices, although marginalized communities will continue to feel the brunt of impacts.

Recent developments in shale extraction are an example of an industry practice that has seeped into class and race-privileged suburban communities, raising concerns and threatening the livelihood of community members. For example, due to the discovery of two resource plays in the state of Colorado – the Piceance Basin in the western side of the Front Range and the Niobrara Shale in the Denver-Julesburg Basin along the northern plains of the state (Opsal & Shelley 2014) –large-scale shale gas development in Colorado has exponentially increased within the last decade.

This increase in large-scale gas development has become possible due to advances in technology, specifically due to the process of hydraulic fracturing, commonly called “fracking” or “hydro-fracking”. In brief, hydraulic fracturing involves the high-pressure underground injection of large amounts of water and other fluids (including chemicals) into gas bearing rock to form fractures that are propped open with sand. Once the formation is fractured, the natural gas can flow to the well where it is pumped out of the ground (Saundry 2009). This technique provides the oil and gas industry the ability to reach a greater amount of natural gas from oil and gas reserves that are otherwise unreachable and has made large-scale oil and gas development more economically viable. In the state of Colorado between 2000 and 2011, natural gas produced in Colorado grew from 752,985 to 1,709,376 million cubic feet – a 127% increase (US Energy Information Administration 2013). Much of this development has occurred along the Front Range, one of the most densely populated areas in Northern Colorado.

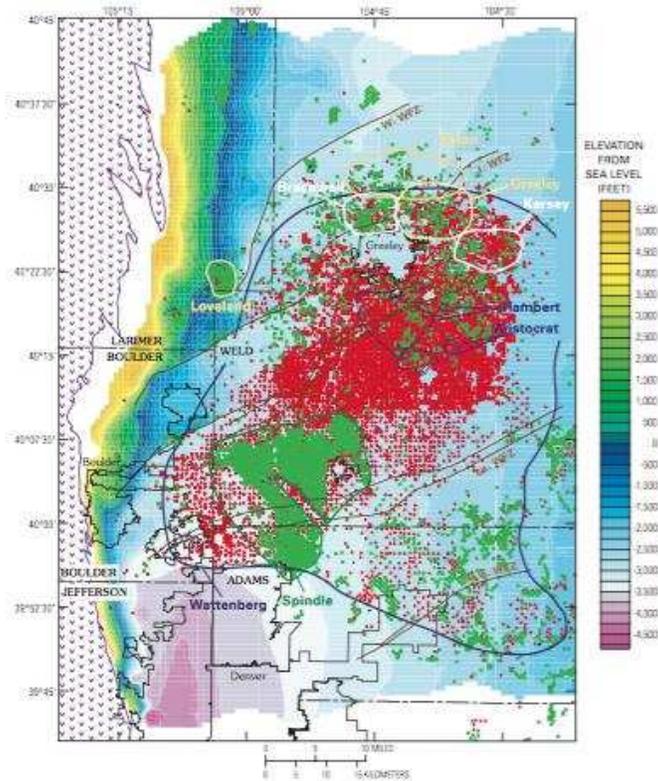


Figure 8. Locations of oil and (or) gas wells within a portion of the Front Range Urban Corridor. Oil wells are green, gas wells are red dots, and oil and gas wells have blue symbols. Color-filled contours are elevation relative to sea level on the top of the Lower Cretaceous Muddy (T₂) Sandstone. Contour interval is 250 feet; contours are offset relative to Windsor (W. WFZ), Johnstown (J. WFZ), Longmont (Lo. WFZ), Lafayette (La. WFZ), and Cherry Gulch (C.G. WFZ) wrench faults. The eastern and western termini of these faults are not mapped. Contours show the steeply dipping western flank and gently dipping eastern flank of the Denver Basin. Fields mentioned in the text have labeled boundaries.

Figure 1.1: Locations of oil and (or) gas wells within a portion of the Front Range Urban Corridor. Oil wells are green, gas wells are red dots, and oil and gas wells have blue symbols. Source: U.S. Geological Survey Digital Data Series

Thus, the recent discovery of these two resource plays in Colorado and the subsequent development in populated areas has meant that communities and individuals typically protected from industry practices and the environmental harms and risks associated with such practices are beginning to fear the possible negative impacts of industry practices. As fracking encroaches upon urban and populated areas within Colorado, community members along the Front Range have begun to organize and form grassroots anti-fracking organizations in an effort to suspend or halt the practice of hydraulic fracturing within their communities. Activists from anti-fracking

organizations stress a laundry list of concerns related to fracking, including, but not limited to: lack of proper regulation, uncertainty of economic impacts, environmental impacts, health and safety impacts, and local control rights (Quinn 2013; Finley 2013; Landman 2014). Furthermore, many stress the concept of procedural equity, stating that they have a right to decide what industry practices are allowed in their community, a notion that is central to environmental justice (Lake 1996).

For three years, beginning in 2012, four communities and one county in Northern Colorado along the densely populated Front Range worked vigorously to mobilize citizens to align with their cause and passed a local ban or enacted a moratorium on the practice of fracking. My research investigates the efforts of two anti-fracking organizations, Anti-Frack 1 and Anti-Frack 2 located in Northern Colorado. Anti-Frack 1 and Anti-Frack 2 are located in adjacent communities and often assisted and supported each other throughout their organizations' endeavors. Furthermore, the communities these organizations are located in resemble each other in a variety of demographic ways: mainly they are privileged across race, class, and education. More specifically, they are predominately white, middle-upper class, and highly educated (See Table 1.1). These characteristics contribute to the unique nature of this environmental justice movement because historically, as noted earlier, lower class and majority-minority communities have led environmental justice movements¹.

¹ Environmental justice movements have been closely allied with the Anti-toxin movement that was exemplified by community reaction to the Love Canal case, a leaking toxic dumpsite located in Niagara Falls, New York. Many of the local residents involved in this movement were much like that of Northern Colorado, privileged across race, class, and education, and mainly women (Gibbs & Levine 1982).

Table 1.1: Community Demographics of Anti-Fracking Organizations

	Colorado	Community #1	Community #2
Population	5,189,500	26,784	58,298
Race/Ethnicity (White)	81.3%	85.6%	86.1%
Median Value of Owner-Occupied Housing Units	\$236,800	\$264,300	\$274,900
Bachelor's Degree or Higher (25+)	36.7%	55.8%	47.0%
% of Female Persons	49.9%	51.1%	50.4%

A number of scholars have turned their attention towards understanding the impacts of hydraulic fracturing (Osborn, Vengosh, Warner & Jackson 2011; Rahm 2011; Howarth, Ingraffea, and Engelder 2011). Additionally, social movement scholars have focused on the way gender, race, and class organize and influence the entry of participants into movements as well as the division of labor (Kaplan 1990; Robnett 1996; Rodriguez 1994). However, less research on the role of gender in environmental justice movements exists (Krauss 1993; Kurtz 2007; Bell & Braun 2010; Culley & Angelique 2003). Specifically, little research exists on the role of gender in relation to *both* men and women's activism *and* hydraulic fracturing. The central goal of this thesis is to add to the emerging body of work on (1) oil and gas development and (2) gender and environmental justice movements working on social justice and environmental issues.

Additionally, as I describe later, this thesis relies on intersectionality as an analytical and methodological approach and examines the ways that gender, race, and class simultaneously impact activist's efforts. To do this, I draw on qualitative interviews with 17 activists from two anti-fracking organizations located in Northern Colorado and explore the following research questions:

Primary research questions:

How does gender:

- 1) Influence the entry of activists into anti-hydraulic fracturing organizations?
- 2) Influence the jobs and tasks activists perform in grassroots organizations?

Supplementary Research Questions:

- 1) How does gender converge with race and class in the hydraulic fracturing movement in Northern Colorado?
- 2) How does gender operate in the context of an environmental justice movement?

Chapter 2: Literature Review

In this upcoming chapter, I provide a broad overview of social movement literature, highlighting the shifting paradigms that have occurred within the United States. Then I discuss the historical origins of environmental justice and highlight the changing and ever-expanding theoretical and conceptual definitions of environmental justice. Furthermore, I present research that focuses on how gender, race, and class operate in the context of social movements more generally and then environmental justice movements more specifically. Lastly, I end this chapter by highlighting my preliminary and supplementary research questions and denote how these research questions fill gaps or under-explored areas in existing environment justice research.

Social Movement Research Paradigms

To set the stage for this research, I begin by providing a historical account of social movement research to give the reader a sense of how researchers have understood social movements and the broad questions they have explored. Social movements are one of the key drivers of modern history and geography, leading to extensive changes in human society and form due to the efforts of activists. Drawing on Brown & Ferguson's (1995) conceptualization, social movement activists are people who take some public action in legislative, judicial, political, or media arenas to cause avoidance or remediation of known or suspected harms. The effects of social movements surround us day-to-day but often we take for granted the impact they have had on our lives and fail to recognize that many of the rights, freedoms, and protections that we enjoy are the direct result of collective movements for social change (Kuumba 2001).

According to Snow, Soule, and Kriesi (2005) social movements are based on three or more of the following features: collective or joint action, change-oriented goals or claims, some

extra- or non-institutional collective action, some measure of organization, and some degree of temporal stability. Based on these axes, social movements can be conceptualized as:

collectivities acting with some degree of organization and continuity outside institutional or organizational channels for the purpose of challenging or defending institutional or organizational channels, for the purpose of challenging or defending extant authority, whether it is institutionally or culturally based, in the group, organization, society, culture, or world order of which they are a part (Snow et al. 2005: 11).

More succinctly, a social movement is a collective, structured, continued, and noninstitutionalized challenge to authorities, power holders, or hegemonic cultural beliefs and practices (Goodwin & Jasper 2003).

A breadth of research exists in which academics from varying fields explore the characteristics of social movements locally, nationally, internationally, and transnationally, ranging from social movements that focus on human rights, labor rights, environmental justice issues, and global justice issues (Jenkins & Perrow 1977; Taylor 1989; Andrews 2001; Bullard 2000). Often, social movement research seeks to answer two fundamental questions: 1) why do social movements emerge when they do? (Tarrow 1988; Della Porta 2006) and 2) what are the characteristics of those who participate in social movements? (Verta, Whittier, Morris, & Mueller 1992; Irons 1998).

Social movement research has shifted through disparate paradigms throughout the decades. For example, theorists in the 1950's and early 1960's adopted the collective behavior approach, an early theoretical tradition, that viewed social movements as the collective response to the individual alienation caused by social strain and disruption of rapid social changes, such as urbanization and industrialization (Smelser 1962). Participants that joined social movements were dubbed as immature, mistaken, and irrational beings by some social science researchers

operating under a positivist paradigm (Goodwin & Jasper 2003). Under this paradigm, theorists contested that social movements arose as a result of discontent in society and many viewed discontent as unusual and best avoided (Hoffer 1951; Kornhauser 1959; Lebon 1960).

During the late 1960's and 1970's the school of "resource mobilization" (RM) formed, as researchers began to note that social movements were structured, patterned and typically consisted of formal organizations (McCarthy & Zald 1977). According to the RM theory, social movements are essentially an expansion of politics by other means and can be explored in terms of clashes of interest just like other forms of political struggle (Oberschall 1973; McCarthy and Zald 1977). RM theory sees social movements as "normal, rational, institutionally rooted, political challenges by aggrieved groups" (Buechler 1993: 218). This school of thought focused almost exclusively on the infrastructure, that is, the financial, organizational, and human resources, needed for movement emergence and subsistence and less on the kinds of individuals who might join a movement (Buechler 1993). However, under this perspective, while exploring questions of recruitment, motivation, and participation, individuals were viewed as rational actors that weigh the relative costs and benefits of movement participation and engaged in participation when the potential benefits outweighed the anticipated costs (McCarthy & Zald 1977).

RM theory later expanded into political process theory, which concentrates almost exclusively on movement emergence and highlights that economic and political shifts occur, often independently of protestors' own efforts that open up space for movement emergence (Jenkins & Perrow 1977; McAdam 1982; Tarrow 1988). Under the political process model, "shifts in the structure of political opportunities work with organizational resources and subjective perceptions to fuel social insurgency" (Kuumba: 2001:8). Above all, political process

scholars stress the importance of structural power noting, “any system contains within itself the possibility of a power strong enough to alter it” (Schwartz 1976: 173). However, as noted above, political process theorists highlight that mere structural change is itself insufficient for a social movement to emerge and sustain itself. In brief, the presence of strong leadership is essential, in conjunction with framing, originally called cognitive liberation, that affects not only how excluded group members perceive changes in political opportunities and their organization but how they portray their message to the outside world (McAdam 1992). In sum, all three factors: structural change, strong leadership, and framing are necessary for the emergence and continuation of social movements under political process theory.

Social network approaches, another paradigm through which researchers study social movements, also focuses on structure but in a very different sense. This approach draws attention to the importance of network ties through which people are mobilized into social movements (Snow, Zurcher, Ekland-Olson 1980). Social network theorists highlight the significance of social ties (and the ways in which these ties are structured) among potential recruits as a causal explanation for the types of individuals who join social movements and the emergence of a social movement itself (Kuumba 2001). Unlike political process theorists that explore the conditions in the external world that allow for a movement to arise, social network theorists investigate the structural conditions within a community or population of those who might be recruited. Social network theorists argue that communities or populations with dense ties or previous established formal organizations will likely find it easier to mobilize supporters and propel a movement forward (Goodwin & Japsen 2003).

In contrast to RM, political process, or social network theory, all of which focus on historical, structural, or material conditions that may give rise to a social movement, cultural

approaches focus on the perceptions, ideas, emotions, and grievances of protestors and declare that there is an interaction between ideas, recruitment, and the broader environment that social movement theorists must investigate as well (Goodwin & Jasper 2003). Cultural theorists recommend that scholars need to look at how protestors view the world and the kind of rhetoric they use to present their vision to others, often referred to as framing. Succinctly stated, framing refers to “the process by which individuals and groups identify, interpret, and express social and political grievances” (Taylor 2000:511). Both how protestors view the world and frames have a direct impact on social movement emergence, recruitment, and mobilization efforts (Goodwin, Jasper, & Polletta 2004).

Cultural approaches fall under the most current theoretical paradigm, new social movement theory. This group of theories emphasizes that symbolic, cultural, and ideational factors can serve as vessels for building sustained social movements (Buechler 1993; Melucci 1985; Kuumba 2001). New social movement theories depart from earlier social movement paradigms and attempt to explain the range of new movements that have sprouted up in Western societies since the mid-1960s. Like earlier social movement theories, new social movement theories focus on who is participating in social movements, but perhaps more importantly, the motivations of the participants in social movements.

More specifically, new social movement theorists stress subjective and symbolic aspects of social movements, such as collection action frames and collective identities (Kuumba 2001) and note that participants in new social movements do not necessarily pursue economic or class interest of their members, but rather pursue quality of life and democratic procedures (Snow 2011). New social movements are seen as a form of new politics that are concerned with the quality of life, self-realization, and objectives of participation and identity formation rather than

focusing on industrialization or the market place (Buechler 1995). Under the paradigm of new social movements, participants are thought to be fighting corporate and government “technocrats” who make an assortment of decisions without being publically debated, altering individuals lives (Snow 2011: 335).

Thus, social movements are complex and social science research that works to construct theoretical approaches to studying social movements is ever evolving. While exploring the two fundamental inquiries social movement research attempts to address, why social movements emerge and who participates in social movements, a number of findings can be revealed based on the theoretical perspective(s) a researcher adopts. My research is rooted in RM and new social movement theory. For example, consistent with the assumptions of RM theory, which states that social movements are an expansion of politics and by other means and can be explored in terms of clashes of interest just like other forms of political struggle, I work to illuminate how conflicting interests, specifically among anti-fracking and pro-fracking parities, resulted in a movement surrounding oil and gas development in Colorado. Additionally, consistent with cultural theory more broadly and new social movement theory more specifically, the research I present in this thesis helps to shed light on the collective action frames and collective identities participants relied on as a means to explain their entry into the movement and the ways in which they went about mobilizing and recruiting citizens in their respective communities.

Research on Environmental Justice Movements

A significant portion of social movement literature is dedicated to investigating and understanding environmental justice movements. Environmental justice movements fall under the umbrella of social movements, as they are indeed collective, structured, continued, and noninstitutional challenges to authorities, power holders, and cultural beliefs in practices

(Goodwin & Jasper 2003). Environmental justice movements emerged from the principles behind the Civil Rights Movement and the Environment Movements of the 1960's and 1970's (Dunlap & Mertig 2014) and are distinct due to their concentration on the concepts of social justice and environmental protection, as the two are viewed as compatible goals (Cole & Foster 2001). To highlight how Northern Colorado's Hydraulic Fracturing movement is representative of an environmental justice movement, in the following sections I introduce the concept of environmental justice and discuss how theoretical and conceptual understandings of what constitutes environmental justice have shifted and expanded throughout the decades. Then, I will discuss environmental justice movement literature more concretely, with a particular focus on the origins of the environmental justice movement and past studies that explore the components of gender, race, and class in relation to social movement participation.

The US Environmental Protection Agency posits that environmental justice focuses both on processes and outcomes and defines it as:

The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA has this goal for all communities and persons across this Nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work (US Environmental Protection Agency, Office of Environmental Justice 2015).

Theoretical and conceptual understandings of what constitutes environmental justice have expanded from early definitions and have not always focused on both processes and outcomes as the above definition does. As appropriately articulated by Sexton and Phillips, "in practice, environmental justice is a complex, multidimensional concept, that cannot easily be pinned down" (1998:10). Originally, many proposed definitions of environmental justice that focused

almost explicitly on distributional and spatial outcomes. For example, according to Bullard (1996:493), environmental justice can be broadly defined as “embracing the principle that all people and communities are entitled to equal protection of environmental and public health laws and regulations.” Similarly, in the past, the US Environmental Protection Agency focused on outcomes and posited that the goal of environmental justice is, “to ensure that all people, regardless of race, national origin or income, are protected from disproportionate impacts of environmental hazards” (US Environmental Protection Agency, Office of Environmental Justice 2000). Under the distributive justice model, all communities should be exposed to the same amount of environmental risk no matter their race, class, or socio-cultural status (Schlosberg 2004). Equity was clearly a key component in the early discourse of environmental injustice; however, this notion quickly expanded beyond the idea of the maldistribution of environmental bads and began to stress the unequal distribution of environmental goods and amenities such as green space, recreational parks, public transit, and fresh food (Schlosberg 2013).

Notably, EJ scholars and policy makers have begun to stress not only the importance of distributional patterns but also the processes of environmental justice. In greater detail, EJ scholars highlight the importance of procedural equity or process equity, the concept that all individuals and groups have the right to access political and social systems to make decisions, such as how land will be used or how zoning will take place (Sze and London 2008; Malin 2011;Scholsberg 2013). About this, Lake (1996: 165) explains that procedural equity stresses, “full democratic participation not only in decisions affecting distributive outcomes but also, and more importantly, in the gamut of prior decisions affecting the production of costs and benefits to be distributed.” According to Schlosberg (2003), public participation is often seen as the tool to accomplish both equity and political recognition. Through public participation individuals

may gain political recognition, thus allowing them to be involved, in some shape or form, in decisions affecting environmental outcomes in their communities. Furthermore, Lake (1996) argues that by fully participating in decisions through which environmental burdens are produced, individuals and communities will develop self-determination and come to realize the social relations of production within which the problem is generated. Lake (1996) goes on to argue that by becoming involved in the decision-making process of the distribution of environmental bads and goods, communities will begin to uncover the causes of environmental injustice rather than simply attempting to treat the symptoms of environmental injustice. Moreover, by becoming involved in the decision-making process of the distribution of environment bads, communities have the opportunity to prevent them altogether if involved early (Schlosberg 2003). This point of view highlights the hazard in stressing distributive justice alone: that while scholars and policy makers sort out the scale/scope of the problem, the actual causes and repercussions of those patterns of injustice that we already know remain understudied (Pulido 1996; Lake 1996; Walker 2009). Procedural equity is a central component of Northern Colorado's hydraulic fracturing movement examined in this thesis. Many activists involved in this movement assert they have the right to democratic participation and should be able to decide at the local level whether or not they want the practice of hydraulic fracturing present in their community.

As mentioned earlier, the US environmental justice movement arose in the 1960's and 1970's from the principles behind the Civil Rights Movement and the Environmental Justice Movements of that time period. Unlike preceding environmental movements that focused predominately on concerns of wildlife management, conservation, and deep ecology, the environmental justice movement focused on the unequal burden of pollution that was placed on

poor and minority communities (Brulle & Pellow 2006) and was predominately led by low-income and racial and ethnic minorities, in comparison to earlier environmental movements that were supported and led by middle-upper class whites and those with access to economic resources (Bullard 2000; Brulle & Pellow 2006).

Many scholars (Chavis 1993; Bullard 2000; McGurty 2000) trace the birth of the environmental justice movement to the case of Warren County, North Carolina. In Warren County a landfill was established to dispose of polychlorinated biphenyl (PCBs) that were illegally dumped during 1978 on hundreds of miles of North Carolina Roads by Robert Burns, a business associate with Robert Ward of the WARD PCB transformer Company of Raleigh (GAO 1983 Study; McGurty 2000). In this particular case, the state claimed they opted for the landfill in Warren County due to other options being too costly. However, residents of Warren County—who were disproportionately African America -- protested the citing of the landfill and argued that the landfill was sited on the basis of racial discrimination (GAO 1983). Thus, because it was a movement initiated and led by African Americans who were slated to experience the disproportionate burden of industrial waste, the street protests and legal challenges lead by the residents of Warren County to fight the landfill are considered by many to be the first major milestone in the national movement for environmental justice.

The case of Warren County was pivotal in helping to establish the empirical reality that marginalized communities experienced the brunt of environmental degradation because of institutionalized racist and classist practices of governments and industries. Beginning in the early 1970s, a considerable body of studies began to emerge in the U.S. documenting the presence of environmental inequalities among particular social groups, specifically, minority, aboriginal, and poor communities. For example, in 1983, the General Accounting Office

examined whether or not there was a correlation between the location of hazardous waste landfill and the racial and economic status of surrounding communities (GAO 1983). Findings from the study demonstrated that African-Americans made up a majority of the population in 3 of the 4 communities where landfills were located despite the fact that African Americans made up 1/5 of the region's population (GAO 1983). Moreover, a national study performed by the Commission for Racial Justice United Church of Christ (1987) investigated the relationship between the location of sites containing hazardous wastes and the racial and socio-economic characteristics of persons living in close proximity to those sites. Ultimately, the study found that race proved to be the most significant among variables tested—even more important than the socio-economic status of the community-- in association with the location of commercial hazardous waste facilities and the communities with the greatest number of commercial hazardous waste facilities had the highest composition of racial and ethnic residents (UCC 1987).

Although early environmental justice studies highlighted the significance of race and class in relation to distributional patterns of hazardous waste and harmful industry practices, scholars note weaknesses associated with these early distributional studies. For example, Bowen (2002) reviewed forty-two empirical research studies spanning three decades and concluded that the empirical foundations of environmental justice are so underdeveloped that little can be said with scientific authority regarding the presence of geographical patterns of disproportionate distributions and their health effects on minority, low-income and other disadvantaged communities. Charkraborty, Maatay, & Brender (2002) draw specific attention to methodological flaws utilized in early environmental justice studies. Many early environmental justice studies rely on spatial coincidence analysis, more specifically unit-hazard coincidence, that uses the presence of a hazard source within a specific analytic unit as a proxy for

environmental exposure. Charkraborty and colleagues (2003) assert that the problem with this method is that different units lead to different conclusions regarding the role of race and ethnicity or income. Williams (1999) points to methodological errors similar to that of Charkraborty and colleagues and observes that although many early environmental justice studies rely on “community” as a unit of analysis, different operationalizations of community exist, leading to contradictory findings about the extent of the problem. Furthermore, Downey (2005) draws attention to the definitions of environmental inequality that researchers employ and ultimately highlights that different definitions lead to divergent results. Downey’s main critique focuses on scholars basing their research on a relatively narrow range of environmental inequality definitions, leading us to understand some forms of environmental inequality more so than others. Regardless of the methodological issues brought to light in early environmental justice, to this day, studies continue to emerge that ultimately highlight what Warren County originally brought to light: racial and ethnic minorities, low-income people, and indigenous people are more likely to live in close proximity to hazardous environmental facilities and that these communities remain the targets of citing and growth of harmful industry activities (Brulle & Pellow 2006; Bullard 2003; Commission for Racial Justice United Church of Christ 1987; Evans & Kantrowitz 2002; Wilson, Fraser-Rahim, Zhang, Rice, Svendsen & Abara 2012).

