POLITICS, MASS MEDIA, AND POLICY CHANGE: RECREATIONAL WATER RIGHTS IN COLORADO COMMUNITIES

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Dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Nicholas School of the Environment and Earth Sciences in the Graduate School of Duke University

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ABSTRACT

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Abstract

This study looks at the process of local policy change in environmental policy decisions. It employs a comparative case study research design to analyze the creation of a new recreational water right in Colorado to support whitewater boating. It compared the 12 communities that have applied for the new water right to 6 non-adopter communities. Factors including stakeholder groups, citizens, policy entrepreneurs, mass media, policy knowledge, policy timing, and politicians’ motivations are analyzed to determine their role in local policy decisions. This research also considers how policy change in local communities promoted new state laws, and was in turn influenced by them.

The dataset includes interviews with 75 Colorado water experts and community decision makers, mass media coverage of the policy process, and legal and legislative documentation of the process. These data were then analyzed within cases and across cases to create a model of community policy change.

This research found that three elements were present when a community’s policies changed regarding the use of natural resources. First, the community was dependent on the resource, either economically or socially. Second, a policy entrepreneur was present to influence the community’s decision makers to enact a new policy regarding natural resource use. These policy entrepreneurs were most often
experts in water law or management. Finally, the community had access to accurate
information regarding the new policy.

The case study analysis found that neither mass media coverage of the issue nor
citizen participation influenced policy change. This may have occurred primarily
because water rights were viewed as a technical detail to be handled by experts.
Citizens usually became engaged in the process only after the decision to file for the
water right had been made. Similarly, media coverage of recreational water rights was
present in most cases only after the policy decision had been made.

This study provides an understanding of the processes that communities go
through in deciding to change policies to account for new non-consumptive uses and the
factors that influence those decisions. This research is not only relevant to water law in
Colorado, but also to environmental policy in general.
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1. The Actors and Influences of Policy Change

This research project analyzes the factors that influence public policy change within local communities. Specifically, this research looks at environmental policy decisions in local communities in Colorado related to applying for non-consumptive water rights for recreational purposes. This area of research is particularly important to scholars and practitioners who seek to establish and understand sustainable environmental policies. By developing an understanding of the factors that lead communities to adopt policies that promote sustainable use of natural resources, this research can aid the progress of such policies.

This research not only analyzes the influences over policy decisions within local communities, but it also analyzes a particularly interesting area of public policy—water law in the western United States. The recreational water right that is the subject of this study involves placing a new idea into an established system of property rights. This has proven particularly controversial in Colorado. How this change happened when it did, the factors that influenced change, and the results of that change are the focus of this study.

The subject of public policy change and how it takes place within communities of policy actors is an area of continual scholarly exploration (see F. R. Baumgartner & Jones, 1993; Brewer & deLeon, 1983; Kingdon, 2003; Sabatier, 1991 for example). Theorists view policy change variously as: a matter of rational choice among
institutional actors; a coming together of policy problems and solutions; or a process of political competition involving stakeholders, interest groups, agencies, and mass media. Each theory contributes significant insights into policy decisions and change. The goal of this research is to apply these scholarly contributions to understand an important set of policy decisions involving water rights in Colorado communities, then to build a more robust model of policy change within local communities.

The study has several similarities to previously published work in the fields of public policy and environmental policy. Many scholars attempt to go beyond the boundaries of single theoretical frameworks in their efforts to understand the processes of policy change. John (1999; 2003), for example, expands on the theories presented by Kingdon (2003), Baumgartner and Jones (1993), and Sabatier (1988) in establishing an evolutionary theory of policy change. Scholars attempting to expand theoretical insight to enhance our understanding of the policy process also incorporate a variety of potentially influential factors, as this research does. For example, Lubell, Schneider, Scholz, and Mete (2002) analyze the impact of multiple social, political, economic, and ecological features when attempting to understand how partnerships are created to manage watersheds.