Research on Gender and Social Movement Participation

Although race and class play an imperative role in helping to understanding the emergence, development, sustenance, and decline of social movements, research demonstrates that gender plays an equally important role. Historically speaking, an abundance of research highlights the connection between gender and social movement participation. In part, this body of research illuminates why men and women have different rates of participation in social

movements (McAdam 1992; Rodriguez 1994; Cable 1992). Predominately, this research adopts one of the following approaches: macrolevel, mesolevel, or microlevel. Often these approaches are adopted concurrently to investigate gender and social movement participation.

Consistent with Resource Mobilization theories, macrolevel analysis investigates how broader material shifts or/and conditions in the sociopolitical or economic environment influence the relationship between gender and social movement participation and efforts (McAdam 1982; McAdam 1992; Tarrow 1996). A mesolevel analysis, on the other hand, focuses on the influence of social networks and organizations through which individuals channel their efforts toward social change. For example, social movement scholars note that differences in the lives of men and women, such as differing social networks, gender distinctions in domestic and childrearing responsibilities, and production struggles in the workplace and political realm, help to shape their involvement in social movement organizations (Snow, Zurcher, Eckland-Olson 1980; Rodriguez 1994). Lastly, microlevel analyses of social movement participation and gender focuses on the motivations, ideologies, and grievances to which potential movement participants respond, similar to that of new social movement theories (Chaney 1975). More specifically, a microlevel analysis demonstrates how gender ideologies and gender identity are often tactically utilized to motivate movement participation differently for men and women (Bell & Braun 2010; Hobson & Lindholm 1997; Reese & Newcombe 2003). Furthermore, gender ideologies and gender identity may prompt men and women to enter a movement for different reasons and perform different responsibilities and/or tasks once recruited (Kuumba 2001). For example, research performed by Lobao (1990) found that divisions of labor seemed to mirror the relegation of women and men to private and public spheres, with men on the “front lines” and women in the backdrop in positions of support (Kuumba 2001). In this thesis, I work predominately from a micro-level frame,

exploring how gender motivates movement participation differently for men and women. Since gender is an integral component in my thesis, in the next section, I review research pathways into environmental justice movements with a particular focus on gender.

Pathways into Environmental Justice Movements

Environmental Justice research demonstrates that some of the most successful at calling attention to environmental issues have been women, more specifically working-class women and women of color (Deluca & Peeples 2006; Di Chiro 1997). For example, in 1994, the Citizen's Clearing House of Hazardous Waste (CCHW) estimated that nearly 70-80% of the leaders of local environmental justice groups to be women and recognized that women generally represent a large percentage of the members of local environmental justice groups (Epstein 1997). Given that racial and ethnic minority, low-income, and indigenous people are the targets of the siting and growth of harmful industry activities and disproportionately impacted, it is not surprising that working-class and women of color are motivated to bring environmental issues to the light.

Given women's vital role in environmental justice movements, within the past few decades, a vibrant environmental justice literature has emerged that sheds light on women's experiences within these movements, which I review next. Environmental justice research demonstrates that men and women can become involved in environmental justice movements through different pathways and via different mechanisms that are connected to and shaped by gender. In the following section, I highlight three pathways by which individuals can become involved in environmental justice movements and the way gender intersects each pathway. First, I will explain gendered attitudes towards risk and the environment may shape individuals involvement in environmental justice movements. Then, I will discuss how gendered identities function to propel individuals to join environmental justice movements, with a particular focus

on the “mother identity” and finally, I will discuss the importance of frames and how they either appeal or do not appeal to potential recruits and how this impacts subsequent environmental justice movement participation.

Gendered Attitudes towards Risk and the Environment

Research regarding environmental attitudes and risk has provided a mixed picture; however, in recent decades, more often than not, research indicates that men and women have different attitudes towards the environment and risk. This is often referred to as a “gender gap”. Overall research findings demonstrate that women express slightly greater or sometimes significantly greater pro-environmental attitudes than men. In greater detail, data from national surveys in which perceptions of environmental health risks were measured indicate that women perceived environmental health risks to be much higher than men. In fact, many surveys reveal that men tend to judge risks as smaller as and less problematic than do women (Steger and Witt 1989; Gutteling and Wiegman 1993; Stern, Dietz, and Kalof 1993; Flynn, Slovic, and Mertz 1994; Davidson and Freudenburg; 1996; Xiao and McCright 2012). For example, a well-known research project performed by Davidson and Freudenburg (1996) documents nineteen studies conducted in the 1980s and the 1990s that investigate gender differences within a technological or environmental risk framework; eighteen of these found significant gender differences, where greater pro-environmental attitudes existed among women. In another national study that controlled for age, education, labor force/home worker status, and other variables, Mohai (1992) found that women expressed greater pro-environmental for the environment than men, but the magnitude of differences was not great. Furthermore, studies exploring attitudes towards the environment and risk on a local level reveal that women are more concerned about

environmental issues and problems, specifically issues and problems that pose a potential threat to their community's health and safety (Blocker & Eckberg 1989; Hamilton 1985; Nelkins 1981).

However, studies demonstrate that although women show greater pro-environmental attitudes than men about the environment, this concern does not necessarily translate into environmental activism. In fact, some studies provided evidence that men were slightly more likely to engage in environmental activism (McStay and Dunlap 1983; Mohai 1992).

Nonetheless, it is important to note that these studies measured environmental activism as such: contacting a local government official, contacting a business or industry, and writing a letter to a newspaper or magazine regarding their concerns about an environmental issue, attending a public meeting or hearing, signing a petition, and donating money or time to an organization. McStay and Dunlap (1983) stress an important point in regards to women's environmental activism, suggesting that it is likely that women's lower level of environmental activity during this point and time was directly related to their less active presence in the political realm as a consequence of social and political position within society at that point and time. More recent survey research performed by Tindall, Davies, and Mauboules (2003) and Hunter, Hatch, and Johnson (2004) provide support that women are not more likely to participate in pro-environment "public behaviors" tending toward activism, such as protests or attending a public meeting, relative to men and are more likely to engage in "private" behaviors within the household reflecting concern with environmental issues, such as recycling, buying, eating organic.

Researchers have developed a handful of theories to explain differences in environmental attitudes and risk perception between men and women. However, many explanations derive

from two camps: 1) “gender socialization” arguments and 2) “gendered social roles” arguments. Generally speaking, “gender socialization” arguments emphasize the gender socialization process (Zelezny, Chua, Aldrich 2000). Gender socialization theorists point to the different values and social expectations pressed upon boys and girls through socialization into their society’s dominant culture and draw on these to explain women’s greater concern about the environment (Gilligan 1982). For example, theorists contend that in contemporary Western culture, women are more concerned about human health and safety because they give birth and are socialized throughout their lives to nurture and preserve life, be more expressive, have a stronger “ethic of care”, and engage in caregiving and the community (Mohai 1992; Flynn et al. 1994; Xiao et al. 2011). This argument has become known as the “concerns about health and safety hypothesis” or “safety concerns hypothesis” and receives considerable support from scholars, meaning that studies utilize gender socialization arguments as a means to explain differences in men’s and women’s attitudes towards the environment and risk quite frequently (Blocker and Eckberg 1997; Davidson et al. 1996).

In contrast “gendered social roles” arguments focus on the influences of the social roles that men and women differentially perform as adults (McCright & Xiao 2014). Generally, gendered social roles arguments focus on three productive or reproductive roles (employment status, homemaker status, and parenthood), which are presumably linked to environmental concern. Unlike “gender socialization arguments” that receive considerable support, research relying on arguments based on gendered social roles has demonstrated little empirical evidence, especially when tested side-by-side with gender socialization arguments (McCright & Xiao 2014; Mohai 1997).

Other scholars suggest that a lack of knowledge and understanding of science and technology has generated these gendered differences (theories that can still be derived from “gender socialization” arguments). For example, Flynn, Slovic & Mertz (1994) note some scholars believe that women have greater concern for the environment due to a lack of understanding regarding technology and its impact on the environment, that is women are more suspect of technology and therefore more concerned about its impacts on the environment. Furthermore, scholars highlight that higher perceived environmental health risks for white females may exist when sociopolitical explanations (for example the role of power, status, trust, social position, vulnerability, trust, and alienation) are taken into consideration (Flynn et al. 1994). For example, white women may often be more privileged in regards to social position than minority women (i.e. higher education) and may come to understand through scientific research the potential risks of the environment and the use of technology (i.e. how industry practices impact the environment). As research continues to emerge that draws attention to the “gender gap” in environmental attitudes and risk between men and women, scholars will continue to develop new theories, many of which will ultimately derive from the two camps of “gender socialization” or “gendered social roles”.

Ecofeminism

Ecofeminism, a theoretical perspective, may help elucidate differences in men and women’s environmental attitudes and risk perceptions, and therefore why women overwhelmingly lead and constitute environmental justice movements. Ecofeminism is a theoretical perspective introduced during the 1970’s to highlight women’s potential to bring about an environmental revolution (d’Eaubonne 1974). Ecofeminism is distinct due to insistence that nonhuman nature and naturism (i.e. the unjustified domination of nature) are feminist issues (Warren & Erkal

1997. In greater detail, it calls for a shift from instrumental value to intrinsic value while assessing nature. Brehm & Pellow (2013) note that ecofeminism is an umbrella term that summarizes a range of perspectives whose “basic premise is that the ideology which authorizes oppressions such as those based on race, class, gender, sexuality, physical abilities and species is the same ideology which sanctions the oppression of nature” (Gaard 1993:1).

A movement in 1974 involving 27 women of Reni in Northern India helps to illuminate why nature is a feminist issue and how ecofeminism can be used as framework to understand the connection between gender and environmental justice movement participation. In greater detail, 27 women of Reni in Northern India threatened to hug the trees if lumberjacks attempted to cut them down. The women’s protest, a grassroots, non-violent movement initiated by women, known as the Chipko movement, ultimately saved 12,000 trees (Warren & Erkal 1997). While exploring this movement, an important women-nature connection is painted. The Chipko movement was not only about saving trees, but perhaps just as important, it was also about the notion that trees and forests are closely connected to rural and household economies governed by women. Thus, tree shortages are about women too because they are connected to household economies, which are often ran by women and – especially in this particular cultural context – the center of women’s lives.

Furthermore, Warren & Erkal (1997) assert that environmental racism is an ecofeminist issue and point to the many grassroots Indigenous led organizations fighting uranium mining on or near reservations as a concrete example of ecofeminism in action. In the U.S., Native women face rare health risks because of the presence of uranium mining on or near reservations. In fact, according to a 1986 report titled, “Toxics and Minority Communities” completed by The Center for Third World Organizing, two million tons of radioactive uranium trails have been dumped on

Native Lands. Women in these communities fight uranium mining because not only are they responding to nature by protecting their native lands, but they are also responding to nature in the abstract, to their homes and the health and safety of their children (Warren & Erkal 1997).

Women in these communities view that capitalist-intensive growth is leading to oppression in their communities.

The above examples demonstrate that ecofeminism can be used as a framework to understand the connection between gender and environmental justice social movement participation. In summary, ecofeminism is distinct due to insistence that nonhuman nature and naturism (i.e. the unjustified domination of nature) are feminist issues (Warren & Erkal 1997). Thus, ecofeminism may be utilized in some cases to help explain why women perceive environmental risk differently than men and how these attitudes may lead them to engage in social movement participation. Notably, however, there are criticisms of eco-feminism. White female scholars dominate ecofeminism and although it embraces an antiracist politics (Bennholdt-Thomsen & Mies 1999) and unity with indigenous peoples (Gaard 2010), it sometimes imposes ecofeminism on women-of-color environmental activists and romanticizes indigenous women's lives (Sturgeon 1997; Taylor 1997).

As described above, gendered attitudes towards risk and the environment can be utilized to help explain entry and differing rates of participation in environmental justice movements among men and women; however, framing, referred to as the process by which individuals and groups identify, interpret, and express social and political grievances (Taylor 2000), significantly contributes to social movement participation and mobilization as well.

Framing, Mobilization, & Recruitment

The rhetoric claims activists rely on to recruit and mobilize citizens are key to any social movement mobilization and recruitment. Claims are complaints or grievances about social conditions that members of a society find unpleasant, unwanted, or unfair (Best 1987; Gamson 1992; Gamson, Fireman & Rytine 1982), while rhetoric refers to the deliberate use of language to persuade others (Best 1987; Taylor 2000). Best (1987) argues that early in the claims-making process, activists employ a “rhetoric of rectitude,” which calls on our values, morals, and desire to do good, in an effort to bring an issue to light and motivate potential supporters to act (Taylor 2000).

Environmental justice movements are filled with rhetoric claims and are organized into collective action frames to appeal to potential supporters (Taylor 2000). Framing refers to “the process by which individuals and groups identify, interpret, and express social and political grievances” (Taylor 2000:511). The products of framing are referred to as collective action frames. Collective action frames serve important interpretive functions: they highlight the seriousness and injustice of a social problem; they identify who or what is to blame; and they offer solutions (Benford 1997; Snow & Benford 2000).

Research provides evidence that the environmental justice movement has shifted through two distinct collective action frames throughout the decades (Taylor 2000). An early collective action frame, environmental racism, was viewed as suggestive, provoking, and innovative because 1) it evoked feelings and memories of the legacy of intentional discrimination, of victimization, or white racism; 2) it attributed a pattern of ecological inequalities, including a variety of chronic health problems, environmental hazards, and public health risk disproportionately experienced by people of color, to the policies, practices, and directives of

governmental, legal, economic, and political entities; and 3) it linked the environmental and civil rights movements together (Bullard 1993; Snow & Benford 2000).

Later, the environmental justice frame evolved into a less radical and specific frame than that of environmental racism and focused less on the concept of injustice and more on the notion of justice, evoking salient cultural values related to rights (Essoka & Brulle 2005). EJ scholars argue that this frame was more elastic and inclusive and could be readily adapted by use for a variety of movements that focus on social, procedural and distributive justice (Snow 1992; Agyeman 2002; Cable & Shriver 1995). Thus, EJM framing is increasingly more diffuse in terms of the number of issues it seeks to address (Snow 2000). For example, movements no longer focus solely on racially distributive patterns of environmental harms and seek to address issues such as: corporate liability, crime, gender, health care, and procedural justice (Benford & Snow 2000), just to name a few.

According to Snow & McAdam (2000), before an individual becomes an active participant in a social movement, his/her personal identity must correspond with the movement's collective identity, much of which connects back to framing. Snow & McAdam (2000) theorize the process whereby individuals experience "identity correspondence" between their personal identities and the movement's collective identities. They argue this can occur via two avenues: 1) "identity convergence" where an individual's personal identity is already aligned with a movement's collective identity and 2) "identity construction", when individuals undergo a process of alignment whereby their personal identities change in some way to make social movement participation congruent with their self-conception. In the following section, I explore empirical research that demonstrates the impact of framing on social movement mobilization.

Once again, given the focus on gender in my thesis, I review predominately studies that explore gendered frames.

Gender & Frames

Past research exploring frames notes that gendered frames are often utilized as a means to push social movement agendas forward, in particular those that focus on women's issues/concerns specifically. For example, during the women's suffrage movement, women relied on gendered frames related to the family, children, and domestic violence, in an effort to push their agenda forward and mobilize citizens around their cause. McCammon and colleagues (2001) draw attention to the fact that suffragists relied on women's knowledge of the private sphere (i.e. the family and children) to identify and express social and political grievances. In greater detail, suffragists asserted that women could bring knowledge of the domestic sphere to the political arena in determining how food, water, domestic violence, and children's schooling should be regulated because these areas are intimately tied to the private sphere, which is and continues to be predominately dominated by women. Suffragists relied on a strategy of supporting separate-spheres arguments. In doing so, they did not overtly challenge the traditional roles of women and men and therefore, during that time, allowed women to help regulate the private sphere, a sphere that previously before had been predominately regulated by men (Marilley 1996; Campbell et al. 2001).

Similarly to that of the Women's Suffrage Movement, social movement participants from the 1960's U.S. Welfare Rights Movement relied on a particular gendered frame to identify, express grievances, and mobilize social movement participants. During the U.S. Welfare Rights Movement, a multiracial, though predominately female African American movement, social movement participants employed a caring labor frame. Although the term "caring labor" may

suggest images of married, middle-class, white women in the home, welfare rights activists dared to fundamentally transpose the identity of the caregiver as a central collective action frame of their movement (Ernst 2009). The frame caring labor was embedded in a discourse about the value of motherhood and confirmed the value of motherhood for poor women and women of color and shifted attention away from the quest of paid employment to one of caregiving as valuable labor provided by welfare parents (Valk 2000; Ernst 2009).

Although less empirical research focuses on frames and environmental justice movements, recent research demonstrates that gendered frames are employed in environmental justice movements as well, which is not surprising given—as described earlier—that the majority of leadership and membership of environmental justice movements is women. For example, Peeples and DeLuca (2006:69) highlight that motherhood is employed as a popular frame in environmental justice movements to draw attention to women’s role in giving and maintaining life and, “to draw attention to the unnatural condition of its antithesis: the illness and earth of children.” Thus, motherhood frames are employed to demonstrate that being a “good mother” extends beyond performing activities inside the home. The above empirical research demonstrates the overall importance of frames and highlights how frames not only help to identity, interpret, and express social and political grievances but also influence individuals’ decisions to join social movements.

The Significance of Identity

Sociologists explain that identity is central in shaping individual participation in social movement activities (Friedman & McAdam 1992; Polletta & Jasper 2001; Stryker, Owens, and White 2000). In greater detail, if a movement’s collective identity aligns with an individual’s personal identity/identities, he/she is more likely to participate in a movement. Thus, the concept

of identity is central to understanding pathways into social movements and, in particular, helps explain why women join environmental justice movements more frequently than men (Friedman & McAdam 1992; Polleta & Jasper 2001; Stryker, Owens, and White 2000).

In particular, when exploring environmental justice research, empirical studies demonstrate that the “mother” identity is critical when it comes to explaining women’s environmental justice movement participation (Bell & Braun 2010; Brown & Ferguson 1995; Culley & Angelique 2003; Krauss 1993). Studies demonstrate that women’s desire to protect their home and children is a primary reason many women join environmental justice movements, an explanation that is intimately tied to the “mother identity”. In the following section, given the centrality of the “mother” identity in environmental justice research, I will review several empirical studies that discuss the significance of the “mother” identity in regards to environmental justice movement participation.

Starting with the Anti-Waste Movement, research performed by Culley & Angelique (2003) demonstrates the historical significance of the “mother” identity. In their study, that explored Three Mile Island Activist’s experiences, women expressed that they ultimately joined the Anti-Waste movement as a consequence of their identities as “mothers”. In greater detail, they shared that they were ultimately concerned about the toxic waste in their neighborhoods and communities and greatly feared the impact it would have on their health and safety of their children, future children, and community and had no other choice but to get involved. Their explanations for joining, protecting the safety and future of their children, are explanations that are intimately tied to the “mother” identity (Culley & Angelique 2003).

Furthermore, the Love Canal case (Newman 2001) illuminates the centrality of the “mother” identity in relation to entry and participation in environmental justice movements.

The Love Canal was a partially dug canal shooting off the Niagara River that became a site for industrial-chemical dumps and was later covered over, and sold to the Niagara Falls School Board, which built a school and sold the remaining land to developers. Soon, working-class mothers began to notice their children getting sick more than usual, and families noted ailments such as asthma and epilepsy, which they contributed to living above the Love Canal, where approximately twenty thousand tons of chemicals sat beneath the surface (Newman 2001). According to Hay (2009) and Newman (2001), Love Canal women considered “mother” their primary identity and understood the safety and protection of families and homes as a natural female role. In other words, their identity as a “mother,” a protector of families and homes, served as justification for their activism.

Even beyond the scope of the Anti-Waste and Toxic Movements, stories shared by activists continue to shed light on the imperativeness of the “mother” identity in helping to explain women’s entry into environmental justice movements. Hamilton (2001), who writes about women activism in South Central Los Angeles, draws attention to the phenomenon that the first stages in building a grassroots organization dedicated to environmental justice often revolve around women’s desire to protect their home and children. Perkins study (2012), which explores women’s pathways to participation in environmental justice advocacy in California’s San Joaquin valley, reaffirms this assertion, and found that most were motivated to become activists primarily in order to protect the health and safety of their families. Similarly, Bell & Braun (2010) found that women most often referenced their identity as “mothers” to justify their activism in the context of the Central Appalachia coalfields. In fact, one activist in that study viewed her activism as obligatory and asserted that if she chose not to become involved, she would not be able to fulfill her responsibility to keep her children safe (Bell & Braun 2010:804).

Lastly, Krauss (1993) demonstrates that women associate their identity as a mother closely with the duty of a “protector” and define their participation as part of the work that mothers just do. In her study, Krauss (1993) interviewed White working-class, African American, and Native American women activists in regards to their grassroots toxic waste activism and found that their traditional role as mothers served as a resource for their resistance.

Although gender appears to be a central factor in explaining women’s overwhelming presence in environmental justice movements, race and class intersect with gender and entry into movements in very important ways. For example, Krauss (1993) demonstrates that White working-class, African American, and Native American women have different beginning places to explain their activism and that their analyses of environmental justice are often mediated by factors of class and race. Similarly, Prindeville (2000) finds that although women’s gendered identities as mothers explained Indigenous and Hispanic women’s activism in New Mexico’s environmental justice movement, explanations for their activism extended beyond this one identity. In greater detail, their reasons for political involvement were not only related to their identities as “mothers” but were also related to political socialization, experiences of politicization, and affinity with and commitment to their racial/ethnic communities.

Furthermore, race and class intersect with “mothering” in important ways. In brief, mothering is a social construction and is differentially constructed for women of different races, ethnicities, and classes. Mothering occurs within specific social contexts that vary in terms of material and cultural resources and constraints (Glenn, Chang, & Forcey 1994) and is constructed by women and men’s actions within specific historical conditions, organized by gender, and consistent with prevailing cultural beliefs about gender. According to Hardy & Wiedmer, “public representations of motherhood and of mothers have a way of bleeding into the

way an actual mother thinks of herself, or as Foucault might put it, of disciplining the maternal subject” (2005:3).

According to Collins (2014), in her book *Reconceiving Motherhood*, the principal portrayal of what it means to be a “mother” remains locked within a reductive and invented prism of white supremacy, heteronormativity, and sexism. Collins notes that for African American women, motherhood is both dynamic and dialectical which means that it is not static and is ever evolving, yet at the same time, contradicted by mainstream society. For example, Collins explains that, historically, African American women not only resisted the hegemonic and racist notions of mainstream society’s idea of them, (i.e. the mammy), that arose out of slavery, but they created different types of mothering within African American Communities such as “Community Mothering” or “Other Mothering”, a form of mothering that is rooted in political activism and is the concept of accepting responsibility for a child that is not only one’s own in an arrangement that may or may not be formal (Collins 2014). This particular form of mothering can be seen in various environmental justice movements that are led by communities of color (Krauss 1993; Bullard 2003; Taylor 2014).

Given women’s overwhelming presence in environmental justice movements, it is not surprising that research exploring the relationship between identity and men in environmental justice movements is lacking, with the exception of one study. Bell & Braun (2010) find that the hegemonic masculinity of the Central Appalachia region, which is concretely tied to the coal industry, serves to deter men’s activism. However, in this study, some men were able to overcome the challenges raised by this “coal-mining identity” due to the fact that “certain life events and circumstances have affected the personal identities of these men in ways that have rendered the local hegemonic masculinity of the coalfields less relevant to their self-conception”

(2010:819). For example, a few of these men who identified themselves as activists did not work for the coal industry, nor did they have immediate family working in the industry (Bell & Braun 2010). Moreover, unlike women activists that overtly referenced their identities as mothers as motivation for their participation, men did not explicitly reference a particular identity, such as father or parent. Instead, they loosely referenced their responsibility to protect their community (Bell & Braun 2010: 809). With the exception of this study, no research exists that explores the identities that men pull upon to justify their involvement in environmental justice movements.

Drawing on this literature that examines the relationship between identity, entry and participation in environmental justice movements, and gender, a central objective of my research is to examine the identities that both men and women pull upon as a means to explain their entry into the hydraulic fracturing movement. Also, given the privileged nature of Northern Colorado's hydraulic fracturing movement, that is, those that are participating in the movement are predominately white, middle-upper class, and educated, a happening that is historically different than past environmental just movements, I explore the ways in which activism is raced and classed in this context as well, with a particular focus on the "mother" identity.

As described above, gendered attitudes towards risk and the environment and identity are two pathways that can be utilized to help explain entry and differing rates of participation in environmental justice movements among men and women; however, framing, referred to as the process by which individuals and groups identify, interpret, and express social and political grievances (Taylor 2000), significantly contributes to social movement participation and mobilization as well.

In the following section, I briefly discuss gendered patterns of labor in environmental justice movements, the second main focus of my thesis. In this section, I discuss gendered

patterns of labor that exist in social movements more broadly and then move on to discuss gendered patterns of labor that exist in environmental justice movements more specifically, with a focus on the type of work both men and women perform.

Gendered Patterns of Labor in Environmental Justice Movements

Although social movement literature investigates patterns of labor in movements (Kaplan 1990; Robnett 1996; Rodriguez 1994) less environmental justice research explores this topic. Environmental justice scholars denote that membership of grassroots EJ organizations is predominately comprised of women due to the basis of a distinction between the public and private spheres of interest and activity (Di Chirio 1992; Taylor 1997). In greater detail, because environmental hazards hit home for vulnerable communities and because women have historically been held as responsible for that domain (private), women engage in movement activities to protect and rebuild the welfare of their families and communities (Stein 2004). Thus, women's concerns and interests are associated with the private sphere of family and children, while men's interests and concerns are tied to the public sphere of employment, (Naples 1998). For example, research performed by Kurtz (2007) demonstrated that men and women alike attributed women's leadership roles in EJ movements to a quasi-biological, quasi-cultural role as nurturers and caretakers.

However, Ackelsbeg (1988) asserts that women's political partition in social activism smears an ideological distinction between public and private spheres. For example, women activists challenge these boundaries with their activism. In many cases, women begin from home-based concerns and then expand their issue recognition to locate their concerns within broader societal/structural contexts (Kurtz 2007). Furthermore, the private and public sphere distinction is intimately connected to race and class. For example, African American women

have been working the public sphere since slavery in the U.S., and—as described above—have extended their maternal interests to other people’s children in their communities. In regards to the environmental justice movement specifically, African American activists extend their maternal interests to other people’s children in their communities and create identities as “community mothers” that ultimately blur the line between private, home-based concerns and broader community based concerns (Krauss 1998; Collins 2014; Kurtz 2007).

The larger breadth of social movement literature denotes that the ways in which movement organizations are structured, examining gender distinctions and hierarchies (Kuumba 2001). For example, research on gender-integrated movements, where both women and men are actively engaged in pursuing a single objective, highlights complex patterns of labor and leadership divisions (Kuumba 2001). In some movements, such as liberation movements, the division of labor and leadership appears to mirror the relegation of women and men to private and public spheres respectively (Lobao 1990). In other strong grassroots movements, women are active in the more “open spaces” of social movements and are viewed as “bridge leaders” that help to sustain movement presence and link movement organizations to the grassroots level (Robnett 1996). Given the lack of EJ research that explores patterns of labor in EJ movements, Northern Colorado’s hydraulic fracturing movement, a gender-integrated movement, provides the perfect opportunity to explore gender distinctions and hierarchies in regards to division of labor and my research seeks to fill this present gap.

In summary, my research seeks to address several gaps and/or enhance environmental justice literature. First, given that the hydraulic fracturing movement in Northern Colorado is a relatively new, gender-integrated, and unique movement because it is a middle-upper class environmental justice movement, my research will contribute to the existing literature by

exploring the role of gender in environmental justice movements in a unique context. Secondly, my research seeks to fill gaps in environmental justice literature in relation to the gendered divisions of labor that may (or may not) exist in within environmental justice movements. A substantial body of research exists within the social movement literature more broadly that explores this phenomenon but not while focusing on environmental justice movements specifically.

Intersectionality

While my focus is predominately on gender in this thesis, I simultaneously work to unpack the way intersecting identities like race and class also shape social movement participation. In brief, intersectionality was introduced in the 1980s as a heuristic term to draw attention to the dynamics of difference and the solidarities of sameness in the context of anti-discrimination and social movement politics (Cho, Crenshaw, & McCall 2013). Intersectionality brought to light that single-axis thinking (i.e. a strict focus on gender OR race OR class) undermines legal thinking, knowledge production, and struggles for social justice (Cho, Crenshaw, & McCall 2013).

Furthermore, intersectionality stresses that organized identity groups that which we find are not monolithic but made up of members with different and perhaps competing identities as well (Crenshaw 1997). In brief, intersectionality examines how gender, race, and class mutually construct one another (Collins 1998). In my research, I use the concept of intersectionality to unpack the various ways in which gender, race, and class interact to shape the multiple dimensions of activist's experiences and identities. Thus, my proposed project seeks to address the following research questions:

Overreaching research question:

How does gender:

- 1) Influence the entry of activists into anti-hydraulic fracturing organizations?
- 3) Influence the jobs and tasks activists perform in grassroots organizations?

Supplementary Research Questions:

- 2) How does gender converge with race and class in the hydraulic fracturing movement in Northern Colorado?
- 3) How does gender operate in the context of an environmental justice movement?

Chapter 3: Methods

To set the stage for the research I present in this thesis, in the previous section I outlined social movement paradigms, the ever-evolving conceptualizations of environmental justice, and highlighted how gender, race, and class operate in the context of social movements more broadly and environmental justice movements in relation to entry and labor patterns. The purpose of this chapter is to describe the research setting of the thesis as well as my methods. To that end, I first discuss unconventional oil and gas extraction in the state of Colorado, specifically outlining perspectives and concerns related to the process of hydraulic fracturing in order to clearly contextualize the emergence of the groups of study in this thesis. Then, I provide a historical overview of the events that unfolded surrounding hydraulic fracturing and outline in detail the formation and objectives of my case studies, two anti-fracking organizations: Anti-Frack 1 and Anti-Frack 2. Lastly, I explain my research design, which includes a discussion of methods, sampling, coding, data analysis, and ethical challenges.

Unconventional Oil and Gas Extraction in Colorado: The Practice of Hydraulic Fracturing

Throughout the United States, oil and gas development is booming. The U.S. is the world's third-largest petroleum producer, with more than 500,000 producing wells (EPA 2015). The boom in drilling and production of natural gas reserves is largely due in part to technological advances in horizontal drilling, commonly referred to as hydraulic fracturing, fracking, or hydro-fracking. Hydraulic fracturing involves the high-pressure underground injection of large amounts of water and other fluids (including chemicals) into gas-bearing rock to form fractures that are propped open with sand. Once the formation is fractured, the natural gas can flow to the well

where it is pumped out of the ground (Saundry 2009). This technique provides the oil & gas industry the ability to reach a greater amount of natural gas from unconventional oil and gas reserves that are otherwise unreachable. (Davis 2012:179; Boudet et al. 2014).

In the state of Colorado, active drilling has increased immensely with the discovery of two resource plays – the Piceance Basin on the western side of the Front Range and the Niobrara Shale in the Denver-Julesburg Basin along the northern plains of the state (Opsal & Shelley 2014). In the early 2000s, the oil and gas industry was actively drilling roughly 23,000 wells. Recent figures indicated 52,000 active wells in 2014, almost a 126% increase (COGCC 2014). Much of this active drilling is taking place along the Front Range Urban Corridor (Figure 1.1).

This rapid expansion has created considerable debate among anti-fracking and pro-fracking camps. Local arguments in support of and in opposition to unconventional oil and gas drilling in Colorado mirror empirical studies focusing on unconventional oil and gas development elsewhere in the United States (Howarth et al. 2001; Sovacool 2014; Maddaford 2013; Osborn et al. 2011). For example, proponents of fracking explain that natural gas is a potential bridge fuel until the nation is ready to make the shift to a renewable energy economy and claim that it could help address climate change mitigation concerns (Pacala and Socolow 2004). In greater detail, natural gas is praised as a solution to greenhouse gas emissions because it produces approximately 45% of the carbon dioxide emissions of coal (Howarth et al. 2011). Additionally, supporters posit that if the U.S. transitions to domestic fossil fuels rather than depending on foreign fossil fuels, national security will be strengthened (Howarth et al. 2011). Furthermore, proponents explain that unconventional oil and gas drilling provides economic opportunity for rural, impoverished, and/or isolated communities (Howarth et al. 2011). For

example, researchers estimate that the gas industry in the U.S. contributes to \$385 billion in direct economic activity and nearly 3 million jobs (Howarth et al. 2011).

Opponents such as politicians, citizens, and scientists stress a variety of concerns regarding fracking. They assert that the technology used for oil and gas drilling is faulty and dangerous. Studies demonstrate that although the technology is technically complex and expensive, and although most accidents are caused by human error, many accidents are caused by leaky wellheads, blowouts, and holding tanks, all of which can be made more secure (Howarth et al. 2011; Sovacool 2014). Additionally, stakeholders who warn against fracking often point to state and federal regulations that seem to facilitate rather than monitor oil and gas development. For example, seven of the fifteen federal environmental regulations that exist nationally, including the Clean Air Act, Clean Water Act, Emergency Planning and Community Right to Know Act, and the Safe Drinking Water Act are exempt from the Energy Policy Act of 2005 (Davis 2012; EWG 2009, Malin 2011, Energy Policy Act of 2005). Critics refer to this as the Halliburton Loophole because its passage was largely due to Vice President Dick Cheney, a former Halliburton CEO (Howarth et al. 2011). In greater detail, Cheney created the Energy Task Force to help form Energy Policy in 2001; however, many of the individuals who met with the Energy Task Force were executives from companies such as BP, Shell, and Exxon Mobile, and recommendations made by these executives significantly shaped the Energy Policy Act of 2005.

In Colorado specifically, proper and consistent regulation is a serious concern among fracking opponents. The Colorado Oil and Gas Conservation Commission is the primary body charged with overseeing oil and gas activity (Opsal et al. 2014), but sustains close ties with industry officials (Davis 2012). Although the state and industry officials of Colorado boast about

Colorado's rigorous and evolving air emissions, set-back rules, and water-testing regulations, identifying them as some of the best in the nation (Finley 2014), Maddaford (2013) notes that these regulations are limited because the COGCC employs approximately 23 inspectors to monitor the 52,000 wells across the state. Furthermore, research performed by Opsal and Shelley (2014) indicates that when the state does respond to citizen complaints regarding oil and gas development, citizens frequently experienced these responses as inconsistent and incomplete and Citizens voiced that many of the problems they experienced were lasting and ubiquitous rather than short-term isolated incidents. Thus, concern regarding the state and industry's effectiveness in regards to regulation remains a fundamental concern among citizens.

Opponents also voice concerns regarding environmental impacts, including noise pollution and soil, air, and water contamination during and after production (Brown 2014, Osborn et al. 2011, Witter al. 2008). As Howarth and colleagues note (2011), volatile organic compounds and reactivate materials can enter into ecosystems through water used during production, and toxic emissions, such as methane, are released during production (McKenzie et al. 2012). In addition, although carbon dioxide emissions during production are less than that of coal, methane emissions, which are 25 times more potent than carbon dioxide over a 100-year period, are higher than coal, resulting in increased air pollution (McKenzie et al 2012). Residents also complain that the tranquility of everyday life is disrupted by continuous noise and traffic from trucks and equipment hauling sand, chemicals, and wastewater to oil and gas production sites (Opsal et al. 2014; Perry 2012). Lastly, recent studies demonstrate that there is significant risk of seismic activity from the reinjection of flowblack fluid (Elsworth 2013, Karanan et al. 2014; USGS 2014).

Given the above environmental impacts, significant health concerns related to increased asthma and birth defects in children born to mothers that live near wells exist among residents directly impacted by industry (McKenzie et al. 2014). Nationally, and within the state of Colorado, there has been a significant demand by concerned citizens and academic scholars to systematically and longitudinally investigate the aforementioned environmental and health impacts of unconventional oil and gas development.

Case Studies: Background Information Related to Anti-Frack 1 & Anti-Frack 2

Anti-Frack 1 and Anti-Frack 2, the two groups I examine in this thesis, point to a number of these concerns in their efforts. Both are grassroots, citizen-led, anti-fracking organizations that are located in Northern Colorado. Geographically speaking, these groups are located less than 30 minutes from each other and are located in close proximity to the Rocky Mountains of Colorado. Although Anti-Frack 1 not currently active, according to the co-leaders, their organization consists of roughly 15-20 core members, who met on a week to bi-weekly basis during election session. In addition, at the time of data collection, nearly 600 people within the community belonged to their mailing list. Activists who joined Anti-Frack 1 came from predominately two neighboring communities, a community established for singles, couples, and families of all ages, and a community established for 55+. Anti-Frack1 has a following on their Facebook page, consisting of 850 “likes”. Anti-Frack 2, on the other hand, was spearheaded by a steering committee; this committee are the core remembers that continually work to achieve the organization’s mission. According to one participant, about 40-50 people subscribe to their email list. Anti-Frack 2 has a substantial following on their Facebook page, consisting of nearly 3,700 “likes”. In this section I explain the purposes and evolution of these organizations.

During 2013, the organizations put forth similar objectives: to ban or enact a moratorium—essentially a timeout—on the process of hydraulic fracturing within their communities because of many of the concerns outlined in the earlier section. These two organizations worked closely together, offering support and assistance in gathering petition signatures to get their respective measures placed on the ballot, and then again while canvassing and mobilizing citizens to vote. However, as the movement progressed, these organizations shifted their objectives. Anti-Frack 1 continued to focus solely on the issue of prohibiting fracking from entering their community boundaries. In contrast, Anti-Frack 2 broadened their objective and began to focus on what they viewed as the larger issue at hand: community rights. A brief discussion of each organization’s objectives, history, and membership follows.

Anti-Frack 1, originally named “Don’t Frack [Community 1],” changed its name to “Our [Community 1]” roughly two months after forming to convey to the public what was taking place in their community, a citizen-led community based initiative to place a five-year moratorium on fracking. One participant from this organization stressed that pushing for a moratorium was a community effort and stated, “We wanted this, this is [Community 1]. You know, we are trying to protect it. This is, we live here”. To the public, Anti-Frack 1 states that their group is:

A dedicated group of volunteers, including citizen activists, parents, concerned residents, and small business owners who successfully put into a law a 5 year moratorium on Fracking in the City and County of [Place 1] We are committed to speaking up and working to protect the health and safety of citizens of [Community 1], as well as, our land, water, and air.

Anti-Frack 2 formed in the summer of 2012 in an effort to inform citizens about the many dangers of hydraulic fracturing. Their organization believes that hydraulic fracturing and other

corporate projects are hazardous in various ways and must be resisted by citizens on all levels.

According to their present mission statement, their primary objective is to:

Educate people and communities about local, community self-governance and community rights; secure the inalienable rights of all people, communities, and ecosystems through local self-governance; assert community rights to empower and liberate communities from state preemption and corporate harm; and advance those efforts toward state and federal constitutional change.

Although Anti-Frack 1 and Anti-Frack 2 are both concerned about the practice of fracking and initially formed in response to the threat of fracking, the organizations' frames differ. Anti-Frack 1 focuses exclusively on the practice of fracking and puts forth frames related to the health and safety of their community and the environment. In contrast Anti-Frack 2 adopts a multitude of frames in their mission statement that do not address fracking specifically but rather the problem with corporate industry as a whole. The organization emphasizes the significance of local governance, community rights, the environment, corporate harm, and community empowerment.

In November 2013, members of Anti-Frack1 placed a five-year moratorium on the ballot in response to an oil and gas operator's plans to frack wells located near a public K-12 charter school. The vote was so close that a mandatory recount took place. On November 20, the recount confirmed that voters narrowly approved a five-year moratorium on oil and gas drilling practices by 20 votes, out of 20,000 votes cast. Immediately thereafter, a pro-fracking group filed a lawsuit alleging that the city did not count the votes correctly and the Colorado Oil and Gas Association (COGA) filed a complaint for declaratory judgment to invalidate the city's moratorium on fracking. In February 2014, a district judge upheld the fracking moratorium vote, stating that although there were problems with the election, it was not illegal. However, in September 2014, a judicial district judge ruled that a Denver based oil and gas operator, who also sued the city

after the election, was exempt from the moratorium because of an agreement it had in place before the moratorium with the city. The city has not appealed the judge's decision, meaning that the company can bypass the five-year moratorium and move forward with plans to drill in the area.

The organizational trajectory of Anti-Frack 2 is parallel to that of Anti-Frack 1. As a way to challenge the growth of industry in their community, in the summer and fall of 2013, Anti-Frack2 organized a citizen-led initiative and gathered over 2,000 petition signatures to put forward a ballot measure amending their city charter to add a community bill of rights that bans fracking within city limits. This community bill of rights contained language that emphasizes protecting citizens' rights to: 1) clean air; 2) clean water; 3) be free from chemical trespass; and 4) local self-government.

On November 4, 2014, roughly 60% of the electoral voted in favor of the community bill of rights banning fracking. Shortly thereafter, in December, COGA sued the city, contesting that state law, which allows fracking, preempts local laws. In response to this, in June of 2014, Anti-Frack 2 and the citizens of the city filed a class action lawsuit against COGA and Governor Hickenlooper to uphold the community rights amendment and enforce the ban on fracking within their city limits. Shortly thereafter, in August 2014, a district court judge struck down the fracking ban and cited *Voss v. Lundwall Bros., Inc.*, a case that addressed operation conflict between the state's interest and the city. In the 1992 case *Voss. v. Lundwall*, a judge ruled that a drilling ban in Voss impeded the state's ability to foster efficient development and production of oil and gas resources in a manner that prevents waste and protects the correlative rights of the owners. The district court judge stated that 2013 ban on drilling does the same, preventing the development and production of oil and gas resources in the city.

After interviewing activists from Anti-Frack 1, it appears that Anti-Frack 1 efforts have halted and the group has disintegrated. According to several activists, they are no longer actively organizing in an effort to halt oil and gas production within city limits. In contrast, Anti-Frack 2 formally joined the Colorado Community Rights Network (COCRN), a network of organizations that was established in late 2013 to advance local and statewide democracy, and environmental and economic justice and sustainability. Currently, Anti-Frack 2 is working with COCRN on a 2016 statewide citizen-led initiative that will protect community rights against any dangerous industrial activity that poses a threat to water, air, health, homes, and the environment. Anti-Frack 2 continues to stress procedural equity, a concept directly tied to environmental justice, as a key concern and feels that they have the right to determine what occurs within their community's boundaries. Below are timeline figures that depict the comparable trajectories that Anti-Frack 2 and Anti-Frack 1 have pursued in an effort to protect their communities for the process of fracking (See Figure 3.2 and Figure 3.3).



Figure 3.2 - Formation of Anti-Frack 1



Figure 3.3 - Formation of Anti-Frack 2 1

Research Design: Qualitative Methods

The purpose of this study is to describe individuals’ lived experiences as activists and to examine how gender, race, and class shape activists’ experiences in Northern Colorado’s hydraulic fracturing movement. At the same time, the purpose of this study is to contribute to existing theory on gendered activism in the context of an environmental justice movement.

Specifically this study answers the following primary and secondary research questions:

Primary:

How does gender:

- 1) Influence the entry of activists into anti-hydraulic fracturing organizations?
- 2) Influence the jobs and tasks activists perform in grassroots organizations?

Secondary:

- 1) How does gender converge with race and class in the hydraulic fracturing movement in Northern Colorado?
- 2) How does gender operate in the context of an environmental justice movement?

This thesis relies upon qualitative methodology. Qualitative research involves an interpretive, naturalistic approach to the world and aims to understand phenomena in terms of the

meanings people bring to them. Qualitative research takes the perspectives and accounts of research participant's social and material circumstances as a starting point to understand phenomenon of interest (Denzin & Lincoln 2011; Flick 2009; Ritchie, Lewis, McNaughton & Omston 2013). Given my interest in understanding participants' lived experiences as activists, a qualitative research approach was most appropriate for this project.

In this study, I used a semi-structured interview schedule to gather detailed information about female and male activists' experiences in two anti-fracking organizations in Northern Colorado. In the following section, I provide an overview of the methods that I employed to answer my research questions. First, I will explain how I chose the cases under examination in this thesis. Then I will discuss non-participant observation and its significance in this project. Lastly, I will discuss in-depth interviewing, the method I utilized to carry out my qualitative research.

Case Selection

Case-study research is an in-depth investigation of an extensive amount of information about very few units or cases for one period or across multiple periods of time (Ragin & Becker 2009). According to Creswell (2013), in case study research, the research explores a real-life contemporary bounded system (a case) through detailed, in depth data collection involving multiple sources of information. Examples of cases researcher often examine include individuals, groups, communities, organizations, movements, events, or geographic units (Creswell 2013; Neuman 2011: 42).

Case studies allow researchers to make macro/micro theoretical connections that ultimately contribute to theory; at the same time, case studies help to shed light on and identify

concepts that are of most interest (Ragin & Becker 2009; Neuman 2011). Case studies are particularly good at making macro/micro theoretical connections because the theory-building process is so intimately tied with evidence. Building theory from case study research is an iterative process that involves constant iteration backward and forward between steps, such as moving from cross-case comparison, back to redefinition of the research question, and out to the field to gather additional evidence (Eisenhardt 1989). Thus, it is likely that theoretical conclusions will be consistent with empirical observations.

The researcher must consider the intent behind adopting a case study approach (Creswell 2013; Yin 2009). Researchers often conduct case studies in an effort to illustrate an intrinsic case, define a case that has unusual interest in and of itself and needs to be described in detail (Stake 1995). For example, Malin's (2015) work explores the dangerous legacy of previous mining booms and the potential promise for economic development. Her work illustrates the battle that several uranium communities faced and highlights how shifting concepts of environmental justice inspire divergent views about nuclear power's sustainability and forms of social activism (Malin 2015). Malin (2015) adopted a case study approach in hopes of illuminating concepts of interest, mainly class and the historical context in which her participants operated.

According to Ragin & Becker (2009), prior to adopting a case study approach, the researcher should select their case or cases and define their boundaries. As Marshall and Rossman (2011) note the availability of rich and diverse data, access to entry, opportunities to build rapport, ethics, and technical considerations, such as the researcher's time and resources, must be weighed when selecting a research setting or cases to study (2011: 101-121). Given my current location in Colorado and my limited financial resources, I selected two anti-fracking

organizations in Northern Colorado as my cases for this research. Mostly importantly, I selected these case studies because they ultimately shed light on the concepts of most interest in my study: gender, race, and class.

Non- Participant Observation

In an effort to deepen contextual understanding surrounding the events of hydraulic fracturing in Northern Colorado and gain entrée into local anti-fracking organizations, I attended three city council meetings in two communities, and three educational forum panel presentations hosted and/or funded by anti-fracking organizations throughout Northern Colorado from March 2013 to February 2014. I officially received IRB approval to perform my research during the month of February 2014. At these meetings, I did not take systematic written accounts because these meetings did not serve as a source of data. Instead, they served three purposes: (1) a means to gain entrée; (2) a means to gather a better understanding of activists concerns; and (3) a means to gain a better understanding of the active organizations in Northern Colorado.

In conducting observations of a particular social setting, researchers can take on a variety of different roles when they enter the field. Adler and Adler (1987) explain that the researcher can adopt the role as the complete observer, observer-as-participant, participant-as-observer, and complete participant in the social setting, ranging from the least degree of participation and immersion to the greatest degree of participation and immersion. For this research, I adopted the observer-as-participant role, where the researcher is a removed, covert or overt, and engages in only brief and highly formalized interaction between the researcher and members (Griffith 1998).

In the observer-as-participant role, the researcher is an outsider of the group under study and can record data without direct involvement in activity or with people (Creswell 2013). Marshall and Rossman (2011) explain that the observer-as participant role is particularly useful while performing research in areas of guarded interaction and sentiment because the researcher, not being directly involved with the activity or people, is not drawing attention to himself/herself and allowing interactions to unfold naturally. Furthermore, adopting this role did not force me to concretely position myself on either side of the issue. This was important because it allowed me to learn more about the movement in its totality and my personal opinions regarding the process of fracking were not brought into question. Ultimately, adopting the role of observer-as-participant helped to reinforce my position as researcher, as opposed to a local community member, that was interested in voicing and understanding their concerns.

Initially, upon entering the field, I assumed a covert role as observer-as-participant given the contestation and sensitivity surrounding the issue. I simply wanted to gather a better understanding of what the movement was about. Thus, I intentionally omitted my interest for attending these meetings and seldom interacted with activists before, after, or during meetings. After two meetings, I assumed an overt role only after activists started to question my attendance at these events and disclosed to activists that I was in the process of conducting research on activism in Northern Colorado and wanted to highlight and understand their experiences as local activists in anti-fracking grassroots organizations.