A common method to explore multiple potentially influential policy factors is to use case study research. Cases can be used to expand or apply a particular theory of the policy process such as multiple streams framework or punctuated equilibrium theory (Rutherford, 2006; Zhang, 2004). Often, these studies use one case to explore multiple
influential factors in-depth. This is especially true in environmental policy research
where scholars often choose a rich research setting to explore the policy process (Adams,
Quintero, 2007; Steketee, 2006). This research will use the latter approach, attempting to
explore multiple influential factors. It will, however, use a comparative case study
research design to do so, similar to many policy studies that analyze cases
comparatively to establish a more sound base upon which empirical findings rest (Astiz,
2002; Gillespie, 2006; Wohlers, 2004). By so doing, this research is similar in nature to
many studies in environmental policy that apply a rigorous cross-case analysis to
answer questions regarding which factors influence local policy decisions (Clark, 2007;
Henry, 2004; Ringelheim, 2006). This research study uses this type of multiple case
study research design to build a model of policy change in Colorado communities in
policy decisions related to recreational water rights. It, therefore, combines the depth of
a single case (that of the recreational water right in Colorado) with the rigor of a cross-
case analysis (using the 12 communities that have applied for such water rights as well
as a sample of non-adopter communities).

To understand what factors influence policy decisions in these communities, it is
important first to understand what factors the literature proposes as influential to policy
change. This chapter will establish that factors including self-interest, policy timing,
policy knowledge, mass media and interest group influence, and the role of policy
entrepreneurs and citizens must be considered in attempting to build a holistic model of
local policy change. Understanding the policy process in water rights policy in Colorado requires not only grounding in public policy theory, but also a brief explication of the concept of collective goods as it relates to water law and political institutions. These elements will be outlined in this first chapter. This chapter will then establish a model, based predominant theories of policy change, of what factors are likely to influence local policy decisions. Research questions will then be asked to guide the study of community policy change.

These research questions are answered by studying a case of recent and significant policy change- the creation of recreational in-channel water rights in Colorado water law. The water rights case is outlined and introduced in chapters two and three. Then, methods are described, data from the case studies are presented, and analyses of data are presented in order to address the research questions asked here. Finally, this dissertation presents a model of policy change based upon the case studies and research findings presented.

1.1 Theories of Policy Change

This chapter does not present a comprehensive list of theories of public policy change. The theories outlined here were chosen based on two criteria. First, these theories are well respected in multiple scholarly venues- they have been tested and subject to intense scrutiny. None of these theories is new to public policy research. Second, these theories were chosen because they represent a variety of scholarly views.
Because this research seeks to incorporate multiple theoretical viewpoints, it is necessary to include theories as disparate as Institutional Rational Choice and Stone’s Polis Model, as well as other explanations of how policy change happens. The significant contributions of each theory will be outlined in order to understand what areas of policy change are important to analyze in attempting to create a model of local policy change.

Policy change has variously been viewed as either a logical, rational approach to decision making, or a somewhat irrational garbage can of policy processes that lead to varying levels of policy success (M. D. Cohen, March, & Olsen, 1972). Additionally, since James Madison’s persuasive arguments in Federalist 10, it has been acknowledged that interest groups also can wield significant influence over policy decisions. Lindblom’s (1959; 1968) incremental approach to policymaking argued that policymakers are rational, but boundedly so. They make decisions within their capabilities and limited information resources and those decisions generally lead to small changes in the policy system. These small changes over time lead to larger changes in the policy system, but do not result in shocks or major disturbances to that system. Likewise, policy decisions have been described as rational, systematic stages (Brewer & deLeon, 1983; C. Jones, 1970) involving a sequence of decisions and steps through which policymakers go when making changes in the policy system. These theories, while excellent starting points for understanding the important concepts of policy change, do not fully explain the variations, actors, and external influences on policy change. The theories presented next help to establish the framework for this
research study, specifically determining the factors that will be analyzed in the case study research of recreational water rights in Colorado.

1.1.1 Institutions and Rational Choice Theories

The rational choice school of theories views the individual as the unit of measurement and policy change as an outcome of the individual’s effort to improve his circumstances through rationally choosing among various alternative approaches. Institutions are the rules or norms “between economic units that govern the ways in which these units can cooperate or compete” (Davis & North, 1970, p. 133). They are the “humanly devised constraints that structure political, economic and social interaction. They consist of both informal constraints… and formal rules” (North, 1991, p. 97). Effective institutions make cooperative solutions more likely by raising the costs of defection from cooperation or by raising the benefits to cooperation. These rules change over time based upon a variety of factors. This process of institutional change, or policy change, is the focus of these varying approaches to rational choice and institutional theory.