Moreover, I worked in other ways to gain entree, primarily by doing activist work. In the fall of 2013, I volunteered and canvassed neighborhoods for a different local anti-fracking organization in my community. I drew on this experience whenever possible in conversations with activists from the two local anti-hydraulic fracturing group I engaged with for this project to

establish my own credibility. In addition, I referenced my ties to Colorado State University's Department of Sociology department and researchers performing work on hydraulic fracturing and citizens' perceptions. Lastly, my presence and participation at other key anti-fracking events in Northern Colorado introduced me to the founder of the second anti-fracking organization under examination in this thesis.

Clearly, then, as I became more accepted by and involved with the network of anti-fracking organizations in Northern Colorado, I transitioned from the covert observer-as-participant to the overt observer-as-participant. As I transitioned to an overt role, I was able to draw upon the rapport I had built through engaging with activists on multiple occasions and reference my position within the anti-fracking activist network with participants. Entering the network as an observer-as-participant decreased skepticism towards my research, and was vital in terms of recruiting participants for my primary method, interviews. Indeed, it was the combination of the above early efforts that eventually allowed me to gain entrée into these two local anti-fracking organizations.

Semi-Structured Interviews

Because of my interest in exploring, describing, and analyzing experiences of activists, I relied on semi-structured interviews to collect data for this thesis. Semi-structured interviews are advantageous for many reasons while performing research. Perhaps most importantly, semi-structured interviews allow the researcher to explore a specific topic while preparing a limited number of questions in advance, allowing for flexibility and innovation throughout the research process (Rubin and Rubin 2012). Given this flexible nature of semi-structured interviews, participants have the freedom to express their views in their own terms (Rubin and Rubin 2012).

Through interviews, researchers discover in detail the experiences, motives, and opinions of others and learn to see the world from perspectives other than their own (Rubin and Rubin 2012:3).

I selected semi-structured interviews as my interview format because I could prepare questions ahead of time, which allowed me to present myself as a prepared and competent researcher. Furthermore, semi-structured interviews allow for a responsive interviewing style, which encourages an open and fluid discussion among conversational partners that often focuses on a single topic and explores it thoroughly in detail. Responsive interviewing emphasizes flexibility of design and expects the interviewer to alter the questions in response to what he or she is learning, as well as the personalities of both conversational partners (Rubin and Rubin 2012:7-8). Rather than focusing on maintaining a relationship, responsive interviewing focuses on making a relationship, encouraging depth and detail on behalf of the participant, to help find an answer to a research question (Rubin and Rubin 2012).

My interview guide (See Appendix A) served as a loose guide, as opposed to a strict schedule. This approach allowed flexibility in how topics were covered, but allowed me to gather the same type of information from all participants. I began each interview by asking introductory questions to provide respondents with a comfort level about their ability to respond to questions. For example, I would ask them about how long they had lived in the community and their favorite thing about their community. As the interview progressed, I moved to asking increasingly more complex questions (Rubin and Rubin 2012). Rubin and Rubin (2012) explain this kind of organization is useful because it allows a level of comfort and transparency to develop between the interviewer and the interviewee. My interview schedule (see appendix A) focused on three main areas of interest: the entry of activists into anti-fracking organizations, the

tasks and responsibilities activists perform within these organizations, and the ways in which activists mobilize citizens to align with the cause of their organization.

Sample Recruitment

I recruited 17 participants on an ongoing basis between February 2014 and April 2015. I relied on snowball sampling to recruit participants throughout this study, where I requested that participants gain permission from other members to be interviewed and pass their contact information onto me. Since I could not obtain a list identifying anti-fracking activists members from different organizations on websites or other media outlets, I relied on the initial contact I made earlier with key leaders within the movement as my starting point.

Once I had received contact information from a previous interviewee stating that an individual agreed to let me contact them, I sent out an email (see Appendix B) asking them if they'd like to formally participate in my study with an introduction letter outlining the parameters of my study attached (see Appendix C). If a phone number was given as contact information, I called these respondents to set up an interview (see Appendix B) and asked for an email at the end of the call that would allow me to send my introduction letter to them. I recruited 15 participants via snowball sampling through the two organizational leaders I initially met at events and interviewed first.

I performed 15 interviews in person and two interviews on the telephone, for a total of 17 interviews. I performed 11 interviews with activists with Anti-Frack 1 and 6 interviews with activists from Anti-Frack 2 and interviews were performed over a period of a year, which corresponded to various levels of activity for each group. Whenever possible, I conducted interviews in person for various reasons. First, research indicates that developing rapport during telephone interviews is more difficult and requires enhanced skills or efforts (Burnard 1994).

Furthermore, face-to-face interviews provide a distinct advantage in providing ‘social cues’ such as voice, intonation and body linkage, all of which can give the interviewer extra information that can be added to the verbal answer of interviewees (Opendakker 2006). Lastly, during telephone interviews breakdowns in communication can easily arise (Hermanowicz 2002) and clarifications are more difficult to execute over the telephone (Burnard, 1994).

The interviews I performed ranged from 45 minutes to nearly two hours with an average length of 1 hour and 15 minutes. Interviews took place at participant’s houses, coffee shops, and at restaurants. The participant had all authority in deciding where the interview was carried out, as I wanted to ensure that all participants felt as comfortable as possible (Marshall and Rossman 2011).

I interviewed each activist one time. Prior to the interviews, all participants read and signed a consent cover letter (see Appendix D). I also asked each participant to fill out a demographic questionnaire at the end of the interview (see Appendix E). If they did not feel comfortable filling out the questionnaire on the spot, I sent them an email version of the questionnaire after I concluded the interview and asked the respondent to email it back to me. In the end, the demographic questionnaires helped me to gain a better understanding of my sample. All participants consented to having their interviews recorded with a digital voice recorder. Recording interviews allowed me to take jottings on topics addressed and note informal communication throughout the entirety of the interview (Lofland et al. 2006).

Given my limited financial budget and in an effort to better understand my data, I produced a transcript, or a word-for-word written accurate account of all questions and answers

(Rubin and Rubin 2012), for each interview. Following each interview, I immediately assigned each participant a pseudonym and used this pseudonym on his/her transcript to protect confidentiality (Marshall and Rossman 2011).

Sample Population

In total, I interviewed 17 activists, 11 female (65%) and 6 male (35%). While participants ranged in age from 35 to 75 years of age, on average, they were 52 years old. In addition, 94% of the sample self-identified as white; only 1 participant self-identified as other. All of my participants are highly educated. More explicitly, 4/17 (24%), participants have a Ph.D., 6/17 (35%) have a Master's degree, 6/17 (35%) have a Bachelor's degree, and 1/17 (6%) have an associates degree. Furthermore, all of the activists I interviewed were non-natives of Colorado and moved here from the Midwest, the East Coast, or the West Coast. All activists shared that they have lived in Colorado for at least three years or more. Of the 11 female participants I interviewed, 8/11 (73%) identified as mothers and 7/11 (64%) held part-time or full-time jobs. In contrast, 4/6 (66%) of the men I interviewed held full-time jobs, while the other two men self-identified as working part-time or being retired. Furthermore, 3/6 (50%) of the men I interviewed identified as fathers. In regards to being a stay-at-home parent, two women out of the eleven women (18%) who identified as mothers stated they were strictly stay-at-home mothers and none of the six men who identified as fathers shared that they were strictly a stay-at-home father.

Both groups were predominately white, middle-upper class, and educated. I interviewed a total of 11 activists from Anti-Frack 1, 9 female (82%), 2 male (18%). All but one activist from Anti-Frack 1 self-identified as white. In regards to class, all activists self-identified, loosely, throughout interviews, that they considered themselves at least middle-class, based on the type of

profession they held, their education level, and the property value of their house. All but one activist (91%) held a bachelors degree or higher. In fact, three individuals, all females, held a MD or a PhD.

I interviewed 6 activists from Anti-Frack 2, 4 (67%) male, 2 (33%) female. All of the activists (100%) from this organization self-identified as white and at least middle-class, and once again, often loosely referencing their professional career, education level, or property value, as an indicator of class. In comparison to Anti-Frack 1, activists from Anti-Frack 2 that I interviewed appeared to be slightly more educated overall. All of the activists I interviewed with the exception of one activist (83%) shared that they obtained Master’s degree or higher and 6/6 obtained a Bachelor’s degree (See Table 3.1).

Table 3.1: Demographic Characteristics of Sample

	Race (Percent White)	Education (Percent Bachelor’s Degree)	Percent Female
All Participants	94% (16/17)	94% (16/17)	65% (11/17)
Anti-Frack 1	91% (10/11)	91% (10/11)	82% (9/11)
Anti-Frack 2	100% (6/6)	100% (2/6)	33% (2/6)

The number of male and female activists I interviewed from each organization appeared to be reflective of their organization’s membership overall. For example, activists from Anti-Frack 1 shared that roughly 75% of the organization’s membership was female, and only roughly 25% male. In contrast, activists from Anti-Frack 2 shared that they thought there organizational membership was almost equal gender wise. However, they noted that there were more men on the steering committee than woman, perhaps demonstrating why more than half of the activist I interviewed from Anti-Frack 2 were male, as all belonged to the steering committee. Based on

my observations from attending various events and forums across the Front Range overall, the network of grassroots anti-fracking organizations in Northern Colorado appears to predominately white, middle-upper class, and highly educated, and predominately comprised of women. Thus, Anti-Frack 1 and Anti-Frack 2 appear to representative of other organizations on the Front Range.

Data Analysis

I applied principles from Charmaz's (1996) grounded theory method while analyzing data. Grounded theory consists of a set of inductive strategies for analyzing data. With grounded theory, the data forms the foundation of theory and the analysis of data generates the concepts researchers construct (Charmaz 2006). A major contribution of grounded theory methods is that they provide rigorous procedures for researches to check, refine, and develop their ideas and intuitions about the data and enable the researcher to make conceptual sense of large amounts of data (Charmaz 1996).

I uploaded all interviews and field notes into NVivo, a qualitative data software (QDA) program that allows the researchers to file and code their data into various categories that organize and render their data meaningful (Lofland et al. 2006). NVivo allowed me to not only code my data, but also to retrieve, record, refile, and detail coded items and relate them to one another more effectively and efficiently (Lofland et al. 2006:203). In other words, QDA allowed me to employ the constant comparative principle of grounded theory method, in which the research makes comparisons during each stage of the analysis (Charmaz 2006).

Charmaz suggests that the researcher create codes as he/she studies the data. Researchers must stay close to the data and remain open to different categories of coding that may emerge from the data. Given my status as a novice researcher, to accomplish this, I engaged in line-by-

line coding where I coded each line of my written data. Line-by-line coding, although tedious at times, creates “detailed observations of people, actions, and settings that reveal visibly telling and consequential scenes and actions” (Charmaz 2006:50). For example, while performing initial line-by-line coding, I came up with approximately 60 codes; however, it soon became apparent that some codes were more telling than others and appeared more frequently than others; for example, “entry,” and “mother” were clearly predominant themes across early interviews. Thus, consistent with grounded theory, I began to focus on these themes in interviews and revisited already conducted interviews with these specific themes in mind.

Because these themes emerged as central during early coding and analysis of early interviews, when I transitioned to focused coding, I used these most codes to sort through my interviews and field notes. Focused coding allowed me to synthesize and explain larger segments of my data, while at the same time consider the adequacy of my codes (Charmaz 2006:57). Focused coding also allowed me to move across interviews and observations and compare activist’s experiences, actions, and understandings (Charmaz 2006:58). For example, my focused code of “entry” allowed me to compare and contrast male’s and female’s justifications for entering the hydraulic fracturing movement or local anti-fracking organization in their community. In greater detail, although men and women appeared to share similar concerns about the process of fracking all together, focused coding illuminated that men and women joined anti-fracking organizations for different reasons.

Finally, in an effort to move from descriptive coding to more analytical coding, I relied on theoretical coding, in which I conceptualized how the substantive codes I produced earlier in focused coding related to each other (Chamarz 2006:63). For example, when I explored in detail the code of “entry,” many women relied on their identity as a “mother” to explain their activism;

however, as I illuminate in my findings, the way in which women were defining or discussing “motherhood” was unique and different, specifically in reference to the other research I had read about identity and environmental justice movement participation. This finding lead me to explore different types of “mothering” that exist in our society and the ways in which “mothering” is tied to class and race and environmental justice movements overall.

Last, I relied heavily on memo-writing throughout the course of data collection and data analysis, where I stopped and analyzed my ideas about codes in any and every way I could (Charmaz 2006). The above coding strategies allowed me to engage in data analysis in a systematic yet flexible manner that ultimately divulged descriptive and theoretical findings from my data about activist’s efforts and experiences.

Intersectionality as a Methodological Approach

Throughout data analysis, I relied on intersectionality as a methodological approach. Instead of summarizing the effects of categories, such as gender, race, or class, the concept of intersectionality stresses the interlocking nature of these categories and how they can mutuality strengthen or weaken each other (Crenshaw 1989) Specifically, feminist scholarship presents race, class, and gender as closely intertwined and contests that these forms of stratification need to be *studied in relation to each other* (McCall 2014). Intersectionality focuses awareness on people and experiences and on social forces and dynamics that are overlooked (MacKinnon 2013).

According to Choo & Free (2010), when designing research that takes advantage of intersectionality most successfully, researchers need to think what kinds of conceptualization of intersectionality makes sense to them and why. In greater detail, Choo & Feree (2010) investigate what it means to practice intersectionality sociologically as a methodological

approach and consider how intersectional analysis could be more widely used to inform understandings of core sociological issues, such as institutions, power relationships, and cultural and interpersonal reactions. There are often three styles of intersectional practices that researchers rely on: group centered, process-centered, and system centered. In brief, group centered intersectional methodological practices place emphasis on including multiple-marginalized groups in the content of the research, attempting to give voice to these groups, while process-centered and system centered intersectional practices focus on explaining intersectional dynamics through the way that the analysis of data is done (Choo & Ferree 2010).

Throughout data analysis, I relied predominately on process-centered intersectional practices and attempted to illuminate the ways in which race, gender, and class intersect, as locations like “street corners” and have multiplicative effects and reveal structural processes organizing power (Choo & Ferree 2010). Furthermore, I paid specific attention to multilevel data and attempted to capture both the agency of individuals in creating the world they live in and the enabling and limiting forces of the word as it has been produced in relation to gender, race, and class (Choo & Ferree 2010). While performing data analysis not only did I isolate the categories of gender, race, or class but I also looked at the complex and dynamic relationships among the three categories in relation to activism, specifically focusing on the processes that unfolded from interactions of these categories.

Ethical Challenges

During my research, I experienced both expected and unexpected ethical challenges. In this section, I discuss these challenges in detail. First, I will discuss ethical dilemmas I encountered concerning confidentiality. Then I will discuss my positionality as both an insider and outsider in this research project and the various ethical challenges this created.

Ethical Dilemma Concerning Confidentiality

The anti-hydraulic fracturing movement in Northern Colorado is highly visible and densely connected. Many of these organizations receive significant media attention because of their efforts to enact a ban or a moratorium on hydraulic fracturing in their communities. In addition, many of these organizations work closely with each other, exchanging frequent communications. Thus, prior to entering the field and prior to performing interviews, I anticipated that I would face confidentiality dilemmas. I anticipated that I would have to find a way to express to my participants that I was taking all measures to ensure confidentiality, not only for themselves, but also for their organization and their community.

As noted by Weiss (1994), as researchers we must consider and take all possible measures to ensure confidentiality for our participants. In an attempt to tackle this ethical challenge, I placed a confidentiality clause on the consent forms I administered to participants and assigned pseudonyms to all participants. Furthermore, I applied pseudonyms to the organizations I selected as my case studies, and the communities in which they resided in an attempt to mask any identifying markers. Moreover, as I explained above, in my own analysis, I do not distinguish between the two groups.

I also ensured, to the best of my abilities, to all participants that agreed to participate in interviews, that they would not be damaged because of their participation in my interviews. For example, if a respondent said something that damaged the reputation of his/her organization or used slanderous language to describe someone else in his/her organization, I omitted these quotes from my overall report or I presented the data in a fashion that no one, even someone belonging

to the organization, would be able to decipher the source of the quote. I ensured this by engaging in member checking, or sharing my data and interpretations with members of the group (Marshall and Rossman 2011).

Positionality In the Setting

When a research enters the field as an insider, defined as someone whose biography (gender, race, class, sexual orientation and so on) gives him/her a lived familiarity with the group being researched, that tacit knowledge informs research producing a different knowledge than that available to the outsider, or researcher who does not have intimate knowledge of the group being researched prior to their entry into the group (Griffith 1998). Early discussions of insider/outsider status assumed that the researcher was predominately an insider or an outsider and that each position carried certain advantages and disadvantages. However, current discussions expose that the boundaries between the two positions are not clearly defined and that it is plausible for the researcher to hold positions in both camps (Marriam, Johnson-Bailey, Lee, Kee, Ntseane, Muhamad 2001).

When I conducted interviews, I assumed the roles of both an insider and outsider simultaneously; however, these roles shifted based on the social statuses and identities of those whom I was interviewing (Griffith 1998). For example, I was an insider in one sense because, like many of my participants, I am white, middle-class, and educated. This insider status provided me with important cultural capital and invaluable knowledge of the social groups I studied, specifically regarding how to gain access, and how they viewed the relationship between education, knowledge, and activism. I sensed that they were more open and willing to discuss these topics with me. At the same time there were disadvantages to this insider status; for

example, some participants would briefly discuss their ideas and experiences because they assumed I already understood their perspective. Thus, probing was central to obtaining thicker data from these participants.

I was also an outsider because I did not officially belong to their anti-fracking organizations. I was a researcher, and I do not identify as a mother, a father, or a parent, identities activists often drew upon to explain their experiences. However, this outsider status did not prove to be a downfall, as I found myself probing more often in an effort to understand their perspectives because I was aware of my status as an outsider. The social similarities and differences between our experiences sometimes obscured findings, but also served to illuminate other findings (Griffith 1998).

Chapter 4: Results

In this chapter, I will discuss the three major themes that emerged from my data. My first overarching theme is related to *identity*, which includes how activists discuss their motivations for creating and/or joining the anti-fracking organization in their community, how they see themselves as activists, and how the potential threat of hydraulic fracturing in their community impacts their identities. My second theme highlights the *gendered division of labor* within these organizations and explains how women performed a brunt of the work within these organizations. This theme explores how the activists I interviewed differentiate the tasks that men and women perform within their respective organizations. Lastly, I will discuss how the *dominant identity of the movement*, being mainly white, middle-class, and educated, impacted activists perspectives of who was/could be/and should be involved in the movement. To best illustrate these themes, I will discuss them separately in-depth and draw on activist's words to illustrate the significance that gender played on micro, meso, and macro levels in regards to activist's participation in Northern Colorado's hydraulic fracturing movement. In this chapter, I apply an intersectional lens of analysis (Cho, Crenshaw & McCall 2013) to investigate the multiple ways that gender interacts with race and class in the context of Northern Colorado's hydraulic fracturing movement.

“My soul’s responsibility”: Understanding activist’s entry into the movement

Entry

Identity is key to symbolic interaction, a primary perspective in sociology, that focuses on social interactions, use of symbols and the assignments of meanings to these symbols, interpretation of stimulus and response, and perhaps most importantly, development of the self as

a construct meaning from interactions, use of symbols and interpretation. Succinctly put, an identity can be defined as “a set of meanings attached to the self that serves as a standard of reference that guides behavior in situations” (Stets & Biga 2003:401). Identity is connected to one’s “self-concept” – how individuals view, present, and make sense of their “selves.” Individuals occupy multiple identities because they hold multiple roles, are members of multiple groups, and declare multiple personal characteristics (Burke & Stets 2009).

Goffman explores identity construction in his study of human interaction and notes that individuals perform to project a desirable image (Leary & Kowalski 1990). Furthermore, Goffman contests that human behavior is shaped by factors such as social expectation (Leary & Kowalski 1990). Researchers interested in identity seek to investigate the specific meanings that individuals have for the multiple identities they maintain, how identities relate to one other, how identities influence behavior, thoughts, feelings and emotions, and how identities tie individuals back to society at large (Burke & Stets 2009).

Identity theorists examine individual’s role identities and person identities. Role identities explore the meanings an individual assigns to himself/herself as a consequence of a particular position he/she holds in the social structure, for example, the occupant of a role of male/female, student, teacher, or worker (Stets & Burke 2009). In contrast, person identities examine self-meanings that are tied to an individual, rather than being tied to a particular role or position in the social structure (Stets & Burke 2009), person identities are related to one’s self-concept. Person identities may be viewed as characteristics and attributes that individuals see as representing who they are, how they feel, and what they value. Individuals adjust and act to preserve the meanings of role identities and person identities (Stets & Biga 2003). My thesis

explores the ways in which activists draw upon role identities and person identities as a means to explain their behavior, in particular, their entry into Northern Colorado's hydraulic fracturing movement.

In the context of social movements more broadly, and environmental justice movements more specifically, identity is a useful tool to help understand activist's entry and participation. According to Klandermans (1984), at the heart of protests, and therefore many social movements, are grievances that fuel motivation. When people who identify as being a part of a particular group, for example, labor union workers, mothers, or students, feel that the principles or interests of their group are in danger, the stronger their motivation to defend the interests and principles of their group and take part in social movement behaviors (Klandermans 1984). For example, in Chile, Argentina, and El Salvador during the 1970s and 1980s, groups of mothers collectively organized in an effort to demand information from the government about the disappearances of their loved ones on the basis of their identities as mothers and wives and started groups named Madres de la Plaza de Mayo (Mothers of the Plaza de Mayo) and Grupo Apoyos, Co-Madres, and Grupo Apoyo Mutuo (GAM) (Agosin 1990).

In environmental justice movement research specifically, activists' identities as "mothers" serve as resources for their resistance. As explored in depth earlier in this thesis, research demonstrates that women join an array of environmental justice oriented movements focusing on issues surrounding toxic waste, municipal management, nuclear waste, and coal mining, to protect the health and safety of their children and communities as a result of their identities as "mothers" (Bell & Braun 2009; Krauss 1993; Culley & Angelique 2003; Brown & Ferguson 1995). Notably, however, little research, explores the relationship between men's

identities and activism, with the exception of research by performed by Bell and Braun (2010), which notes that men loosely reference an assortment of identities when discussing their activism.

The female activists I interviewed, regardless of the organization they belonged to or their age, race, or social-class, shared similar motivations and drew upon similar identities to explain their entry into the two groups of study in this thesis. In particular, and consistent with existing research on the topic, the vast majority of the women in my study pointed to their identities of “mother” and “steward to the earth,” as significant for joining their respective organizations. In contrast, the males I interviewed cited a diversity of motivations and identities to explain their reasons for joining their respective organizations including “father”, “cancer-survivor”, “social justice crusader”, and “environmentalist”. In other words, for men in this study, there was not one single identity they drew on to explain their entry into the anti-fracking organization in their community. Thus, in the following sections, I describe the identities that the participants in my research drew onto to explain their entry into the anti-fracking groups. In this, I illustrate how the identities differed by gender; I also illuminate how race and class intersect the participant’s ability to draw on these various identities.

Women’s Entry

In greater detail, 8/11 (73%) female activists I interviewed stated explicitly that their identity as a “mother”, or a “grandmother” served as a catalyst to join Anti-Frack 1 and Anti-Frack 2. Each of these 8 women had children, most of who were school-aged. They explained that their activism was an extension of their identity as mothers and therefore they had an obligation to participate. First and foremost, for these women, it was crucial to protect the health

and safety of their children, their grandchildren, and their future children's children. As one of the co-leaders from Anti-Frack1 explained, "maybe it is something about being a protective mother that brings that out of me. Who knows!?"

Darla, a white, middle-class, hair stylist shared a compelling story that highlighted the importance of her identity as a mother and her commitment to this identity. After taking a fieldtrip to a farm where she chaperoned 120 kids at the school her children attended that was surrounded by miles and miles of oil and gas operations she quickly became aware of the potential hazardous impacts of fracking. About this, she explained that she had no other choice but to get involved:

I feel it's my soul's responsibility to educate people and wake them up so we can stop things now and make people aware, so we can make these choices and really build a better future for the kids, and [pause] our grandkids.

Nora, an information technology specialist, a mother of a young toddler, and also the only self-identified non-white female activist I interviewed, also relied on her identity as a mother to explain why she became engaged in the hydraulic fracturing movement. She explained:

What really concerns me is the air quality, is everything being put into the air. That's my biggest concern right now. And it's devastating to me because I have a 3 ½ year old and her respiratory system. It's a critical time in her life and I don't want her being around it.

Similarly, Rachel, a white, middle-class, mother of two, stressed how the health and safety of her children was *above all*, the most important thing to her. She shared a story about being raised near Simi Valley and later finding out, when her children were very young, about uncontained reactor meltdowns that occurred near her neighborhood. Upon finding this out, she and her husband decided to immediately vacate the area because she did not want to raise her

kids in a harmful environment. She uprooted her life and moved away from her extended family, her friends, and her job, in an effort to protect the health and safety of her children. In other words, the health and safety of her children took precedence over her wants and needs. Later in our interview, Rachel explained her decision and how this led her to become involved in the hydraulic fracturing movement:

We didn't want to raise the kids there. Even though we were raised there and we had already probably been exposed to a lot, we did not want to put our kids, knowing what we knew, we didn't want to put our kids in danger. So, we came here and everything was great for many years until we learned about the fracking, that it was gonna be right near our school and neighborhood. I had already heard about what fracking was a couple of years before. I heard something about Colorado, but I didn't really know. I mean, you look at those tanks and you think they are water tanks. Or you almost don't see them because, you just don't know what it is. So you don't see it. And it was instant for me. To think that we could stop something that hasn't been done yet, right where we are living, I mean, it just, it was huge for us to get involved.

Women who did not have young children or school-aged children, 3/11 (27%) pulled upon an identity that is connected to “mother” as a means to explain their entry into anti-fracking organizations in their communities. In greater detail, older women involved in this movement with adult children declared that their identities as “grandmothers” motivated them to join the movement. Susan, although not a mother of young children, but rather a 65 year-old self-proclaimed “grandma activist,” stated that her driving force for joining the anti-fracking organization in her community was to protect the health and safety of her four grandchildren and said she joined “just to see the future of my grandchildren, just to see if I can do something to make it better, to make it safer, to make it more ethical.”

Notably, it is important that although three women (27%) did not directly note the significance of being a “mother” a “grandmother” in their interviews to explain their entry and

participation in the movement, they did draw on identities that can be considered cultural extensions of “mother”. Of these three women, only one had children. For example, these women explained that “being a care taker of the earth”, “a tree hugger” or a “steward to the Earth” were central to their entry into the hydraulic fracturing movement. Denise, a retired female practitioner, with no children stated:

This [the movement] caught my interest because I’ve always been an environmentalist at heart anyway. Even though I’ve never done anything besides work and talk. I did a lot of talking because I would spend 15 minutes with my patients on their medical issue and then we would spend another 15 minutes talking about, you know, public policy and the environment, books, whatever. That’s what made it fun. Umm, but I had never been active in anything. I’m just a born tree-hugger I guess.

Similarly, Teresa, a 77 year-old part-time caretaker with no children, explained that it was her connection to the earth and her ability to care and nurture for the earth that pushed her to join the anti-fracking organization in her community. Teresa viewed herself as a steward to the earth. While interviewing Teresa, she described her sacred connection to the earth and said:

I grow flowers. I grow vegetables. I have been blessed with the experience of sitting on the Earth and feeling [pause] this unknown energy that was like bliss, some kind of bliss underneath, percolating. I feel like I have a very deep and sacred relationship, not only just to the earth, but to the beauty. I am an artist and I love color and texture and I grow beautiful flowers. I’m just a person who is attracted to beauty.

Lastly, 4/11 (36%) women merged the identities of “mother” and being a “steward to the earth” in their stories to explain their activism thereby illustrating how the meanings of these identities are connected. For example, Shelby, a mother of two now adults, a self-identified environmentalist, and social justice activist voiced that being a “steward to the earth” and a “mother” held equal weight in her explanation for her activism. She explained:

I care about the earth because I have to live in it and I have four grandchildren. You know. I mean, we need to do what we can for the future. I do think it comes from the fact of perhaps being a mother. I don't know if I wasn't a mother.... I mean, like I said, some of these feelings I had before I was a parent. But yeah, I think that it is an impetus. Obviously there are many who are connected to the earth and understand the future, and you know, they are not mothers.

Likewise, Patricia, a part-time teaching assistant and mother of three stated, "We care what happens to the environment. We don't want to see, you know, something trashed for the future, for our kids generations, and future generations." Patricia illustrates the importance of caretaking, noting that taking care of the earth results in taking care of her children

For the four women who merged the identities of "mother" and "steward to the earth", their involvement in the movement was about protecting and nurturing the earth and prohibiting anything they viewed as dangerous to its overall health. They saw intrinsic value in nature and did not view nature as a commodity. At the essence of their involvement was the concept of protection, similar to that of many of the activists who referenced their identities as mothers as being significant. All of the women I interviewed, whether they were mothers or not, viewed themselves as, "protectors" of the health and safety of children the community, or the earth. For many of these female activists, activism was not a choice, but a necessity. They illustrated that their involvement in the movement was necessary and, as illustrated in this section thus far, many shared stories about how they could not wait around for others to do their work.

After performing interviews with 11 female activists from two anti-fracking organizations in Northern Colorado, I reached theoretical saturation, meaning no new data or concepts appeared while performing data analysis (Morse 2004). It became evident quickly what was happening in Northern Colorado in relation to hydraulic fractured mirrored findings of other environmental justice movement studies (See Bell & Braun 2009; Krauss 1993; Culley & Angelique 2003; Brown & Ferguson 1995). Specifically, the identity of "mother" proved to be a

uniting force and driving mechanism that propelled many of these women to join anti-fracking organizations. For these women, being a “mother” or feeling that the interests associated with that identity (protecting the health and safety of their children) were in danger fueled and then sustained their motivation to participate in anti-fracking organizations.

Overall, it makes sense that these women relied on these two distinct, yet related narratives and drew upon their identities of “mother” and “steward of the earth” as a way to explain their entry into and participation in the hydraulic fracturing movement. Contemporary constructions of mothering, specifically “intensive mothering” (Hays 1996) help us to understand these women’s commitment to their identity, given the white, middle-upper class nature of the movement. Furthermore, the theoretical perspective of eco-feminism helps us to understand women’s commitment who did not draw upon their identities as “mother” explicitly, but rather relied on identities that can be considered cultural extensions of mother” such as “steward to the earth” (Warren & Erkal 1997).

As developed earlier in this thesis, mothering is a social construction and is differentially constructed for women of different races, ethnicities, and classes. Mothering occurs within specific social contexts that vary in terms of material and cultural resources and constraints (Glenn 1994) and is constructed by women and men’s actions within specific historical conditions, organized by gender, and consistent with prevailing cultural beliefs about gender. Thus, the ideology of “mother” is raced and classed.

Today, the identity of “mother” is still a formative identity for women to hold in U.S. culture, and as noted above, what it means to be a mother” is still very much so tied to ideologies related to white supremacy, heteronormativity, and sexism (Collins 2013). In today’s society, white, middle-class women are evaluated as mothers in a very particular way. The most

dominant, observable, and self-consciously spoken North American view of mothering in the 20th century was the view that responsibility for mothering rests almost exclusively on one woman, for whom it constitutes the primary if not sole mission of her existence during the child's formative years (Glenn 1994). This view is called 'ideology of intensive mothering' by Sharon Hays (1996) and describes the current normative understanding of 'good mothering'.

Intensive mothering is:

An expert-guided and child-centered', 'emotionally absorbing, labor intensive, financially expensive' ideology in which mothers are primarily responsible for the nurture and development of the 'scared' child, and in which children's needs take precedence over the individual needs of mothers (Hays 1996:46).

Given the nature of intensive mothering, the circumstances and resources that appear to be prerequisites for its accomplishment, it has been critiqued as "the privileged of married, middle-class women who can afford to stay home with their children" (Hays 1996:164). In greater detail, since intensive mothering orders mothers to invest extremely high levels of time and resources in their children, such investments are incompatible with women who have to work in the workforce, such as women of low-income and women of color (Hays 1996; Blair-Loy 2003). All of the women I interviewed voiced a "mother" identity consistent with the ideology of intensive mothering, even the one woman that self-identified as non-white. They painted themselves as "sacrificial lambs" that were willing to do anything for the common good, in this particular case, the needs of their children. While discussing their motivations for joining the hydraulic fracturing movement, these women very rarely referenced concerns for *their* health and safety, but instead shared narratives illuminating that their children's needs took precedence over theirs.

It is not surprising that many of these women, privileged in relation to race and class and were either stay-at-home mom's (2/8) or working part-time (4/8), called on this "intensive mother" identity to make sense of their self and give meaning to their identity. The "mother" identity these women drew upon to explain their activism, although reflective of past environmental justice research, is distinctly different, given the privileged nature of this movement. For example, past environmental justice movement studies demonstrate that women of color and low-income adhere to an ideology of "community mothering". For example, studies demonstrate that African American activists extend their maternal interests to other people's children in their communities and create identities as "community mothers" that ultimately blur the line between private, home-based concerns and broader community based concerns (Kurtz 2007; Krauss 1998; Collins 2014).

Eco-feminism, a theoretical perspective introduced during the 1970's to highlight women's potential to bring about an environmental revolution (d'Eaubonne 1974) is also useful in unpacking why a "mother" identity was formative for these women's participation in the hydraulic fracturing movement. As addressed more fully earlier in this thesis, ecofeminism can be broadly defined as a framework for evaluating the historical, experiential, symbolic, and theoretical connections between the domination of women and the domination of nature, and in doing so, redefines feminism and creates a subsequent environmental ethic (Warren & Erkal 1997). An assumption of eco-feminism is that modifying the way that nature is valued should alter human relationships with nature. In greater detail, eco-feminism calls for a shift from instrumental value to intrinsic value while assessing nature.

One of the fundamental images of the eco-feminism perspective is the use of motherhood to exemplify women's distinctive capacity to care and nurture the earth (Stearney 1994). Eco-

feminism rhetoric employs motherhood as an archetype, a multidimensional construct that exercises persuasive power through its ability to build and claim interrelationships among diverse phenomena (Stearney 1994). My respondent's responses to their reasons for entering the movement related to the ideas that as women and through their unique roles as caretakers, either as mothers or otherwise, they are uniquely situated to understand environmental and health problems.

Men's Entry

While women relied on identities such as "mother" and "steward to the earth," men involved in anti-fracking organizations, on the other hand, pointed to a variety of diverse identities when discussing their entry into the hydraulic fracturing movement in Northern Colorado. For example, men drew on their identities as "fathers," "husbands," "cancer-survivors," "crusaders of political social justice," and "environmentalists" as justification for their activism. One of the most predominant identities that men drew upon when discussing their entry into their respective anti-fracking organizations was "crusaders of political justice" and this was intimately tied with being able to think critically. This was a person identity, a unique characteristic representing who they are, how they feel, and what they value. For them, they explored a subject by skillfully analyzing, assessing and reconstructing it, and then tackling it.

In greater detail, 4/6 (66%) of the men I interviewed explained that their entry into this EJ movement was connected to their concerns beyond the issue of fracking and attempted to address a broader social issue, one that they viewed directly connected to social inequality and fairness, the root of all evil: corporate power and the problematic nature of the capitalist system. Dave, a leader of Anti-Frack 2, a middle-aged father of two and a nurse shared the following regarding

the problematic nature of the system and how his perspective of the system led him to become involved in Northern Colorado's hydraulic fracturing movement:

The system is engineered to disrupt, negate, or repress a democratic vote or decision-making. It's engineered to make sure that the natural resources are appropriated up to corporations. It's engineered to create profit. It's engineered to create non-sustainability..... I understand how these things work in a theoretical level and so it was something that not only I was able to apply myself to, but something that has intense personal relevance to me and my family.

Jason a 68 year-old, father of three, and retired elementary school public educator shared a similar perspective regarding the system. He explained:

I've been saying, and lots of people have been saying, the real problem is that corporations are running everything and there is no public anymore. Everything is privatized. So, I've been saying that for years and seeing evidence of that. But now specifically when we actually find that the whole structure has been developed for over 100 years, favors, not only favors, but pretty much enthrones corporations. And then we start to specifically realize that in Colorado, the state I'm living in now, has a law that preempts any kind of community decision like we did here in [community] to ban fracking on anything that has to do with oil and gas extraction, we aren't allowed to do that. We can't raise the minimum wage in a community also, because of this preemption.

For these men, fracking was indeed a concern and it worried them for many reasons, mainly environmental and health and safety reasons, but fracking was only a symptom of the problem. Throughout their narratives, they painted themselves as crusaders of social justice and worked to unveil the harms of capitalism and corporate power to those around them and their community at large.

Of the male activists I interviewed, from both organizations, 5/6 (83%) referenced past social movement participation or political participation in interviews and expressed how these experiences helped them to view the structure of the system differently, which impacted why

they decided to join the hydraulic fracturing movement. For example, Dave, the leader of Anti-Frack 2, a middle-aged father of two and a nurse shared the following:

I've been a political activist for a very long. The first real political action I went to was a march against the KKK and the national socialist party in Chicago. It was an anti-racist march and I was 15 and that was in 1985. And I have really worked mainly on anti-war issues, issues around corporate globalization, the World Trade Organization and labor issues.

Another, Mitch, a middle-aged, science-oriented single man, stated, "activism goes all the way back to high school for me." He helped to start an underground newspaper at his high school after authority figures told several classmates that they could not have long hair. Later, he became a member of city council in a small town in Ohio but left after he realized how difficult it was to accomplish social change in his community given power dynamics within his council. Another male activist, Jason a 68 year-old, father of three, and retired elementary school public educator shared stories of joining the Student Nonviolent Coordinating Committee (SNCC) at his college during the Civil Rights movement and marched on the streets of Selma in solidarity white and black students for equal rights. In addition, he touched upon his experiences with the Vietnam War and shared the following, "the Vietnam War was going on, so I went to Washington D.C. for a demonstration and was arrested twice in Washington." Although often critical of the realm of politics throughout their lives, the male activists I interviewed acknowledged that if one wants to produce social change, one needs to get involved politically in one form or another. As Ron, a 60 year-old, part-time instructor at a local community college stated:

I just wanted to get away from politics as much as I could. It seemed like only scumbags only get involved with politics. But the older you get, the more you realize, if you want to help improve you world, if you don't get involved with politics, you don't have a reason to gripe. So that's why I got involved.

While men were more likely to reference politically oriented identities, it is important to note that male activists occasionally referenced their identities as “fathers” or “parents” as justification for joining anti-fracking organizations in the community, although not to the same extent as female activists. In other words, this was not as much of a salient identity for them as it was for women and it was often mentioned in conjunction with other identities. Nonetheless, protecting the health and safety of children appeared to be a motivation that spurred action for both men and women. In greater detail, 3/6 (50%) of the male activists I interviewed stated that their role as a “father” or “parent” impacted their entry into the movement. In my interviews, I asked activists to recall the first moment they heard about fracking and how that made them feel. Dave, a leader of Frack-Free2, nurse, and father of two shared the following:

I read about it on a Sunday morning in the, I think it's called the Colorado Hometown Weekly. It's the local newspaper here. I saw that there had been a protest in Erie of all of these mothers, against a well site by Encana. And to me, it made no sense why any human beings in [Place 2] would be protesting anything. It's very white, middle-class suburbs. I, well for one, it was an interesting paradigm. I just wasn't use to seeing people with pickets in these Front Range communities at all. And obviously I read the story and it said they were upset that Encana was going to be drilling right next to their elementary school. I really only knew about fracking in a third hand sense. I knew there was something going on the East coast. I knew that people were upset about it, and that's it. I had no idea we were on a shale here. So you know, you start to look into it. And through the research, it's like Josh Fox says, science drives the emotion. You get scared. I came out here to raise two kids and yeah. I'm afraid for their health and so I'm going to fight like a parent. That's when I first got introduced to it.

For Dave, the threat of fracking and how that could impact the health and safety of his children served as a drive for him to research fracking more, which eventually lead to creation of Frack-Free 2. Jason a 68 year-old, father of three, and retired elementary school public educator also expressed concerns related to the health and safety of his grandchildren:

Well, children come to, being an elementary school teacher; I think about, I want to think about great grandchildren and great-great grandchildren. You know, a number of generations and this just doesn't make any sense at all. We've got to change how. So, I think we have to break from fossil fuels, we have the responsibility to make the world, not to ruin the world of future umm.... Children, people, adults. So those are the two. And then I think even bigger than fracking, is you know, it's what some very smart people have said, we have a bigger problem than fracking and it's a problem with democracy. So fracking is part of the bigger problem.

As mentioned above, although men called on the identity of "parent" or "grandparent" to explain their entry and activism in anti-fracking organizations, these identities were often mentioned in tandem with others and often were secondary. For example, the quote above by Dave highlights how being a "grandparent," a "critical thinker," and "social justice advocate" operated together to help explain his activism.

In their work, Bell & Braun (2009) echo similar findings and note that male activists in their study did not explicitly draw on a specific identity, such as father or parent, in their descriptions of why they became involved in an EJ movement. Notably, they point out how masculine identities may have constrained men's ability to participate in EJ activism, specifically in relation to the hegemonic masculinity of the region and the loyalty that men feel to the coal industry, given that it is deeply embedded into the historical significance of communities in that region. Of the male activists she interviewed that did join the EJ movement, she found that they did not internalize the regional hegemonic due to a shared characteristic among many of them: having spent a substantial amount of time living outside of the coalfields.

The state of Colorado has a long and complicated history as a leader in oil and gas development. The first well drilled west of the Mississippi was during the 1860's in Florence, Colorado and is now considered to be the second oldest commercial oil producing region in the United States (COGA 2014). Given this history, I expected to uncover similar findings to that of

Bell and Braun (2009) and discover that men's activism was constrained by Colorado's oil and gas development history. However, all of the male activists I interviewed shared one similar characteristic as well: they were all non-natives to Colorado. All of the men involved in Anti-Frack1 and Anti-Frack2 moved to Colorado from the East coast, the Midwest, or the West coast, specifically from larger towns that did not necessarily have a strong connection to extractive industries. This finding could potentially explain why the men I interviewed did not feel a sense of loyalty to the oil and gas industry. Future research interviewing local community residents (both men and women) is needed to better understand the reasons why men and women decide not to join the hydraulic fracturing movement in Northern Colorado.

In summary, the female activists I interviewed drew on two salient identities in their narratives to explain why they entered anti-fracking organizations within their communities: "motherhood" & "steward to the earth". In contrast, male activists I interviewed referenced multiple identities in tandem while explaining their reasoning for joining anti-fracking organizations in their communities, including "crusaders of political social justice," "parents", and "environmentalists". While both males and females drew on identities that were related to the environment, such as "environmentalist," "steward to the earth" or "tree hugger," the ways in which men and women conceptualized these definitions was unique. Although men were concerned about the environment, they talked about it in a more technical sense or as a commodity. In contrast, women talked about the intrinsic nature and beauty of the environment. The most prominent identity male activists pulled upon was "crusaders of political social justice," as male activist's narratives related to the fact that they saw beyond the issue of fracking and deemed corporate power and capitalism as the root of all evils. Overall, identity appears to play a pertinent role in explaining motivations and behaviors and helps to elucidate why men and

women join anti-fracking organizations in northern Colorado. My findings demonstrate that most men enter the hydraulic fracturing movement through their experience in the public sphere, while women access the movement by calling on a meaningful private sphere identity.

“Putting everything on hold” or “working as many humanly hours as possible”:

Gendered roles and responsibilities in anti-fracking organizations

My second theme explores the gendered division of labor in my case studies. My findings elucidate the way gender shaped the assignment and performance of different tasks and responsibilities that men and women performed while working and volunteering for Anti-Frack 1 and Anti-Frack 2. Extensive sociological research illustrates that men’s and women’s division of labor tends to be separated between the public and private sphere (DiChiro 1992; Kurtz 2007, Naples 1998; Stein 2004). The public sphere is defined as the world of politics, economy, commerce, and law, while the private sphere is defined as domestic life, child rearing, housekeeping, and the community at large (Lobao 1990). Men predominantly dominate the public sphere, where women dominate the private sphere. However, race and class intersect these spheres in very important ways (Naples 1998; Kurtz 2007). In this section I illustrate that while working with the organizations of study in this thesis, women performed more community outreach than men, but perhaps more importantly, women appeared to perform the brunt of the work, aligning with past environmental justice research (Culley & Angelique 2003; Bell & Braun 2010; Krauss 1993).

Studies on gender-integrated movements, where both men and women are actively engaged in pursuing a single objective, draw attention to complex patterns of labor and leadership divisions (Kuumba 2001). There appears to be no consensus in social movement research about the characteristics that tend to predict or at least be correlated with movements where there is a

traditional gendered division of labor. In some movements, the division of labor seems to mirror the relegation of men and women to private and public spheres respectively (Lobao 1990). In other movements, with a strong grassroots level presence, driven by community politics, women are active in the more public spaces of the movement and hold leadership positions (Barnett 1995; Gibbs & Levine 1982). In environmental justice movements specifically, there is a strong grassroots presence and women within these movements play a significant role in creating and sustaining environmental justice movements and act as leaders (Krauss 1993; Kuumba 2001; Gibbs & Levine 1982). As a consequence of women's overwhelming presence in environmental justice movements, little researching examining gendered patterns of labor in gender-integrated environmental justice movements exists.

While interviewing 17 activists in Northern Colorado's hydraulic fracturing movement, I asked them to discuss the general tasks and responsibilities they performed while they were actively engaged with their community's anti-fracking organization on a daily basis. Additionally, I asked them to describe their involvement with the organization at and outside of organizational meetings. Generally speaking, all activists noted that they participated in community outreach in some form or capacity. Community outreach included: gathering petition signatures from citizens, canvassing neighborhoods encouraging residents to vote, and hosting educational forums to inform the public of the perceived impacts of hydraulic fracturing. Notable, my participants, both men (50%) and women (100%), state that women engaged in this type of activity more often and for longer durations of time. Research on EJ movements, in particular, indicates that women are significantly more likely to take on responsibilities related to outreach (Krauss 1993; Kuumba 2001).

The women I interviewed shared that they engaged in a combination of the following tasks, often on a daily basis: calling constituents, door-knocking, canvassing neighborhoods, volunteer coordinating, talking to media, and distributing literature -- all related to community outreach. The women I interviewed expressed that they enjoyed this activity and shared sentiments similar to that of Darla, a mother of two, who stated:

I did, I think the most time consuming aspect and yet the most amazing aspect was door knocking. I feel like I walked a lot of [Place1]. Maybe $\frac{3}{4}$ of this city and sometimes it would be, I would drop my kids off at school and I would pick a section. We had different sections divided up, and I'd pick a section to do and I would walk from 9 o'clock in the morning until 2 o'clock in the afternoon and bring my lunch as I was walking.

Likewise, Sandy, a retired physician shared the following regarding community outreach, "I just went gangbusters collecting petitions [in the community]. And I couldn't sleep at night. I would wake up in the middle of the night thinking about things."

On the other hand, male participants were unlikely to participate in community outreach on behalf of the organizations. Instead, the men I interviewed shared stories of working with lawyers, the government, and national environmental groups. Often, many of them adopted roles in the organization that mirrored that of their professional lives. For example, one male activist helped to create the website for his organization, as he worked as a web developer previously. Another male activist took on the role of educator in his group and worked to inform his community about the health and impacts of fracking, given his career in nursing. Another male activist took on the role as photography, given that is his current profession as a photographer and another male activist, with a masters in accounting who works at company that delivers images, information and insight, worked with lawyers and the industry in his community to create a memorandum of understanding with a prospective oil and gas developer.

Notably, *all* of the men I interviewed held a leadership position in their organization, mainly holding an official title and/or belonging to the organization's steering committee. Four out of six (66%) of these men did not originally hold a leadership position but were later asked weeks or sometimes months after joining Anti-Frack 1 and Anti-Frack 2 to take on a leadership position. This was not the case for the women I interviewed, as only 6/11 held a leadership position in some form or capacity. When I asked one female activist if she felt like men and women performed different roles in her organization she stated, "Yeah, they do different things but I'm not sure why, maybe due to individual strengths and weaknesses." In fact, most participants, regardless of gender, shared the sentiment that men and women performed different tasks in their organizations; however, one participant offered a more concrete explanation for these differences and stated

You know there aren't that many men that are like, "use me for whatever you want." I've got some women that are like, I'll go to the grocery store. I will make calls. I will write letters. I will go testify. It's a little bit harder to pin the men down doing that, but there are some that will. You know, it might just be part, I know as I'm thinking about this, you know, hydraulic fracturing is, a complex process, and it is a multi-faceted issue and I think that men probably are less emotional. Women are okay to go up and just be so of emotional about it. I'm concerned about my kids. I do not want this. I know enough to know that it's not good near us, but the testimony from the men tends to be more, they want to be more, factual.