Rational choice theory views “political life… as an exchange activity among self-interested individuals acting in the setting of market transactions” (Scaff & Ingram, 1987, p. 616). Individuals are rational decision makers who calculate costs and benefits to rationally maximize their individual utility and public policies emerge based on the combination of individuals’ preferences. These public policies are the public goods that
agencies and decision makers produce through their decisions (V. Ostrom & Ostrom, 1971). Institutional change involves “incremental change to existing rules” (E. Ostrom, 1990, p. 140). These rules are changed because “individuals decide whether or not to change a set of status quo rules” governing the institutions that influence collective behaviors (p. 141). Public choice theory also focuses on the different arrangements for decision-making and the effects that these rules have on the provision of public goods (V. Ostrom & Ostrom, 1971).

Central to the body of work described here is the problem of collective action. The collective action barriers to group formation are based upon the assumed individual rationality described above. Collective action theory argues that individuals will be unlikely to cooperate for mutual gains due to the fact that their self-interest is promoted most efficiently through consistent pursuit of individual gains, not collective ones (Olson, 1965). Central to this problem of group formation and cooperation is the idea that individuals will free ride off the effort of others in the group unless they can be excluded from the benefits of group collective behavior in some manner (Olson, 1965). This, then, is why the individual must be the appropriate unit of analysis for a theoretical understanding of policy change, since group formation cannot be taken as a given in a political context. This also is one of the centrally important attributes of institutions- they help to solve collective action problems through coercion, enforcement, and like mechanisms (Moe, 1990).
The rational individual political actor is presumed to have information about the decision at hand. This information may be complete and therefore the decision is made under certainty. The information may be made under circumstances of risk, in which case the individual has information about the potential options and the probabilities of outcomes based on those options. And finally, the decision may be made under uncertainty, which means that the individual bases his decision on incomplete information without the benefit of knowing the probabilities of certain outcomes as in the risk scenario (Moe, 1990).

Time and history play important roles in the process of institutional change according to these theories. The evolution of institutions is based significantly on their own histories according to North (1990). “Lower information costs and economies of scale together with the development of improved enforcement of contracts will permit and indeed encourage evolution from simpler to more complicated forms of exchange” (p. 121). This evolution, or “path dependence,” is inevitable simply because of the “constraints from the past imposing limits on current choices and therefore making the current choice set intelligible” (p. 137). North’s path dependence, however, is “more than the incremental process of institutional evolution in which yesterday’s institutional framework provides the opportunity set for today’s organizations and individual entrepreneurs” (North, 1991, p. 109). Rather, these institutions consist of a complex web of political and economic organizations that can be characterized by significant
increasing returns, which means that the organizations themselves owe their existence to the institutional framework.

Individuals or individuals as part of a group can influence institutional change or innovation as an action group. These groups recognize benefits to be derived from institutional change and seek change in order to reap the benefits of this change. They generally have to pay at least part of the costs associated with change, but they may not have to bear the full operating costs under the new arrangement. When the potential gains from institutional innovation are great or when the balance of power between action groups is significant, the institutional model demonstrates that change will occur (Davis & North, 1970).

More recently, efforts to include an organizational approach to understanding institutional innovation have become more prominent (Moe, 1994). Moe argues that despite the fact that organizations are prevalent in politics and vital to understanding institutional innovation, political theorists have paid little attention to developing their own theories of organizations. This focus on structural choice argues that individuals will act rationally to maximize their gains from institutional innovation, as stated above, but that this institutional result will not be efficient due to inherent political flaws (Moe, 1991). New institutions will be “structured for performance, but also for protection against political uncertainty” (p. 124). These protective measures undermine efficient performance in favor of preserving the institutions during times of political uncertainty. In addition to creating less efficient organizations, these protective measures also make
institutions slow to change, which is central to the case of water law that is the focus of this research.