The above narrative by a female activist illustrates multiple sociological concepts including stereotypes and gender socialization. A stereotype refers to a simplified description applied to every person in some category (Devine 1989). Here, this female activist stereotypes women as more emotional, more docile, and willing to assist whenever needed. In contrast, she stereotypes men as more complex and credible, relying on science as a means to determine the scope and structure of their involvement while engaging with the public. Furthermore, the above account highlights how gender socialization works to shape social expectations and attitudes

associated with one's sex (Devine 1989). As a result of the agents of socialization, school, peers, family, and the media, human males and females behave in different ways, as they learn different roles that are expected by society of men and women. In the passage above, the participant draws attention to the fact that, although men and women in this movement may be engaging in different roles and tasks, they were taught these roles through the process of gender socialization at a young age.

As highlighted above, both men and women engaged in community outreach; however, when participants spoke of seeing a difference in the division of labor, they explained that women engaged in this activity more often and for longer durations of time. Men in Anti-Frack 1 and Anti-Frack 2 tended to perform work related directly to the organization itself or work that was an extension of the professional careers. In contrast, women performed work that almost exclusively focused on community outreach. Notably however, women took on a brunt of the work. Through the interviewing process, I discovered two predominant reasons that women were able to take on a brunt of the work in these organizations including: the second shift and deprioritization of work.

The Second Shift

Of the female activists I interviewed, 6/11 (54%) shared that community outreach at times resembled a second job in addition to the work they were already performing in the private sector and inside the home. These women indicated that they were often working, at least part-time, taking care of their children and/or household labor (if they did not have children), and then finding time to perform community outreach whenever possible. In greater detail, of these six women, 2/6 (33%) indicated they were working full time, and the rest 4/6 (66%) indicated they were working part-time in professional careers. As stated by Marissa, a mother of two and a part-

time preschool teacher community outreach, “felt like a full-time job”, specifically she shared, “you know you try to contribute as many humanly hours as possible, without totally neglecting your family.” Similarly, Dora, a single, 61-year-old, full-time employee who works with individuals with developmental disabilities shared that although she was not able to put her work life on hold because of her one-person income, she did whatever she could, whenever she could, to contribute to the success of the movement. Dora shared the following:

I personally did not put my work life on hold. You know, I mean. I’m single. At the time I wasn’t sick, so I had enough energy to do that [both work and complete tasks for the organization]. I mean personal, if I had a commitment between farting around and doing this, I would collect signatures, it’s true. And you know, I’d come to council meetings, I’d write emails.

Taking on extensive and additional hours related to community outreach resulted in specific mental and physical conditions for these women. Many of the female activists expressed emotional and physical feelings related to anxiety, stress, inability to sleep, inability to eat, *etc.* Some female activists would work 6-8 on the weekend canvassing neighborhoods and worked for 3-4 hours after their 8-5 jobs to engage with even a large breadth of constituents, much of which lead to this mental and physical stress. Research demonstrates that women take on a far greater burden of civic engagement work than men (Skocpol & Fiorina 2005; Verba, Schlozman, Brady & Brady 1995). The men that I interviewed did not relay to me this same degree of mental and physical stress. As illustrated by Jane, an activist who struggled with sleeping, stress, and anxiety, she found herself communicating with other (mostly female) organizational members throughout all hours of the day:

But still, she was on that damn iPhone 24 hours a day [Co-leader]. Sending emails because I mean, I was so hyped up that I would wake up in the middle of the night and I couldn't sleep. My brain would be going so I would get up and I would come out here to the laptop and try and organize the next thing I was suppose to do. And I would check my email and we would be emailing back and forth in the middle of the night. And she would send an email at five when she was up nursing the baby. She just never slept.

A parallel to the second shift, a term coined by Arlie Hochschild (1989) arises from these women's narratives. The second shift refers to the labor performed at home (household and childcare) in addition to the paid work performed in the formal sector. Regardless of marital roles, traditional, transitional, or egalitarian, Hochschild found that women still take care of most of the household childcare and responsibilities despite their involvement in the labor market (1989). Traditionally, sociologists draw on the concept of the second shift to talk about work, family, and children to explain how traditional gender roles propel women to engage in an unequal distribution of unpaid labor. (Hochschild 1989). My research indicates that given the fact that many of the women I interviewed view their activism as in extension of their identity as mothers or caretakers, EJ activism for these women could be constructed as "a second shift". Not only are many of these women engaging in labor in the formal sector, either part-time or full-time, finding time to perform household labor and childcare at home, but they are also taking it upon themselves to protect the health and safety of their children, their community, and the earth outside of this immediate context.

Deprioritizing Work

Rather than taking on a second shift like the women above, 4/11 (36%) women I interviewed indicated that the work they performed with their respective anti-fracking organization often impacted their career. These four women, most who were working at least

part-time, deprioritized their work in different ways. Rachel, a white-middle class, mother of two and an aesthetician said:

My job actually took a backseat. I work from home and I'm an aesthetician and I try to do like, holistic skincare, and here we have fracking possibly coming into the neighborhood. Umm.... I like, during that time, I put everything on hold because a) I had the squirrel in the forest that is burning kind of syndrome where I wanted to leave right away. I wasn't even going to deal with this. Like, no way. They are going to win. They are going to come in and they are going to do it. I'm out of here. And, it's not that easy to pick up and leave.

Similarly, Jessica, the stylist of two twin daughters, explained that she deprioritized work responsibilities and skipped work meetings and often showed up to work late because the objectives of the movement were too important. Luckily, her boss appeared to be supportive of her efforts. She said:

Yeah. I just can't stop. As much as I want to, and it pains me, and it's hard. Fortunately, also, when you are talking about time, my boss at my job is, he agrees with me, and he is very supportive. So when like, time restraints came up, as far as not going to meetings and things like that, he was like you do what you've got to do.

Skipping work hours, coming into work late, or reducing work hours was not the only way women deprioritized their work. Lucy, the co-leader of Anti-Frack1, a mother of two, and a now stay-at home mom was able to quit her job to devote more time to the movement. As shared by Patricia, a retired physician in regards to Lucy situation and comparing her to the (male) leader of the adjacent neighboring organization:

I think she has it easier because...I think financially, I think she and her husband are much better off than Dan and his family. I have a feeling his wife doesn't work, maybe she does. I just have a feeling there is more money over here than over there. She got help. She could pay for extra help, but I don't think Dan and his wife do. I don't know. That was my impression.

Because Lucy did not serve as the primary breadwinner for her family, this put Lucy in a particular position to contribute more hours to the organization itself, specifically community

outreach. She was able to quit her job and contribute more to the movement due to her partner's high paying job. Her family would be able to survive off of one salary. For many working-class women and women of color involved in environmental justice movements, this is not a plausible option (Cutler 1995; Bullard 1996). Research demonstrates that women get paid less compared to men, but women of color face an additional financial barrier, they get paid substantially less than their white female counterparts, all due to the color of their skin (Hunter 2002). Lucy being able to quit her job in an attempt to contribute more to her organization's success highlights the white, middle-class nature of this movement. Yet, at the same time, this situation, quitting one's job, also marginalizes women in other ways. For example, since Lucy did not contribute financially to her household's income, her economic power in the context of a heterosexual family is reduced.

Overall, the phenomenon of women putting their professional lives on hold to a degree brings up the issue of how class intersects women's ability to participate in this movement. As stated earlier, these female activists were afforded the opportunity to put their careers on hold and dedicate more time to their respective organization's ballot measure because of their middle-upper class status. Specifically, they were able to do so as result of one or both of the following: 1) they had partners who were full-time professionals in moderate or high paying careers and/or 2) they held part-time, flexible jobs. Furthermore, it is plausible that these women "chose" to put their careers on hold because in U.S. culture, women's jobs are generally viewed as disposable and of less significant when compared to men (Macpherson & Hirschi 1995). Furthermore, cultural ideas about what women can or should do are different than expectations for men, so their choice (deprioritizing their work) becomes culturally acceptable. Finally, as discussed in

my first theme, perhaps these women's commitment to the "intensive mothering ideology" superseded their professional careers.

Thus, my findings demonstrated that generally, within these organizations, a traditional gender division of labor existed. Men predominately performed tasks related to the organization itself, and related to their professional careers, while women engaged in traditional gendered jobs related to service and the community. Women were able to engage in a brunt of the work in this movement via two avenues: taking on a second shift or deprioritizing their work. The latter avenues are directly linked to race and class. Throughout my interviews, many activists referenced the time constraints they were under while attempting to propel this anti-fracking movement forward, stating that they had to rely on the organizational structures they already had in place in many parts of their life within their organizations, perhaps explaining why these traditional division of labor roles seemed to run so deep and wide within these organizations.

"It takes a degree of research and education...": Unintended Consequences of The Movement's Dominant Identity

As I've made clear throughout this thesis, these organizations, Anti-Frack1 and Anti-Frack 2, and the movement more broadly, is dominated by white, middle-class, and educated activists. In fact, the state of Colorado is highly educated in comparison to the U.S. In greater detail, 37% of individuals 25+ in the state of Colorado hold a bachelors degree, while only 28.8% of individuals 25+ or older in the U.S. hold a bachelor's degree (U.S. Census 2014). One reason my sample is disproportionately highly educated is because, on average, Coloradans are more likely to be highly educated, as indicated above. In my sample, 95% of my participants self-identified as white, 100% I perceived to be middle-upper class, and 95% of my participants held a bachelors degree or higher. In fact, 35% held a master's degree or higher. Based on my

observations of the movement thus far from attending outreach events and my research, these demographics (white, middle-upper class, and educated) appear to be similar to the movement as a whole, generally in the Northern Colorado region.

As I described above, this dominant identity shaped the first two themes of the findings in this thesis. Additionally, though, activists' understandings of who wanted/should/could belong to the movement were raced and classed and shaped by this dominant identity. For example, while interviewing activists, some participants stressed that an individual must be educated to understand the potential hazardous impacts of fracking and the larger issue at hand, the problematic nature of the capitalistic system and corporate America. As Darla, a mother of two, stated, "I am going to just say that it takes a degree of research and education to even know what you are talking about. I mean, the people who first got involved with this, we all did our homework." Similarly, Ron, a part-time instructor at a community college, explained that performing research and the ability to critically think were imperative to his understanding of the issue. He explained how he learned about the issue and as illustrated below, his education was critical:

I'm just reading newspapers and things. When I read about the opposition I tend to come down on the side of the scientific side. Ok? Because there are...there is information about what's released during the drilling process, all the pollution that occurs and...a lots been very environment minded. I actually enrolled in environmental science degree program at the University of Cincinnati before I moved here.

Out of the 17 activists I interviewed, *all* stressed how important performing independent research and education was to understanding the issue of fracking. To inform themselves about fracking, they relied on a combination of the following: scholarly studies, newspaper articles looking at both sides of the issue, working with or reading up on larger environmental groups concerned about the issue, and educational guest speakers. They repeatedly expressed throughout

interviews that education was key to understanding the issue, but also the key to helping others understand the issue. In short, to understand the ramifications of fracking, these activists asserted that a certain level of education, time, and effort was necessary.

Activists also noted that particular racial groups, specifically the Latino community in their local communities, appeared to be uninterested in the issue. When I asked them if they reached out to the Latino Community and what their response was one male participant said: “They don’t respond. They don’t want to get politically in the spotlight but they are a significant part of our community.” Some participants offered more concrete answers as to why they thought the Latino community was not involved in the hydraulic fracturing movement. One female activist shared the following when asked if she felt the Latino community was represented in [Community 1]:

No, they definitely aren’t. I’m not sure if they are active in anything. That issue, and I can say that, struggling for universal healthcare and the war, I get depressed when I go to a venue and I know in some communities it’s there but when I don’t see any minority faces, I get so bummed. It’s like, I know the people know the right thing to do.

Another participant goes on to offer a similar reason when asked if she felt like the Latino community was present:

Well, I think again, you know, there is just lots of other issues that are in the forefront of that community’s mind, the Hispanic community. I mean, war, and economic issues and the environmental issue is not so obvious to them. So, I think that when those lists were developed in terms of precincts that they probably targeted those areas. You know how you do that whole thing.

In brief, both participants made assumptions about what issues are at the forefront of the Latino community. One participant states that she does not see the Latino community at events about issues that she presumably thinks impacts them (i.e. universal healthcare and the war)

while the other prioritizes which issues are of most importance for the Latino community, indicating that the environment was not one of them.

Another female participant expressed that she felt like Latino population in her community was engaged in “survival” mode and did not have the time or the money to get involved in activism, especially for something that perhaps does not show direct impacts immediately. Debra shared the following:

I think it's, any social justice issue isn't driven by minorities in general. Whether you are talking about under-educated, lower-income, ... certain racial groups. I think in general they tend to not be very self-righteous and activists until a certain point. Until they reach a certain point with their own narrow little issue, whether it's racial or justice, you know like in Ferguson. Or Cesar Chavez in CA, the farm workers, you know. Their living conditions and pay. I think that they are, for the most part, so involved in survival that they don't have, they don't have the time, the money, to get involved in activism, except as it directly affects them. Let alone learning about how other things, like air pollution can directly affect them. That's too esoteric for them. That's my own opinion. It's not that they wouldn't care if you sat down and talked with individuals about it. They would say yeah, you're right. I just think that they have more existential problems that they have to deal with first. You know, it has to reach a real critical mass before they come activists. And when they do become activists in those areas, they are often terribly punished for doing it. So they are careful. I think they pick and choose. I think it is off the radar for them.

Debra, a mother who stated that her identity as a “mother” was central to her entry into the movement, brings to light the subject of cultural constructions of motherhood in her narrative. Implicit in her narrative, and the narrative of other female activists above, is a critique of the Latino community's lack of concern about social issues, lack of involvement, and thus, mothering abilities. As discussed earlier in this thesis, what it means to be a “mother” is differentially constructed for women of different races, ethnicities, and classes and mothering occurs within specific social contexts that vary in terms of material and cultural resources and constraints and is constructed by women's actions within specific historical conditions (Glenn 1994; Collins 2014). Nonetheless, in the U.S. women what it means to be a “mother,”

specifically a “good mother,” is shaped by white supremacy, heteronormativity and sexism. In other words, what it means to be a good mother is dominated by a Eurocentric view of motherhood. For example, white perspectives on motherhood revolve around the notions that: 1) mothering occurs within the confines of a private, nuclear family household where the mother has almost all responsibility for the children and 2) motherhood and economic dependency on men are linked and that to be a “good mother”, one must stay home, making motherhood a full-time career. Neither of these assumptions often hold true for marginalized groups, and as Collins (1997) notes in her work, marginalized groups have been critiqued (and continue to be critiqued as demonstrated by Debra above) by the dominant group because the dominant group fails to see or acknowledge that mothering strategies arise out of different cultural, material, and historical contexts.

Furthermore, it is interesting that the participants in this study viewed—especially—Latino communities as unengaged in social movements given, as described from the outset in this thesis, social movements in this county have ridden on the backs of marginalized minority groups (Bullard 2006; Andrews 2001; Culley & Angelique 2002). Even though these activists are highly educated themselves, many although not all, appeared to lack an historical understanding of past social movements, specifically environmental justice movements. In total, 6/17 (35%) activists expressed sentiments related to the idea that the Latino community was disinterested in the issue of fracking or that the issue was “off their radar.” The above statements may be interpreted as a form of microaggression because microaggressions are subtle insults (verbal, nonverbal, visual and/or non-visual) that, often automatically or unconsciously, insult or send negative messages to marginalized individuals based on their identities (Solorzano et al. 2003).

Notably, researchers have not explored the relationship between microaggressions and engagement in social movements. However, based on my preliminary data, it seems plausible that microaggressions, alongside the dominant identity of the movement, may be one important variable that shapes the extent to which individuals are willing to participate. In particular, the ideas expressed by activists in this study, specifically that it takes a certain level of education to understand the issue of fracking and that minorities are disinterested in the issue of fracking, may create a particular public message that marginalizes racial and ethnic minorities. Indeed, perhaps by emphasizing needing a particular kind of knowledge and education to understand the potential hazards and impacts of fracking, these organizations may actually be alienating less affluent and less educated individuals and deterring them from learning more about the issue in the first place.

Furthermore, although narratives from the activists above imply that it is ultimately the Latino community's (autonomous) decision to engage in the hydraulic fracturing movement in Northern Colorado, research on framing suggests that the way social movement participants go about expressing the social and political grievances bears significant consequences on social movement mobilization and recruitment. As discussed previously, framing is "the process by which individuals and groups identify, interpret, and express social and political grievances" (Taylor 2000:511). As described at the outset of this thesis, the resultant products of framing are referred to as collective action frames. Collective action frames serve important interpretive functions, as they highlight the seriousness and injustice of a social problem, they identify who or what is to blame, and they offer solutions (Benford & Snow 2000). Although not a focus of this thesis, it is important to note that both Anti-Frack 1 and Anti-Frack 2 relied on an array of collective action frames during mobilization periods and many of these collective action frames revolved around: corporate power, procedural justice, health and safety concerns, property

values, environmental concerns, quality of life concerns, and so on. Unfortunately, relying on a diffuse number of issues to address may have actually prohibited individuals from joining the anti-fracking movement and conflated the agenda of these organizations (Snow 2005).

Furthermore, it's possible that the frames employed by these organizations may not connect with the Latino community or other populations because many of them were centered around white, middle-class, and educated ideologies, such as the wickedness of corporate power and the impact of fracking on devaluing property values. For communities of color and other populations, it is possible that these frames do not resonate. The frames these organizations employed should be explored in other research because it would provide important information about how the organizations transformed throughout the movement, but perhaps most importantly, elucidate what frames served to mobilize or not mobilize citizens (in particular citizens of color) in their community.

Lastly, by failing to recognize the contributions that communities of color have made to the history and success of the environmental justice movement, these organizations are missing an integral part of their community that may help contribute even more to the success of the movement. Further research is needed to investigate the Latino communities concerns and thoughts regarding the process of fracking. Moreover, research is needed to investigate if anti-fracking organizations in northern Colorado's network have engaged with the Latino community and if so, how? Are these individuals being excluded from a movement that they ultimately started and brought to the light?

Chapter 5: Conclusion

Throughout this thesis I have provided insight into the lives of 17 anti-fracking activists in two communities located in Northern Colorado. The activists I interviewed relentlessly fought for three years against unconventional oil and gas development, specifically the practice of hydraulic fracturing, in an effort to protect their respective communities from the perceived harmful impacts of the practice, mainly detrimental environmental and community health impacts.

Relying on qualitative research, I have illustrated why these men and women felt compelled to join local anti-fracking organizations in their communities, specifically drawing attention to how gendered identities played an imperative role in their entry and subsequent participation, how gender shaped the assignment and performance of different tasks and responsibilities activists performed while working and volunteering with Anti-Frack 1 and Anti-Frack 2, and how the dominant identity of the movement *may* have resulted in unique consequences for the movement's success. Individually, these men's and women's narratives tell a multifaceted story that, when presented collectively, illuminate larger gendered trends. In this final chapter, I summarize the major themes of the results chapter and simultaneously identify the significant empirical and theoretical contributions of this project, draw attention to major methodological challenges I faced while performing this research, and finally, propose areas for future research.

Summary of Research & Significant Contributions

My research approach engages two social movement paradigms, more specifically resource mobilization (RM) theory and new social movement theory. Consistent with RM theory, which explains that social movements are an expansion of politics and can be explored in terms of clashes of interest, my research elucidates how conflicting interests between anti-fracking and pro-fracking stakeholders resulted an environmental justice movement in Northern Colorado. More specifically, my research highlights anti-fracking stakeholders positions on the impacts of hydraulic fracturing in local communities. Furthermore, my research relies heavily on new social movement theory, which draws attention to the significance of collective action frames and collective identities, both of which function as key pathways for social movement participation.

Prior to this project, the impact of identity on driving and sustaining social movement participation has been explored in both social movement literature more broadly and in environmental justice movement literature (for example, Culley & Angelique 2003; Bell & Braun 2009; Veta 1992; Robnett 1996). However, given the relatively new and growing presence of the hydraulic fracturing movement in Northern Colorado and nationally, researchers have yet to critically examine the ways in which identities are embedded and function within this context in relation to *both* men and women's' activism. Furthermore, this research contributes theoretically to environmental justice research overall and applies an intersectional approach to understand the ways in which gender, race, and class intersect in a unique and privileged environmental justice movement.

Identity

In this thesis, I have illustrated how two salient identities, “mother” and “steward to the earth,” guided women’s behavior, leading them to enter local anti-fracking organizations in their respective communities. Specifically, I discussed how contemporary constructions of mothering, in particular the middle-class oriented ideology of “intensive mothering” and the theoretical perspective of eco-feminism, are both useful in unpacking why the identities of “mother” and “steward to the earth” were formative for these women’s participation in the hydraulic fracturing movement. In contrast, the men I interviewed for this project did not reference one singular or salient identity as a means to explain their entry into the hydraulic fracturing movement like women activists did but rather they loosely referenced multiple identities, two prominent ones being “crusaders of political social justice” and “father.” These results hold true when analyzing each group separately.

This finding reaffirms Bell and Braun’s (2009) research and demonstrates that, unlike females who often reference one salient identity—that of “mother”—as a means to justify their participation, males loosely reference an assortment of identities. However, perhaps more importantly, my findings highlight the gendered nature of Northern Colorado’s hydraulic fracturing movement, illustrating that men and women entered the movement through two separate channels. Specifically, men entered the movement through identities more aligned with the public sphere, while women entered through a meaningful identity historically affiliated with the private sphere, and processes very much tied to the white, middle-class, educated nature of the movement. Furthermore, my findings point to the intersection of gender, race, and class, demonstrating that although women in my study pull upon the “mother” identity as a means to explain their activism like many other women in past studies, the specific “mother” identity they

are referencing is constructed through raced and classed notions. In other words, unlike past environmental justice studies, it is a “mother” identity that is rooted in the ideology of “intensive mothering,” a white, middle-upper class ideology.

Gendered Division of Labor

Furthermore, in my results chapter, a second theme I explored centers on the gendered division of labor within these anti-fracking organizations. Although past social movement research demonstrates that complex patterns of labor exist in social movements (Kuumba 2001; Naples 1998; Stein 2004), minimal research investigating patterns of labor in a fairly gender-integrated environmental justice movement exists. A lack of research in regards to this topic exists mostly due to the fact that women overwhelmingly lead and constitute the ranks of environmental justice movements (Kraus 1998).

In my research project, although men and women both performed community outreach, women engaged in this activity more frequently and for longer durations of time. Although these findings are not contrary to previous environmental justice movement research, my findings demonstrate that women did more of the work overall due to reasons fundamentally connected to gender, race, and class. First, women working part-time or full-time took on a second shift. In greater detail, they took on extra work engaging in community outreach, in addition to the labor performed at home and paid work performed in the formal sector. Secondly, women with a part-time or full-time job deprioritized their job, by cutting hours, missing meetings, extending deadlines, or quitting their job. The latter way these women were engaged in the movement and engaged in community outreach more frequently than their male counterparts occurs largely in part as a result of their middle-upper class status. In particular, these women were given the option to deprioritize their job because they were in an economically privileged position (i.e.

their partners had a professional moderate to high paying job that could provide for their family without the need for an additional source of income). Overall, my work contributes to environmental justice movement research because it illustrates how gender, race, and class intersect to shape the division of labor in a specific environmental justice movement that consists—primarily—of individuals with race and class privilege.

The Dominant Identity of the Movement

Lastly, I briefly discussed how the dominant identity of the movement—white, middle-class, and highly educated—*may* have impacted citizen mobilization and recruitment. Specifically, although there is a strong presence of the Latino community in these areas, according to the activists I interviewed, there appeared to be a lack of Latino participation. Activists' understandings of who wanted/should/could belong to the movement were raced and classed. Some activists suggested that, although they reached out to the Latino community, Latino community members were not interested in the issue. Other activists suggested specific reasons for their lack of participation, such as there being other issues in the forefront of the Latino community's mind and that the Latino community does not like to be in the political spotlight. This is an interesting paradox, given that communities of color and working-class communities have played such a significant role in creating and sustaining environmental justice movements historically. In fact, it's plausible that the above attitudes expressed by the activists about the Latino community and the spectrum of frames adopted by these two organizations may have contributed to homogeneity in the movement.