The important elements to consider when building a model of policy change based on these institutional rational choice theories include the role of individuals and self-interest in the process. Additionally, path dependence and information available for policy change decisions must be included in this analysis.

1.1.2 Multiple Streams Framework

Another significant body of public policy theory is multiple stream framework. As presented by Kingdon (2003), this framework describes three separate but significant streams: problems, policies, and politics, that exist and evolve independently but occasionally join together to set policy agendas and allow significant policy change. Joining of these streams can occur when policy windows open due to focusing events that draw attention to particular policy issues and present opportunities for policy advocates to push their issues and solutions.

Kingdon argues that problems draw attention and become part of the political debate through indicators, which simply include objective information about the presence or magnitude of a problem. Focusing events and dramatic incidents can also draw attention to a previously unknown problem. Finally, feedback about existing programs or policies can result in the emergence of new problems based on ineffective policies or programs.
Kingdon also distinguishes a “political stream” from a “policy stream” in his framework. The political stream involves elected officials, campaigns, and the political tools of consensus building, interest group activity, and public opinion (or national mood as Kingdon describes it). Finally, the policy stream is described as being a soup of ideas that float along somewhat independently reforming, recombining, and developing coalitions of support. When the streams come together through the opening of windows of opportunity, policy entrepreneurs act to ensure that their policy issues are heard and implemented.

The actors in multiple streams framework include those that Kingdon describes as visible and those that he describes as hidden. Visible actors include those in the public or media spotlight such as elected officials and political appointees, mass media, and political parties that are largely able to influence the agenda of policy discourse, but not necessarily the alternatives that are considered for problem solution. These actors are not issue experts and therefore are either not interested or not able to involve themselves in this alternative specification stage of policy change. Hidden actors, on the other hand, are those issue experts that wield great influence over the alternatives that are considered, but little influence over the agenda, such as academics, analysts, congressional staffers, and bureaucrats.

Interest groups can play significant roles both in agenda setting and alternative specification depending on the incentives and issues in question. Interestingly, Kingdon finds that the media have little ability to influence policy directly because of the fleeting
and sensational nature of much media coverage. Instead, these actors are able to influence policy change either by influencing public opinion or by influencing elected officials directly. Likewise, citizens do not influence the process of agenda setting except in rare cases of dramatic national events. Citizens are also not able to influence alternative specification due to their lack of knowledge regarding specific public policy issues. Their most valuable role may be the level of influence they have on elected officials to select certain policy alternatives once the agenda has already been set and alternatives have been defined.

Policy entrepreneurs are people who are willing to invest their resources of time or money in order to promote policy change in favor of their preferred policies. They can be motivated by a straightforward concern for the issue at hand, a self-interested motivation such as protecting their personal interest or gaining credit for the accomplishment, or simply for the pleasure of participating in policy change. These entrepreneurs either have legitimacy that allows them access to powerful decision makers, political connections and negotiating skill that provide them the ability to influence elected officials, or they might simply be persistent (or likely a combination of factors). Kingdon argues that these individuals play significant roles in placing issues on the policy agenda for consideration.

Based on this overview of Kingdon’s multiple streams framework, a model of community policy change necessarily includes an analysis of the timing of policy changes and the information used to make those decisions. It is also important to
include analyses of groups and individuals, including policy entrepreneurs, mass media, and interest groups, in this process of policy change.

### 1.1.3 Punctuated Equilibrium Theory

Punctuated equilibrium theory presents a model of policy change that accounts not only for dramatic policy change, but also for prolonged periods of policy stability (F. R. Baumgartner & Jones, 1993). This picture of equilibrium dotted by punctuations of dramatic policy change describes the process over long periods of time according to Baumgartner and Jones. This idea of punctuations in policy change builds on Eldredge and Gould’s use of the term “punctuated equilibrium” to describe biological evolution (p. 19). Change happens as a result of:

- powerful forces of change that sweep through the entire system. These are not controlled or created by any single group or individual, but are the result of multiple interactions among groups seeking to propose new understandings of issues, political leaders seeking new issues in which to make their name, agencies seeking to expand their jurisdictions, and voters reacting to the whole spectacle (p. 237).

These forces of change can build gradually and seemingly suddenly to promote significant change. What appears to be sudden change, however, is a constant pattern in policymaking and policy change. This dramatic change is generally followed by subsequent periods of stasis.

The theory describes this punctuated equilibrium as a process involving policy monopolies that include the interested and exclude the apathetic actors in society. These monopolies involve a prevailing understanding of policy issues, induced by mass media
coverage and information that encourages a status quo understanding of policy issues. Because media cover issues in a similar fashion described here—little to no coverage of an issue followed by dramatic and pervasive coverage of a single issue—a pattern of punctuated equilibrium is enforced. The apathetic individuals that are excluded from the subsystems are considered to be “slack resources” that can be mobilized if needed in order to promote policy change (p. 239). Redefinition of policy issues is one tool used to mobilize the apathetic, or slack individuals.

Due to the nature of the American political system, there are multiple venues in which policy change can take place. These multiple venues work in favor of policy change over time. Policy ideas then spread quickly through institutions that are linked and provide a feedback process that promotes policy change at increasing rates (F. R. Baumgartner & Jones, 1993). The institutional structures of government then act to promote this feedback loop and increase momentum towards policy change. Political institutions also impose costs on political activity, making it more or less difficult to promote and advocate for policy change within the system (B. D. Jones, Sulkin, & Larsen, 2003). Those institutions that impose higher costs on policy actors, and particularly on policy entrepreneurs, will demonstrate an increasingly punctuated pattern of policy change over time. These “sticky” institutions, in essence, create sticky policy processes. As problems come to be considered among policy agenda items, they are considered separately from policy solutions (F. R. Baumgartner & Jones, 1993). As
these changes occur throughout the policy system, they can have long-term influences for subsequent policy change.

Kingdon’s framework of agenda setting looks a lot like punctuated equilibrium theory according to the authors due to its highly changeable and sudden process of policy change. Kingdon (2003), however, argues that the agenda setting process can look similar to punctuated equilibrium, but the alternatives for policy solutions are developed gradually over time and therefore do not conform to this pattern of dramatic change preceded by stasis. He also suggests that perhaps agenda setting is a process of continual change as opposed to periods characterized by equilibrium.

Punctuated equilibrium theory suggests that any attempt to model community processes of policy change must inherently include analyses of groups, citizens, policy entrepreneurs, and mass media on the process. Additionally, the role of information in policy change and the process and timing of that change are vital considerations in developing a model of policy change.

1.1.4 Advocacy Coalition Framework

The advocacy coalition framework (ACF) proposes that policy change results from the interaction of advocacy coalitions within policy subsystems and the broader policy system that they inhabit (Sabatier, 1988). These policy subsystems are comprised of actors involved in a particular issue area in the policy process. Advocacy coalitions form within those policy subsystems around common beliefs. The actors involved in the
coalitions described in ACF include elected officials, agencies, interest groups, journalists, academics and researchers, and others involved in the policy process with regard to a certain issue.

The members of these advocacy coalitions act in a coordinated manner to manipulate the rules of government institutions to achieve their policy goals (as cited in Schlager & Blomquist, 1996). The methods that these coalitions use to promote their form of policy change include developing information and using it to persuade decision makers, manipulating the forum for decision making, and supporting elected officials who share the coalition’s views on the relevant issues to coalition members.

Because the ACF focuses on the role of information and learning among coalitions and how it influences policy change, the process is described as an “iterative process of policy formulation, problematic implementation, and struggles over reformulation” (Sabatier, 1988, p. 130). Coalitions learn from one another; their core beliefs are resistant to change, while their secondary values are less resistant to change, as research in mass belief systems would support (see Conover & Feldman, 1984; Converse, 1964 for example). These coalitions then learn from one another by adopting the opposition’s core beliefs as secondary beliefs (those that are likened to tools for policy implementation rather than central values) (Sabatier, 1988). In this manner of learning and competition, compromise happens and policy change takes place over time.
Advocacy coalition framework clearly would suggest that any model of policy change must include an understanding of the roles that coalitions, or groups of interests and individuals, play in this process. Specifically, interest groups, mass media, and agency roles may be important considerations for research and modeling. Finally, the ACF argues that information and time with regard to policy learning and change are vital components of this process of change.