Limitations of Research & Suggestions for Future Research

The research I conducted only touches the surface of activists' life experiences in Northern Colorado. Activists provide an interesting way to explore the nuances of environmental

justice movements, and how race/ethnicity, gender, and class operate and intersect on differing analytical levels in environmental justice movements. Further research can explore these intersections more thoroughly as unconventional oil and gas development and fracking continues to grow exponentially across Colorado, slowly but surely infringing upon the boundaries of all types of communities and leading residents to collectively organize and form anti-fracking grassroots organizations.

There are limitations to my research, in particular in relation to my methodological approach and sampling procedures. Given the difficulty of building rapport and trust, and the contentious nature of the movement itself, I relied predominately on snowball sampling to recruit participants, which lead me to interview mainly core members in both of my case studies. For this research project, I was interested in learning about the breadth of activism; therefore, I wanted to interview all types of participants, mores specifically core and peripheral members. However, I learned quickly that participants only referred me to core members of their organization and not to peripheral members. As a result, my sampling population was fairly homogenous, with all participants identifying as core remembers. Interviewing only core members made it difficult to reach data saturation, defined as the process whereby a researcher brings new participants into the study until the data set is complete given concepts of interest (Bowen 2008:140). It is likely that incorporating participants of differing degrees of participation would have yielded more insightful theoretical findings.

Additionally, richer findings would likely arise from expanding the number of cases. In Northern Colorado, there are ten-plus anti-fracking grassroots organizations that are closely connected and more are continuing to surface. This research focused on members from only two

anti-fracking organizations. Future research should explore how gender, race, and class operate in the larger network of organizations in Northern Colorado's hydraulic fracturing movement.

Furthermore, research looking on the intersections between gender, race, and class, and activism would benefit from additional methods. Although interviews proved to be fruitful in gathering data, other methods, such as participant observation would likely yield richer data. For example, incorporating additional methods, such as participant observation, would allow the researcher to simultaneously rely on the recalled experiences of his/her participants, but also allow the researcher to directly note his/her experiences in the moment, as they unfold.

Future research should also explore if and how the Latino population in Northern Colorado is engaged in the hydraulic fracturing movement, given activists' responses during this research project. Given that communities of color and working class communities are frequently the targets for harmful industry practices, leading to their strong presence in creating and sustaining environmental justice movements, why do they, according to these activists, appear to not be participating in this movement? Future research questions could address the following: 1) is the Latino community interested in the issue of hydraulic fracturing and if so, how? 2) in what ways have anti-fracking organizations across Northern Colorado reached out to the Latino community? and 3) in what capacity is the Latino community involved in Northern Colorado's hydraulic fracturing movement. Lastly, future research could specifically focus on framing. As indicated in chapter two, research on framing suggests that the way social movement participants go about expressing social and political grievances bears significant consequences on social movement mobilization and recruitment. Future research in this area could explore how framing utilized by anti-fracking organizations impacts social movement participation and mobilization in Northern Colorado's hydraulic fracturing movement. Although my research sheds light on

some gendered, raced, and classed trends, important questions still remain unanswered regarding communities of color and working-class communities participation in Northern Colorado's hydraulic fracturing movement.

References

- Ackelsberg, Martha A. 1988. "Communities, Resistance, and Women's Activism: Some Implications for a Democratic Polity." *Women and the Politics of Empowerment*: 297-313.
- Adler, Patricia A. and Peter Adler. 1987. *Membership Roles in Field Research*. Thousand Oaks, CA: Sage Publications.
- Agosin, Marjorie. 1990. *The Mothers of Plaza de Mayo*. Trenton, N.J.: The Red Sea Press, Inc.
- Agyeman, Julian. 2002. "Constructing Environmental (In) Justice: Transatlantic Tales." *Environmental Politics* 11(3): 31-53.
- Andrews, Kenneth T. 2001. "Social Movements and Policy Implementation: The Mississippi Civil Rights Movement and the War on Poverty, 1965 to 1971." *American Sociological Review*: 71-95.
- Becker, Howard S. and Blanche Geer. 1957. "Participant Observation and Interviewing: A Comparison." *Human Organization* 16: 28-32.
- Beckwith, Karen. 2001. "Gender Frames and Collective Action: Configurations of Masculinity in the Pittston Coal Strike." *Politics & Society* 29:297-330.
- Bell, Shannon and Yvonne Braun. 2010. "Coal, Identity, and the Gendering of Environmental Justice Activism in Central Appalachia." *Gender & Society* 24:794-813.
- Benford, Robert D. 1997. "An Insider's Critique of the Social Movement Framing Perspective." *Sociological Inquiry* 67(4): 409-430.
- Benford, Robert D., and David A. Snow 2000.. "Framing Processes and Social Movements: An Overview and Assessment." *Annual Review of Sociology*: 611-639.

- Bennholdt-Thomsen, Veronika. and Mies, Maria. 1999. *The Subsistence Perspective*.
London: Zed Press.
- Best J. 1987. Rhetoric in Claims-Making: Constructing the Missing Children Problem.
Social Problems 34:101–21
- Blocker, T. Jean, and Douglas Lee Eckberg. 1989. "Environmental Issues as Women's
Issues: General concerns and Local Hazards." *Social Science Quarterly*: 586-593.
- Bord, Richard J., and Robert E. O'Connor. 1997. "The Gender Gap in Environmental Attitudes: the Case
of Perceived Vulnerability to Risk." *Social Science Quarterly*: 830-840.
- Boudet, Hilary, Christopher Clarke, Dylan Bugden, Edward Maibach, Connie Roser-Renouf, and
Anthony Leiserowitz. 2014 "Fracking" Controversy and Communication: Using National
Survey Data to Understand Public Perceptions of Hydraulic fracturing." *Energy Policy*
65: 57-67.
- Bowen, Glenn A. 2008. "Naturalistic Inquiry and the Saturation Concept: A Research Note."
Qualitative Research 8(1):137-52.
- Brehm, Hollie Nyseth, and David N. Pellow. 2013. "Environmental Justice." *Routledge Handbook of
Global Environmental Politics*: 308.
- Brown, Phil and Faith IT Ferguson. 1995. "'Making a Big Stink' Women's Work, Women's
Relationships, and Toxic Waste Activism." *Gender & Society* 9:145-172.
- Brown, Valeria J. 2014. "Radionuclides in Fracking Wastewater: Managing a Toxic Blend."
Environmental Health Perspectives 122(2): A50.
- Brulle, Robert J., and David N. Pellow. 2006. "Environmental Justice: Human Health and
Environmental Inequalities." *Annu. Rev. Public Health* 27: 103-124.

- Buechler, Steven M. 1995. "New Social Movement Theories." *The Sociological Quarterly* 36(3): 441-464.
- Buechler, Steven M. 1993. "Beyond Resource Mobilization?." *The Sociological Quarterly* 34(2):217-235.
- Bullard, Robert D. 1993. *Confronting Environmental Racism: Voices from the Grassroots*. South End Press.
- Bullard, Robert D. 1996. "Environmental justice: It's More Than Waste Facility Siting." *Social Science Quarterly*: 493-499.
- Bullard, Robert Doyle. 2000. *Dumping in Dixie: Race, class, and environmental quality*. Vol. 3. Boulder, CO: Westview Press.
- Bullard, Robert D., and J. Lewis. 1996. *Environmental Justice and Communities of Color*. San Francisco, CA: Sierra Club Books.
- Bulle, Robert J., and Jonathan Essoka. 2005. "Whose Environmental Justice? An Analysis of the Governance Structure of Environmental Justice Organizations in the United States." *Power, Justice, and the Environment: A Critical Appraisal of the Environmental Justice Movement*: 205-218.
- Bowen, William. 2002. "An Analytical Review of Environmental Justice Research: What Do We Really Know?." *Environmental Management* 29(1):3-15.
- Burnard, Philip. 1994. "The Telephone Interview as a Data Collection Method." *Nurse Education Today* 14(1):67-72.
- Burke, Peter J., and Jan E. Stets. 2009. *Identity Theory*. Oxford University Press.
- Cable, Sherry, and Thomas Shriver. 1995. "Production and Extrapolation of Meaning in the Environmental Justice Movement." *Sociological Spectrum* 15(4): 419-442.

- Cable, Sherry. 1992. "Women's Social Movement Involvement." *The Sociological Quarterly* 33(1): 35-50.
- Chakraborty, Jayajit, Juliana A. Maantay, and Jean D. Brender. 2011. "Disproportionate Proximity to Environmental Health Hazards: Methods, Models, and Measurement." *American Journal of Public Health* 12: S27-36.
- Chaney, Elsa M. 1975. "The Mobilization of Women: Three Societies." Pg. 471-87 in *Women Cross-Culturally: Change and Challenge*, ed. Ruby Rohrlich-Leavitt. Paris: Mouton and Co.
- Charmaz, Kathy. 2006. *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. Thousand Oaks, CA: Sage Publications.
- Chavis, B. 1993. Forward In: *Confronting Environmental Racism: Voices from the Grassroots*, ed. R.D. Bullard, 3-5. Boston: South End Press.
- Choo, Hae Yeon, and Myra Marx Ferree. 2010. "Practicing Intersectionality in Sociological Research: A Critical Analysis of Inclusions, Interactions, and Institutions in the Study of Inequalities*." *Sociological theory* 28(2):129-149.
- Cho, Sumi, Kimberle Williams Crenshaw, and Leslie McCall. 2013. "Toward a field of Intersectionality Studies: Theory, Applications, and Praxis." *Signs* 38 (4): 785-810.
- Cole, Luke W., and Sheila R. Foster. 2001. *From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement*. NYU Press.
- Collins, Patricia Hill. 1998. "It's all in the Family: Intersections of Gender, Race, and Nation." *Hypatia* 13(3): 62-82.

Colorado Oil and Gas Conservation Commission. 2014. Retrieved January 15, 2014

(<http://cogcc.state.co.us/cogis/>).

Constantine, Madonna G., and Derald Wing Sue. 2007. "Perceptions of racial

Microaggressions among Black Supervisees in Cross-Racial Dyads." *Journal of Counseling Psychology* 54 (2): 142.

Creswell, John W. 2013. *Qualitative Inquiry & Research Design*. 3rd ed. Thousand Oaks, CA: Sage Publications.

Culley, Marci R. and Holly L. Angelique. 2003. "Women's Gendered Experiences as Long-Term Three Mile Island Activists." *Gender & Society* 17:445-461.

D'Eaubonne, François. 1974. "Le temps de L'Ecofeminisme." *The Time For Ecofeminism*.

Davidson, Debra J., and Wiluam R. Freudenburg. 1996. "Gender and Environmental risk Concerns a Review and Analysis of Available Research." *Environment and Behavior* 28(3): 302-339.

Davis, Charles. 2012. The Politics of Fracking: Regulating Natural Gas Drilling Practices in Colorado and Texas. *Review of Policy Research*, 29(2):177–191.

Della Porta, Donatella. 2006. *Social Movements, Political Violence, and the State: A Comparative Analysis of Italy and Germany*. Cambridge University Press.

DeLuca, Kevin, and Jennifer Peeples. 2002. "From Public Sphere to Public Screen: Democracy, Activism, and the " Violence" of Seattle." *Critical Studies in Media Communication* 19(2):125-151.

Denzin, Norman K. & Yvonna S. Lincoln. 2011. Introduction: The discipline and Practice of Qualitative Research. *The Sage Handbook of Qualitative Research*. 4th ed. Thousand Oaks, CA: Sage Publications.

- Di Chiro, Giovanna. 1997. "Local Actions, Global visions: Remaking Environmental Expertise." *Frontiers: A Journal of Women Studies*: 203-231.
- Downey, Liam. 2005. "Assessing Environmental Inequality: How the Conclusions We Draw Vary According to the Definitions We Employ." *Sociological Spectrum* 25: 349-369.
- Drisko, James W. 2004. "Qualitative Data Analysis Software: A User's Appraisal." Pp. 193-209 in *The Qualitative Research Experience*, Rev. ed., edited by D. K. Padgett. Belmont, CA: Wadsworth
- Dunlap, Riley E., and Angela G. Mertig. 2014. *American Environmentalism: The US Environmental Movement, 1970-1990*. Taylor & Francis.
- East Boulder County United. 2015. "About Us". Retrieved May 8, 2015 (<http://eastbocounited.org/>).
- Eisenhardt, Kathleen M. 1989 "Building theories from case study research." *Academy of management review* 14(4):532-550.
- Ellsworth, William L. 2013. "Injection-induced earthquakes." *Science* 341, no. 6142 (2013): 1225942.
- Emerson, Robert M., Rachel I. Fretz, and Linda L. Shaw. 2011. *Writing Ethnographic Fieldnotes*. 2nd ed. Chicago: The University of Chicago Press.
- Epstein, Barbara. 1997. "The Environmental Justice/Toxics movement: Politics of Race and Gender." *Capitalism Nature Socialism* 8(3): 63-87.
- Ernst, Rose. 2015. "Working Expectations: Frame Diagnosis and the Welfare Rights Movement." *Social Movement Studies* (8)3:185-20.

- Evans, Gary W., and Elyse Kantrowitz. 2002. "Socioeconomic Status and Health: the Potential Role of Environmental Risk Exposure." *Annual Review of Public Health* 23(1): 303-331.
- Finley, Bruce. 2013. "Colorado Anti-Fracking Groups Launch Campaign for State Ban." *The Denver Post*. Retrieved April 15, 2013 (http://www.denverpost.com/environment/ci_27591553/colorado-anti-fracking-groups-launch-campaign-statewide-ban).
- Flick, Uwe. 2009. *An Introduction to Qualitative Research*. Sage.
- Flynn, James, Paul Slovic, and Chris K. Mertz. 1994. "Gender, Race, and Perception of Environmental health risks." *Risk analysis* 14(6):1101-1108.
- Friedman, Debra, and Doug McAdam. 1992. "Collective Identity and Activism." *Frontiers in Social Movement Theory* :156-173.
- Gaard, Greta. 1993. *Ecofeminism: Women, Animals, and Nature*. Philadelphia: Temple University.
- Gaard, Greta. 2010. *Ecofeminism*. Blackwell Publishing Ltd.
- Gamson WA. 1992. The Social Psychology of Collective Action. See Morris & Mueller, pp. 53–76
- Gamson, William A, Bruce Fireman, and Steven Rytine. 1982. *Encounters with Unjust Authority*. Homewood, IL: Dorsey
- General Accounting Office. 1983. *Siting of Hazardous Waste Landfills and Their Correlation with Racial and Economic Status of Surrounding Communities*. Washington, D.C.: General Accounting Office

- Gibbs, Lois Marie, and Murray Levine. 1982. *Love Canal: My Story*. SUNY Press.
- Gilligan C. 1982 *In a Different Voice: Psychological Theory and Women's Development*. Cambridge (MA): Harvard Univ. Press.
- Glenn, Evelyn Nakano, Grace Chang, and Linda Rennie Forcey. 1994. *Mothering: Ideology, experience, and agency*. Psychology Press, 1994.
- Goodwin, Jeff, James M. Jasper, and Francesca Polletta. 2004. *Emotional Dimensions of Social movements*. London: Blackwell Publishing.
- Goodwin, Jeff, and James M Jasper. 2003. *The Social Movements Reader: Cases and Concepts* . Malden, MA: Blackwell Publishers.
- Griffith, Allison I. 1998. "Insider/Outsider: Epistemological Privilege and Mothering Work." *Human Studies* 21(4):361-76.
- Goodwin, Jeff, James M. Jasper, and Francesca Polletta. 2003. *Passionate Politics: Emotions and Social Movements*. University of Chicago Press.
- Gutteling, Jan M., and Oene Wiegman. 1993. "Gender-Specific Reactions to Environmental Hazards in the Netherlands." *Sex Roles* 28(7-8): 433-447.
- Hamilton L.C. 1985. "Who Cares About Water pollution? Opinions in a Small-Town Crisis." *Sociological Inquiry* 55:170-181
- Hamilton, Nora, and Norma Stoltz Chinchilla. 2001. *Seeking Community in Global City: Guatemalans and Salvadorans in Los Angeles*. Temple University Press.
- Hardy, Sarah, and Caroline Wiedmer, eds. 2005. *Motherhood and Space: Configurations of the Maternal Through Politics, Home, and the Body*. Palgrave Macmillan.
- Hay, Amy M. 2009. "Recipe for Disaster: Motherhood and Citizenship at Love Canal." *Journal of Women's History* 21(1): 111-134.

- Hays, Sharon. 1996. *The Cultural Contradictions of Motherhood*. New Haven, CT: Yale University Press.
- Hermanowicz, Joseph C. 2002. "The Great interview: 25 Strategies for Studying People in Bed." *Qualitative sociology* 25(4): 479-499.
- Hobson, Barbara, and Marika Lindholm. 1997. "Collective identities, Women's Power Resources, and the Making of Welfare States." *Theory and Society* 26 (4):475-508.
- Hochschild, Arlie, and Anne Machung. 1987. *The Second Shift: Working Families and the Revolution at Home*. Penguin.
- Hoffer, Eric. 1951. *The True Believer*. New York: Harper
- Howarth, Robert W. Anthony Ingraffea, and Terry Engelder. 2011. "Natural Gas: Should Fracking Stop?." *Nature* 477(7364): 271-275.
- Hunter, Margaret L. 2002. "'If You're Light You're Alright' Light Skin Color as Social Capital for Women of Color." *Gender & Society* 16(2): 175-193.
- Hunter, Lori M., Alison Hatch, and Aaron Johnson.2004. "Cross-National Gender Variation in Environmental Behaviors*." *Social Science Quarterly* 85 (4): 677-694.
- Irons, Jenny. 1998. "The Shaping of Recruitment and Participation: A Study of Women in the Mississippi Civil Rights Movement." *Gender & Society* 12 (6): 692-709
- Jenkins, J. Craig, and Charles Perrow. 1977. "Insurgency of the powerless: Farm Worker Movements (1946-1972)." *American Sociological Review*: 249-268.
- Kaplan, Temma. 1990. "Community and Resistance in Women's Political Cultures." *Dialectical Anthropology* 15: 259-67.

- Klandermans, Bert. 1984. "Mobilization and Participation: Social-Psychological Expansions of Resource Mobilization Theory." *American Sociological Review* 49: 583-6000.
- Kornhauser, William. 1959. *The Politics of Mass Society*. Glencoe, IL: Free Press.
- Krauss, Celene. 1993. "Women and Toxic Waste Protests: Race, Class and Gender as Resources of Resistance." *Qualitative Sociology* 16(3): 247-262.
- Kurtz, Hilda E. 2007. "Gender and Environmental Justice in Louisiana: Blurring the Boundaries of Public and Private Spheres." *Gender, Place and Culture* 14(4): 409-426.
- Kuumba, Bahati M. 2001. *Gender and Social Movements*. Rowman Altamira.
- Lake, Robert W. 1996. "Volunteers, NIMBYs, and Environmental Justice: Dilemmas of Democratic Practice." *Antipode* 28(2):160-174.
- Landman, Ann. 2014. "Colorado Citizen's Launch Class Action Lawsuit to Protect Lafayette's Fracking Ban." *Desmog*. Retrieved March 30, 2015 (<http://www.desmogblog.com/2014/06/18/lafayette-citizens-launch-class-action-lawsuit-protect-community-s-fracking-ban>).
- Lareau, Annette. 1996. "Common Problems in Field Work: A Personal Essay." Pp. 196-236 in *Journeys Through Ethnography: Realistic Accounts of Fieldwork*, edited by A. Lareau and J. Shultz. Boulder, CO: Westview Press.
- Leary, Mark R., and Robin M. Kowalski. 1990. "Impression management: A literature review and two-component model." *Psychological bulletin* 107(1): 34.
- LeBon, Gustave 1897. *The Crowd*. London: Unwin.
- Lobao, Linda. 1990. "Women in Revolutionary Movements: Changing Patterns of Latin America Guerrilla Struggle." Pp. 18-204 in *Women and Social Protest*, ed. Guida West and Rhoda Lois Blumberg. New York: Oxford Press

- Lofland, John, David Snow, Leon Anderson, and Lyn Lofland. 2006. *Analyzing Social Settings: A Guide to Qualitative Observation and Analysis*. Belmont, CA: Wadsworth.
- MacKinnon, Catharine A. 2013. "Intersectionality as method: A note." *Signs* 38(4) 1019-1030.
- Macpherson, David A., and Barry T. Hirsch. 1995. "Wages and Gender Composition: Why do Women's Jobs Pay Less?." *Journal of Labor Economics* (1995): 426-471.
- Maddaford, Brooke. 2013. *Inspections of Oil and Gas Development*. Colorado Legislation Staff Council Issue Brief, 13-09. 1-7.
- Malin, Stephanie. 2014. "There's No Real choice but to Sign: Neoliberalization and Normalization of Hydraulic Fracturing on Pennsylvania Farmland." *Journal of Environmental Studies and Sciences* 4(1):17-27.
- Malin, Stephanie. 2015. *The Price of Nuclear Power: Uranium Communities and Environmental Justice*. Rutgers University Press.
- Marshall, Catherine and Gretchen B. Rossman. 2011. *Designing Qualitative Research*. 5th ed. Thousand Oaks, CA: Sage Publications.
- McCammon, Holly J., Karen E. Campbell, Ellen M. Granberg and Christine Mowery. 2001. *American Sociological Review* (66)1:49-70
- McCright, Aaron M. & Chenyang Xiao. 2014. Gender and Environmental Concern: Insights from Recent Work and for Future Research, *Society & Natural Resources*,27(10):1109-1133.
- McAdam, Doug. 1992. "Gender as a Mediator of the Activist Experience: The Case of Freedom Summer." *American Journal of Sociology* 97: 1211-1240.

- McAdam D. 1982. *Political Process and the Development of Black Insurgency, 1930-1970*. Chicago, IL: Univ. Chicago Press.
- McCall, Leslie. 2014. "The Complexity of Intersectionality." *Signs* 40(1).
- McCarthy, John D., and Mayer N. Zald. 1977. "Resource Mobilization and Social Movements: A Partial Theory." *American Journal of Sociology*: 1212-1241.
- McGurty, Eileen Maura. 2000. "Warren County, NC, and the Emergence of the Environmental Justice Movement: Unlikely Coalitions and Shared Meanings in Local Collective Action." *Society & Natural Resources* 13(4): 373-387.
- McKenzie, Lisa M., Roxana Z. Witter, Lee S. Newman, and John L. Adgate. 2014. "Human Health Risk Assessment of Air Emissions from Development of Unconventional Natural Gas Resources." *Science of the Total Environment* 424: 79-87.
- McStay, Jan, and Riley E. Dunlap. 1983. "Male-Female Differences in Concern for Environmental Quality." *International Journal of Women's Studies* 6: 291-301
- Melucci, Alberto. 1985. "The Symbolic Challenge of Contemporary Movements." *Social Research* 52:781-816.
- Merriam, Sharan B., Juanita Johnson-Bailey, Ming-Yeh Lee, Youngwha Kee, Gabo Ntseane, and Mazanah Muhamad. "Power and positionality: Negotiating Insider/Outsider Status Within and Across Cultures." 2001. *International Journal of Lifelong Education* 20(5): 405-416.
- Mohai, Paul. 1992. "Men, Women, and the Environment: An Examination of the Gender Gap in Environmental Concern and Activism." *Society & Natural Resources* 5(1): 1-19.

- Naples, Nancy A. 1998. *Community Activism and Feminist Politics: Organizing Across Race, Class, and Gender*. New York: Routledge.
- Nelkin, Dorothy. 1981. Nuclear Power as a Feminist Issue. *Environment*. 23:14-39.
- Newman, Rich. 2001. "Making Environmental Politics: Women and Love Canal Activism." *Women's Studies Quarterly*: 65-84.
- Neuman, Lawrence W. 2011. *Social Research Methods: Qualitative and Quantitative Approaches*. 3rd ed. Boston, MA: Pearson Publishers.
- Oberschall, Anthony. 1973. *Social Conflict and Social Movements*. Englewood Cliffs, N.J.: Prentice-Hall.
- Opdenakker, Raymond. 2006. Advantages and Disadvantages of Four Interview Techniques in Qualitative research. *Forum: Qualitative Social Research* 7(4).
- Opsal, Tara, and Tara O'Connor Shelley. 2014. "Energy Crime, Harm, and Problematic State Response in Colorado: A Case of the Fox Guarding the Hen House?." *Critical Criminology* 22(4): 561-57
- Osborn, Stephen G., Avner Vengosh, Nathaniel R. Warner, and Robert B. Jackson. 2011. "Methane Contamination of Drinking Water Accompanying Gas-well Drilling and Hydraulic Fracturing." *Proceedings of the National Academy of Sciences* 108 (20): 8172-8176.
- Our Broomfield. 2015. "About Us." Retrieved May 10, 2015 (<http://ourbroomfield.org/>).
- Pacala, Stephen, and Robert Socolow. 2004. "Stabilization wedges: Solving the Climate Problem for the Next 50 years with Current Technologies." *Science* 305(3685) :968-972.