1.1.5 Policy Paradox

In a theory she calls “policy paradox,” Stone (1997) argues that the rational and sequential theories of policy change are simply not realistic in a polis model (as opposed to a market model). She argues that the polis is far different from the presumed market model that rational choice theories are based upon. The assumptions made in rational choice theories cannot be made in the polis because they are based upon this market model and the process of policy change must be understood separately from the market model. Rational analysis in the political process is not practical because all analysis and decision making is based upon socially constructed meanings, rhetoric, and strategic manipulation.

In the polis, decisions are always political. They are not rational attempts to maximize utility based upon a rational, or even boundedly rational, analysis of the alternative options and consequences of policy alternatives. Rather, since the process of policymaking is inherently political, Stone argues that decisions are made based on
purposefully incomplete information, ambiguous rhetoric and definitions of policy problems and solutions, and strategic manipulation of this information to allow for multiple sides to claim policy victory at the same time.

Interests are important in a policy paradox model, but not until their desires are translated into demands. These interests and demands are then vital in mobilizing support for policy alternatives. Stone argues that “problems are defined in politics to accomplish political goals- to mobilize support for one side in a conflict. To define an issue is to make an assertion about what is at stake and who is affected, and therefore, to define interests and the constitution of alliances” (p. 231). Because the process is inherently political, these interests and the narrative stories that they construct are important to understand. Policy rhetoric is based largely on symbols, numbers, and causal stories that describe policy problems and their solutions in terms that use hidden language to manipulate public perception of policy issues. This “rhetoric can help lodge a particular understanding of a problem in the minds of the public” (Rochefort & Cobb, 1993, p. 56). “The language of policy analysis… if taken for granted, conceals the potential to limit, exclude, distort, or manipulate” (Danziger, 1995). Due to the importance of language, framing, and rhetoric to the process of policy change, the mass media can wield incredible influence over public support for issues, problems, or solutions. Danziger argues that by framing issues in this manner and by being purposely vague in the articulation of problem definitions and policy solutions,
politicians can assure the path of least resistance in their pursuit of strategic policy change.

One significant critique of Stone’s theory is that her emphasis on political strategy and manipulation through rhetoric cannot be completely differentiated from the market model, wherein policy actors are driven by self-interest and rational decisions to maximize their personal utility (Ryan, 2004). Caplan (2007) argues that we should “drop specious analogies between markets and politics” (p. 14), that voters are irrational and that their ideological beliefs more closely resemble religious faith than they do rational market decisions. This critique is important to consider in the context of a comparative analysis of theories of the policy process- is Stone’s theory altogether different from rational choice theories? For the purposes of this research, the most significant contributions of Stone’s work are those related to the use of rhetoric, language, and information in the policy process. This, therefore, does not require that the theory be wholly consistent or separate from rational choice theories, but rather that it contributes new information that is useful to building a model of community-level policy change and posing useful research questions for the study of such processes.

Stone’s political theory of policy change suggests that information plays a key role in the process of change. This information and the role that it plays in defining problems and alternatives for policy solutions is a significant component that must be considered in building a model of policy change. Additionally, the role that interests play in policy change is clearly a significant component of modeling this process of
change. Finally, while Stone argues that the rational model of decision making is not applicable to the policy process, her emphasis on political strategy and rhetoric indicates that an analysis of the role that self-interest plays in political decisions may be vital to understanding this process of policy change.

1.2 Theoretical Commonalities

The theories presented here propose that certain common institutions, actors, and influences affect policy change. None of these theories, however, offers a model that analyzes all of the theoretical variables mentioned as important in the previous sections. This research seeks to incorporate these multiple variables to understand policy change in its entirety in local communities, and these theories of policy change are therefore inadequate. These actors and influences are detailed here in order to outline the important elements for researching and understanding policy change processes within communities of policy actors and to help develop research questions to answer the broad question of how policy change happens in communities.

Based on the theories presented above, it is clear that certain elements are significant to theories of policy change. While these theories vary greatly depending on their focus on the individual versus collective influences, it is clear that the role of groups, and individuals within those groups, are important considerations to understanding any policy change. Institutional theory and rational choice theory focus on individual-level incentives for change, while multiple streams framework,
punctuated equilibrium theory, and advocacy coalition framework generally argue that stakeholder groups, policy communities, or coalitions as variously defined play a central role in policy change.

To develop an understanding of policy change, this research analyzes the roles of individuals within communities as well as groups of actors. These individuals may include policy decision makers, citizens, policy entrepreneurs, or issue experts, as suggested in this theoretical outline. The groups studied in this research must include coalitions of likeminded policy actors, competing coalitions of actors, agencies or organizations, and interest groups. It is important to develop an understanding of the motivations and policy interests of these groups and individuals within the policy process as well. Based on both rational choice theories as well as Stone’s theory of strategic policy formulation, it is clear that the roles of self-interest and political motivations in policy decisions are potentially significant and must be explored in attempting to understand processes of change. Specifically, the role of self-interest as it relates to the decision makers within case study communities is important to this research. If self-interest is a determining factor in policy change, then decisions should be made in line with the interest of the elected officials making those decisions.

These theories presented herein also call for a thorough understanding of the roles that information and process timing play in policy change. Institutional theory posits that path dependence and the historical evolution of policy innovation are important to understanding this process. Multiple streams framework similarly argues
that the timing of policy change is vital to understanding the process. In the context of recreational water rights policy change, this role of institutional legacy and path dependence is especially important to consider. Chapter two details the legal institutions that comprise the water rights system in Colorado and the American West; this system is the context in which all decisions related to recreational water rights policy are made and is therefore important to consider in the case studies presented in this dissertation. Beyond the timing, it is important to understand the spread of policy innovation throughout communities of potential policy adopters. Path dependence analysis may allow for some understanding of this process, but a more thorough evaluation of the role of information will be required as well.

In each theory of policy change, the role of information is suggested to be vital to the process. Multiple streams framework, punctuated equilibrium theory, and advocacy coalition framework all directly posit specific roles and influences for mass media in dissemination of important policy information. Rational choice theory argues, along economic lines of reasoning, that the degree of information available to decision makers will influence the process of policy change. Similarly, Stone’s assertion that rhetoric and framing are vital to the politics of policy change underlies the importance of analyzing the role of information and the spread of policy knowledge.

Several of the above theories suggest an important role for mass media in the policy process- as an institutional actor, as an agenda-setter, or as a disseminator of rhetoric and framing. To understand the process of policy change, this research must
include analyses of mass media coverage of policy issues as well as an analysis of the historical evolution of policy change. Within these analyses it will be necessary to understand how knowledge of policy innovation spreads among communities of policy actors and how this knowledge influences policy change. This knowledge should be important to decision makers prior to making their decisions related to recreational water rights, and if their decisions are based upon accurate knowledge, they would be “better” decisions based upon the interest of their communities. As will be outlined in chapters five and seven, the process of undertaking an application for a recreational water right can require significant costs (financial as well as political) for the community. Accurate knowledge, then, is important in order for decision makers to base their decisions both on the past experiences of other communities as well as the financial and political interest of their community.

The research questions asked and tested in this study are based upon these common theoretical sources. This research examines the role that individuals and groups play in policy change, including the role that coalitions (or stakeholder groups), policy entrepreneurs, citizens, and political actors play. Additionally, this research attempts to examine the level of motivation among these actors based upon self-interest. This research also analyzes the roles that information and timing play in the process of policy change. In order to do so, analyses of mass media coverage of policy issues, spread of policy knowledge, and the role that policy knowledge plays in policy change are conducted. Finally, in order to understand the role that path dependence plays in
policy change, a thorough examination of the historical evolution and process of policy change as well as the spread of policy innovation is undertaken.