- Pellow, David N., and Robert J. Brulle. 2005. *Power, Justice, and the Environment: A Critical Appraisal of the Environmental Justice Movement*. Cambridge, MA: MIT Press.
- Pellow, David Naguib. 2003. *Garbage Wars: The Struggle for Environmental Justice in Chicago*. Mit Press.
- Perkins, Tracy E. 2012. "Women's Pathways Into Activism Rethinking the Women's Environmental Justice Narrative in California's San Joaquin Valley." *Organization & Environment* 25(1): 76-94.
- Perry, Simona L. 2012. "Environmental Reviews and Case Studies: Addressing the Societal Costs of Unconventional Oil and Gas Exploration and Production: A Framework for Evaluating Short-term, Future, and Cumulative Risks and Uncertainties of Hydrofracking." *Environmental Practice* 14 (4): 352-365.
- Phillips, Carl V., and Ken Sexton. 1998. "Science and Policy Implications of Defining Environmental Justice." *Journal of Exposure, Analysis and Environmental Epidemiology* 9(1): 9-17.
- Polletta, Francesca, and James M. Jasper. 1997. "Collective identity and Social Movements." *Annual Review of Sociology*: 283-305.
- Pulido, Laura. 1996. "A Critical Review of Methodology of Environmental Racism Research". *Antipode* 28(2):142-159.
- Quinn, Megan. 2013. "New pro-fracking Group Forms in Broomfield". *The Greeley Tribune*. Retrieved March 10, 2013 (<http://www.greeleytribune.com/news/8388428-113/broomfield-fracking-group-ban>).

- Phillips, Carl and Ken Sexton. 1999. "Science and Policy Implications for Defining Environmental Justice." *Journal of Exposure Analysis and Environmental Epidemiology* 9:9-17.
- Ragin, Charles C. and Howard S. Becker. 2009. *What is a Case? Exploring the Foundations of Social Inquiry*. 12th ed. New York, YK: Cambridge University Press.
- Rahm, Dianne. 2011. "Regulating Hydraulic Fracturing in Shale Gas plays: The Case of Texas." *Energy Policy* 39 (5): 2974-2981.
- Reese, Ellen, and Garnett Newcombe. 2003. "Income Rights, Mothers' Rights, or Workers' Rights? Collective Action Frames, Organizational Ideologies, and the American Welfare Rights Movement." *Social Problems* 50(2):294-318.
- Ritchie, Jane, Jane Lewis, Carol McNaughton Nicholls, and Rachel Ormston. 2013. eds. *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. Sage.
- Robnett, Belinda. 1996. "African American Women in the Civil Rights Movement, 1954-1965: Gender, Leadership, and Micromobalization." *American Journal of Sociology* 101(6): 1661 – 93.
- Rodriguez, Lilia. 1994. "Barrio Women: Between the Urban and the Feminist movement." *Latin American Perspectives*:32-48.
- Rubin, Herbert J. and Irene S. Rubin. 2012. *Qualitative Interviewing: The Art of Hearing Data*. 3rd ed. Thousand Oaks, CA: Sage Publications.
- Saundry, Peter. 2009. Hydraulic fracturing. In C. Cleveland (Ed.), *Encyclopedia of Earth*. Washington, DC: National Council for Science and the Environment.
Retrieved from http://www.eoearth.org/article/Hydraulic_Fracturing

- Schwartz, Michael. 1976. *Radical Protest and Social Structure*. New York: Academy Press.
- Schlosberg, David. 2003. "The Justice of Environmental Justice: Reconciling Equity, Recognition, and Participation in a Political movement." *Moral and political Reasoning in Environmental Practice*:77-106.
- Schlosberg, David. 2013. "Theorising Environmental Justice: the Expanding Sphere of a Discourse." *Environmental Politics* 22(1): 37-55.
- Schlosberg, David. 2004 "Reconceiving Environmental Justice: Global Movements and Political Theories." *Environmental Politics* 13(3): 517-540.
- Skocpol, Theda, and Morris P. Fiorina. 2004. eds. *Civic Engagement in American Democracy*. Brookings Institution Press.
- Smelser, Neil 1962. *Theory of Collective Behavior*. New York: Free Press.
- Snow, David A., and Doug McAdam. "Identity Work Processes in the Context of Social Movements: Clarifying the Identity/Movement Nexus." *Self, identity, and social Movements* 13 (2000): 41.
- Snow, David A., Louis A. Zurcher Jr, and Sheldon Ekland-Olson. 1980. "Social Networks and Social Movements: A Microstructural Approach to Differential Recruitment." *American sociological review*: 787-801.
- Snow, David A., Sarah A. Soule, and Hanspeter Kriesi. 2005. *The Blackwell Companion to Social Movements*. Malden, MA: Blackwell Pub.
- Solorzano, Daniel, Miguel Ceja, and Tara Yosso. 2000. "Critical Race Theory, Racial Microaggressions, and Campus Racial Climate: The Experiences of African American College Students." *Journal of Negro Education*: 60-73.

- Sovacool, Benjamin K. 2014. "Cornucopia or curse? Reviewing the Costs and Benefits of Shale Gas Hydraulic Fracturing (fracking)." *Renewable and Sustainable Energy Reviews* 37:249-264.
- Stake, Robert. 1995. *The Art of Case Study Research*. Thousand Oaks, CA: Sage Publications.
- Stearney, Lynn M. 1994. "Feminism, ecofeminism, and the Maternal Archetype: Motherhood as a Feminine Universal." *Communication Quarterly* 42(2): 145-159.
- Steger, Mary Ann E., and Stephanie L. Witt. 1989. "Gender Differences in Environmental Orientations: a Comparison of Publics and Activists in Canada and the US." *The Western Political Quarterly*: 627-649.
- Stern, Paul C., Thomas Dietz, and Linda Kalof. 1993. "Value orientations, Gender, and Environmental Concern." *Environment and Behavior* 25(5): 322-348.
- Stets, Jan E., and Chris F. Biga. 2003. "Bringing Identity Theory into Environmental Sociology." *Sociological Theory* 21(4): 398-423.
- Story, Kaila Adia. 2004. *Patricia Hill Collins: Reconceiving Motherhood*. Bradford, ON: Demeter Pres. Print.
- Stryker, Sheldon, Timothy Joseph Owens, and Robert W. White, 2000 eds. *Self, identity, and Social movements*. Vol. 13. U of Minnesota Press.
- Sturgeon, Noel. 1997. *Ecofeminist natures: Race, Gender, Feminist Theory, and Political Action*. Psychology Press.
- Sze, Julie, and Jonathan K. London. 2008. "Environmental Justice at the Crossroads." *Sociology Compass* 2(4): 1331-1354.
- Tarrow, Sidney. 1996. "States and Opportunities: The Political Structuring of Social Movements." *Comparative Perspectives on Social Movements*: 41-61.

- Tarrow, Sidney. 1988. "National Politics and Collective action: Recent Theory and Research in Western Europe and the United States." *Annual Review of Sociology*: 421-440.
- Taylor, Dorceta E. 2000. "The Rise of the Environmental Justice Paradigm Injustice Framing and the Social Construction of Environmental Discourses." *American Behavioral Scientist* 43(4): 508-580.
- Taylor, Verta. 1989. "Social Movement Continuity: The Women's Movement in Abeyance." *American Sociological Review*: 761-775.
- Taylor, Verta, Nancy Whittier, A. D. Morris, and C. M. Mueller. 1992. "Collective Identity in Social Movement Communities: Lesbian Feminist Mobilization." *Social Perspectives in lesbian and gay studies*: 349-365.
- Taylor, Dorceta E. 1997. "Women of Color, Environmental Justice, and Ecofeminism." *Ecofeminism: Women, Culture, Nature*: 38-81.
- Tindall, D. B., Scott Davies, and Celine Mauboule. 2003. "Activism and Conservation Behavior in an Environmental Movement: The Contradictory Effects of Gender." *Society and Natural Resources* 16:909-32.
- United Church of Christ. 1987. Commission for Racial Justice. *Toxic Wastes and Race in the United States: A National Report on the Racial and Socio-economic Characteristics of Communities with Hazardous Waste sites*. Public Data Access.
- U.S. Census Bureau. 2013. "State and County Quick Facts". U.S. Census Bureau. Retrieved May 10, 2013 (<http://quickfacts.census.gov/qfd/states/08000.html>).
- U.S. Energy Information Administration. 2013. Colorado. Retrieved February 24, 2015 (<http://www.eia.gov/state/?sid=CO>).

- US Environmental Protection Agency. 2015. Office of Environmental Justice. "What is Environmental Justice?" Retrieved May 1, 2015 (<http://www.epa.gov/environmentaljustice/>).
- U.S. Environmental Protection Agency. 2015. "Environmental Justice". Retrieved March 10, 2015 (<http://www.epa.gov/environmentaljustice/>).
- US Environmental Protection Agency. 2000. Office of Environmental Justice. Retrieved May 2, 2015 (<http://www.epa.gov/environmentaljustice/>).
- Valk, A. M. 2000. 'Mother Power': The Movement for Welfare Rights in Washington, D.C., 1966 – 1972, *Journal of Women's History* 11(4): 34 – 58.
- Verba, Sidney, Kay Lehman Schlozman, Henry E. Brady, and Henry E. Brady. 1995. *Voice and equality: Civic Voluntarism in American politics*. Vol. 4. Cambridge, MA: Harvard University Press.
- Warren, Karen, and Nisvan Erkal. 1997. *Ecofeminism: Women, Culture, Nature*. Indiana University Press,
- Weiss, Robert S. 2004. *Learning from Strangers: The Art and Method of Qualitative Interview studies*. Simon and Schuster.
- Williams, Robert W. 1999. "The Contested Terrain of Environmental Justice Research: Community as the Unit of Analysis." *Social Science Journal* 36:313-328.
- Wilson, Sacoby M., Herb Fraser-Rahim, Edith Williams, Hongmei Zhang, LaShanta Rice, Erik Svendsen, and Winston Abara. 2012. "Assessment of the Distribution of Toxic Release Inventory Facilities in Metropolitan Charleston: an Environmental Justice case study." *American Journal of Public Health* 102(10):1974-1980.

- Witter R, Stinson K, Sackett H, et al. Potential Exposure-Related Human Health Effects of Oil and Gas Development: a Literature Review. Available at: http://docs.nrdc.org/health/files/hea_08091702c.pdf. Accessed January 26, 2011.
- Xiao, Chenyang, and Aaron M. McCright. 2012. "Explaining Gender Differences in Concern About Environmental Problems in the United States." *Society & Natural Resources* 25 (11): 1067-1084.
- Zelezny, Lynnette C., Poh-Pheng Chua, and Christina Aldrich. 2000. "Elaborating on Gender Differences in Environmentalism." *Journal of Social Issues* 56(3): 443-458.
- Yin, Robert K. 2009. *Case Study Research: Design and Method*. 4th ed. Thousand Oaks, CA: Sage Publications.

Appendix A

INTEVIEW GUIDE

Interview Topics

The following are interview topics and example questions. Some topics/questions will be more relevant for some interviewees than others. The questions are open-ended to allow the individuals to freely describe their perceptions, beliefs, and experiences in relation to hydraulic fracturing and their activism without me priming their thoughts one direction or another. My probes will remain non-personal and oriented towards the activist's actions and efforts.

1) Setting the Stage

- a. How long have you lived in [community]?
- b. What is your favorite thing about [community]?
- c. If someone asked you to describe the community of [insert name], what would you say to them?

2) Hydraulic Fracturing (A.K.A fracking) – According to the Colorado Oil and Gas Conservation Commission, fracking is a process in which oil and gas companies inject a water-sand-chemical mix deep underground to induce small cracks or fractures in geological formations that release deposits of gas trapped in subterranean rock (2013). Community members hold different perceptions regarding the practice of fracking; therefore, it is imperative to gather a better understanding of these varying viewpoints.

- a. What can you tell me about the practice of hydraulic fracturing?
- b. How did you learn about the practice of hydraulic fracturing?
- c. What are the advantages and/or disadvantages of hydraulic fracturing?
- d. What are your fundamental concerns when it comes to the practice of hydraulic fracturing?
- e. What policies currently exist in your community in relation to the practice of hydraulic fracturing?
- f. How did you find out about [anti-fracking/pro-fracking organization]?
- g. Describe why you joined [anti-fracking/pro-fracking organization].
- h. Can you reference a particular experience and/or a concern that compelled you to join [anti-fracking/pro-fracking organization]?

2) **Organization Details**

- a. Tell me about [anti-fracking/pro-fracking organization].
- b. How did this organization form?
- c. What are the goals of this organization?
- d. What is Ballot Measure [insert name]?
- e. Can you tell me more about the members who belong to [anti-fracking/pro-fracking organization]?
- f. What role do you play in [anti-fracking/pro-fracking organization]?
- g. On a daily basis, what is your day like in {anti-fracking/pro-fracking organization}?
- h. How much of your time do you commit to [anti-fracking/pro-fracking organization] on a daily basis?
- i. On a weekly basis?
- j. Do you find yourself actively engaging with the community often? If so, in what way?
- k. On a weekly basis, what work are you doing that is related to [anti-fracking/pro-fracking organization]?
- l. Why are the reoccurring tasks you find yourself doing for [anti-fracking/pro-fracking organization]?
- m. Are there any tasks you have difficulty performing?
- n. Are there any tasks you do not take part in now but would like to take part in?
- o. How did you end up performing these tasks?
- p. What struggles have you encountered thus far working with [anti-fracking/pro-fracking organization]?
- q. How often does your organization meet?
- r. What do you discuss in these meetings?
- s. Is there anything you are in charge of at group meetings?
- t. What has been the biggest accomplishment of [anti-fracking/pro-fracking organization]?
- u. Do you feel that you have personally contributed to the success of [anti-fracking/pro-fracking group]? If so, how?
- v. Can you share some goals with me that [anti-fracking/pro-fracking organization] hopes to accomplish in the future?

Recruitment/Mobilization of Citizens – how do anti-fracking/pro-fracking organizations attempt to persuade community member to align with their cause?

- w. Tell me about the strategies [anti fracking/pro-fracking organization] uses to inform citizens about hydraulic fracturing; can you give me a specific example of one of these strategies? Which strategy do you deem to be the most successful? Which strategy does your organization implement most often? How do you citizens respond to these strategies?

- x. How did you persuade citizens of [community] to vote on [ballot initiative]?
- y. How big of a role did canvassing nearby neighborhoods play?
- z. How did you decide what areas to focus on?
 - aa. Did you find yourself discussing the practice of hydraulic fracturing with citizens?
 - bb. What did you most commonly find yourself saying to them?

Appendix B

RECRUTIMENT TELEPHONE/EMAIL SCRIPT

HF Telephone Script:

Hello, my name is Amber. I am a graduate student at Colorado State University. I am conducting on a research project about activism in relation to hydraulic fracturing in Northern Colorado. Did you receive a letter from us recently describing the study we are conducting?

[If received letter]

Great. Do you have any questions concerning the study?

Today, I am calling to see if you would be willing to sit and talk with me for 45-60 minutes about involvement in [name of local organization]. Your participation in this study is completely voluntary and confidential.

Would you be willing to participate?

[If says yes to participate]

Thank you so much for your time and participation. When would be a good time to meet with you?

We can meet anywhere that is convenient for you. Do you have someplace in mind?

Great, I will meet you then. Do you have any further questions for me today?

Good, I will see you then. Do you still have the letter with our contact information?
[if not] My number is (715)-207-9048, if any questions come up before we meet.

Thanks again.

[If says no to participate]

Thank you very much for you time and I hope you have a good day.

[If did not receive letter]

I'm sorry you did not receive that. I am documenting community member's experiences in relation to their efforts surrounding oil and gas development in their community. We are talking with activists that believe that oil and gas development, specifically in relation to hydraulic fracturing, is beneficial for their community, as while as activists who believe this development is unsafe and problematic for various reasons. You emailed us on [date] as someone who might have experiences that you can share with us.

Do you have any questions concerning the study?

The interview will take approximately 45 to 60 minutes of your time. And today, I am calling to schedule dates and times that are convenient for you, if you are interested. Your participation in this study is completely voluntary and confidential.

Would you be interested in participating?

[If says yes to participate]

Thank you so much for your time and participation. When would be a good time to meet with you?

We can meet anywhere that is convenient for you. Do you have someplace in mind?

Great, I will meet you then. Do you have any further questions for me today?

Good, I will see you then. My phone number is (715)-207-9048, if you have any questions before then.

Thanks again.

[If says no to participate]

Thank you very much for you time and I hope you have a good day.

HF Email Script (if potential participant cannot be contacted by phone or prefers to be contacted by email):

Subject Line: Hydraulic Fracturing Activism Interview

[Name],

Hi, my name is Amber Kizewski. I am graduate student from Colorado State University. I am conducting a research project about activist's efforts in relation to oil and gas development in Northern Colorado. We recently sent you a letter about participating in this project.

I am writing today to see if you are willing to be interviewed about your efforts with [name organization]. The interview will take approximately 45-60 minutes. Your participation in this study is completely voluntary and confidential.

If you are willing to be interviewed, we can meet at a time and place convenient for you. Please let me know when and where would work best for you. Also, let me know if you are not interested in participating.

Appendix C

INTRODUCTION LETTER

[Introduction letter]

Dear [Name],

My name is Amber Kizewski and I am a graduate student at Colorado State University in the Sociology Department. Recently, I started a research project under the supervision of Dr. Tara Opsal that examines the organizations in Northern Colorado that worked to enact a ban or a moratorium on the process of fracking. I received your name from _____ and I am hoping that you will be willing to participate in this study.

I'm interested in understanding community member's participation in local organizations that worked for/against a ban or a moratorium. In particular, I'm interested in understanding why community members become involved in local organizations and their experiences and efforts within these organizations.

The interview will take approximately 60 minutes of your time, and can be scheduled at a time and place convenient for you. We will be telephoning/emailing you in the next few weeks about participating in the study. At that time, we can set up a time and place to talk, if you choose to participate. You may be asked for one or two follow-up interviews to expand on your responses or provide further details. These follow-up interviews, if necessary, will take approximately 15 to 30 minutes of your time.

Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled. Your responses will be kept confidential unless you otherwise wish to be identified.

There are no direct benefits to you for participating; however, your involvement provides us with important information about community member's participation in organizations for or against oil and gas exploration in Northern Colorado. You do not face any risks for participating nor are there any costs to participate.

If you have questions about the study, you can contact me anytime at the contact information listed below. If you have any questions about your rights as a volunteer in this research, contact Janell Barker, Colorado State University's Human Research Administrator at 970-491-1655.

Thank you for your time and I will be in contact soon.

Sincerely,
Amber Kizewski

Graduate Student
Department of Sociology
Colorado State University
(715) 207-9048
Amber.Kizewski@colostate.edu

Appendix D

INFORMED CONSENT FORM: INDIVIDUAL INTERVIEWS

Consent to Participate in a Research Study

Colorado State University

TITLE OF STUDY: *Activist's Efforts in Northern Colorado's Hydraulic Fracturing Movement*

PRINCIPAL INVESTIGATOR: Tara Opsal, Department of Sociology, PhD,
Tara.Opsal@colostate.edu

CO-PRINCIPAL INVESTIGATOR: Amber Kizewski, Department of Sociology, Graduate Student, Amber.Kizewski@colostate.edu

WHY AM I BEING INVITED TO TAKE PART IN THIS RESEARCH? You are being asked to participate in this study because you are an active member of a local organization that formed in response to the ongoing events surrounding oil and gas development in Broomfield, CO.

WHO IS DOING THE STUDY? Amber Kizewski, a graduate student in the department of Sociology and Tara Opsal, an Assistant Professor in the Department of Sociology are conducting this study.

WHAT IS THE PURPOSE OF THIS STUDY? The purpose of this study is understand why citizens in Broomfield become involved in organizations for or against oil and gas development and their experiences within these local organizations.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

Today, I will be talking with you about your involvement with your community and organization. I will ask you about motivations that lead to become active in relation to oil and gas development (specifically in regards to hydraulic fracturing), the tasks and responsibilities you've performed for your organization, and ways in which you have encouraged citizens to align with your cause. This interview will take approximately 60 minutes of your time. You may be asked for one or two follow-up interviews to expand on your responses from today or provide

further details. These follow-up interviews, if necessary, will take approximately 15 to 30 minutes of your time.

ARE THERE REASONS WHY I SHOULD NOT TAKE PART IN THIS STUDY?

There are no anticipated reasons why a participant could be excluded from volunteering for this study.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS? You do not face any risks for participating nor are there any costs to participate. It is not possible to identify all potential risks in research procedures, but we have taken reasonable safeguards to minimize any known and potential, but unknown, risks.

ARE THERE ANY BENEFITS FROM TAKING PART IN THIS STUDY? There are no direct benefits to you for participating; however, your involvement provides us with important information about community member's participation in organizations for or against oil and gas exploration in Northern Colorado.

DO I HAVE TO TAKE PART IN THE STUDY? Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participating at any time.

WHO WILL SEE THE INFORMATION THAT I GIVE? We will keep private all research records that identify you, to the extent allowed by law. For this study, we will assign a code to your data (e.g. 1216) so that the only place your name will appear in our records is on the consent and in our data spreadsheet, which links you to your code. Only the research team will have access to the link between you, your code, and your data. The only exceptions to this are if we are asked to share the research files for audit purposes with the CSU Institutional Review Board ethics committee, if necessary.

WHAT IF I HAVE QUESTIONS?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the investigators, Amber Kizewski at Amber.Kizewski@colostate.edu or Tara Opsal at Tara.Opsal@colostate.edu. If you have any questions about your rights as a volunteer in this research, contact Janell Barker, Human Research Administrator at 970-491-1655. We will give you a copy of this consent form to take with you.

WHAT ELSE DO I NEED TO KNOW? With your permission, this interview will be recorded with a digital voice recorder. We will only record the interview with your permission. The audio

files of this interview will be kept in a secure location. You have the right to refuse to answer any question(s) for any reason. You also have the right to refuse to be audio recorded.

Your signature acknowledges that you have read the information stated and willingly sign this consent form. Your signature also acknowledges that you have received, on the date signed, a copy of this document containing two pages.

Signature of person agreeing to take part in the study

Date

Printed name of person agreeing to take part in the study

Name of person providing information to participant

Date

Signature of Research Staff

Signature of Research Staff

Appendix E

DEMOGRAPHIC INFORMATION FORM

Directions: Please answer all of the items. On items that have more than one choice, please place an X next to your choice. You may skip any questions do you not feel comfortable asking.

****THIS FORM IS FOR DEMOGRAPHIC REPORTING PURPOSES ONLY. PLEASE DO NOT WRITE YOUR NAME ON THIS FORM****

- | | |
|---|--|
| 1. Today's Date _____ | 9. Martial Status
_____ Single
_____ Married
_____ Separated/Divorced
_____ Widowed |
| 2. Gender: _____ | |
| 3. Age: _____ | |
| 4. Educational Degree Obtained:
_____ High School Diploma
_____ Associate's Degree
_____ Bachelor's Degree
_____ Master's Degree
_____ Doctoral Degree | 10. How many children do you have?
_____ |
| | 11. How are you employed?
_____ Employed Full-Time
_____ Employed Part-Time
_____ Not Employed
_____ Student
_____ Retired
_____ Other |
| 5. Place of Birth: _____ | |
| 6. Years you've lived in Colorado: _____ | |
| 7. Years you've lived in your specific community: _____ | |
| 8. Political Affiliation:
_____ Democrat
_____ Green Party
_____ Independent
_____ Republican
_____ Other (<i>please specify</i>) | 12. Race/Ethnicity
_____ White
_____ African American
_____ Asian American
_____ Latino American
_____ Other (<i>please specify</i>) |