1.3 The Problem of Collective Goods

When attempting to understand the policy process in the context of environmental policy, it is vital to consider the problem of collective goods and how the nature of these goods can make environmental policy decisions and processes somewhat different than many other policy processes and decisions. The nature of all collective goods such as national defense, clean air, and law and order, is that they are non-excludable and non-rival (Olson, 1965). Excludability means that no one in a group (in the examples given above, no citizen of the country that provides the goods) can be excluded from enjoying the benefits of the collective good. Non-rival consumption means that one person’s consumption of the good does not diminish another person’s consumption of the good.

Because anyone is free to enjoy the benefits of the good and their enjoyment does not preclude others from using the same good, individuals are not prone to help in the provision of these goods. This classic free rider problem means that often, government has to provide collective goods such as environmental protection, defense, and other services that individuals or small organizations would be unlikely to provide on their own. This rationale of the market failures associated with collective goods has been
used to justify many government interventions in environmental problems (Stiglitz, 2000).

This dilemma of public goods, or collective goods, is not applicable to “an analysis of appropriation and use of subtractable resource units. Appropriation and use of the resource units are more closely related to the theory of private goods than to the theory of public goods” in these cases (E. Ostrom, 1990, p. 32). This is the case, as will be outlined in chapter two, in the case study setting for this research - Colorado water rights. The process through which communities go to decide on property rights mechanisms to allocate use rights to these resources which otherwise would bear characteristics of collective goods and be subject to the dilemmas associated with open-access resources, however, is akin to a collective good. The collective good, in this case, is the institution that is created to determine resource use, discussed in chapters two and three. To establish these institutions requires significant resources as well as the participation of political actors, and perhaps citizens, which is a collective good with many barriers to success (Olson, 1965). Understanding that both the institutions and the water resource can demonstrate characteristics of a collective good is important to understanding the dilemmas faced by policy decision makers in Colorado water policy, who are certainly not guaranteed success, either in terms of policy passage or policy outcomes.
1.4 Research Setting

The theoretical concepts underlying this research that have been outlined above are most effectively analyzed in a specific case setting in order to understand the complex relationships and influences that these multiple processes and actors have on policy change. An appropriate case for analysis of these theoretical issues is the case of recreational water rights policy in Colorado. As stated above, environmental policy decisions must often take into account issues of collective goods. Water resources broadly demonstrate the concepts of non-rival consumption and non-excludability. In the arid American West, the water resources are highly uncertain and limited in quantity, which means that left unregulated, water supplies can be overappropriated or exploited. All American states have established systems for appropriation of water resources, but the western states have instituted significantly more strict legal institutions for managing their water resources. These systems have evolved over time to reflect modern natural resource use values to varying degrees, as is the case of the prior appropriation water rights system in Colorado which dates to 1876, when it was officially included in the state’s constitution.

Beginning in 1998, Colorado communities tested the limits of water law in the state by applying for a right for a new type of water use- in-channel recreational purposes. To support recreational water uses, such as kayaking and whitewater rafting, minimum stream flows are required, which led communities to seek water rights for the
maintenance and protection of stream flows. When granted, these water rights marked a significant change in Colorado water law and a heated political and legal battle ensued within the legislature, the courts, and communities interested in applying for the new water right. This research will analyze the process of policy change in these individual communities. Policy change is defined in this research as the process through which each community went to decide to apply for a recreational in-channel water right. Once filed, the water right application becomes subservient to legal precedent, statutory requirements, and constitutional principles and is therefore largely outside the realm of policy and political decision making. As will be detailed herein, this decision was significant and difficult for many Colorado communities. This policy process at the community level provides an excellent opportunity for developing an understanding of the important influences and concepts presented in the theories outlined above.

As of 2007, only 12 communities in Colorado had decided to apply for recreational in-channel water rights despite a growing recreational base of the Colorado economy. The universe of communities eligible to apply for the water right, however, includes all Colorado communities and sub-units of state government\(^1\). It would seem that these communities who have applied have either more to gain by adopting the policy (from a self-interest perspective) or have been influenced into making the

\(^1\) There are 271 municipalities in Colorado, 64 counties, and numerous other sub-units of government (such as water conservation districts) that are eligible to apply for recreational water rights.
decision (from an institutional and political perspective). It is the purpose of this research to analyze how policy change happened in these 12 Colorado communities.

1.5 Research Questions

The theories presented above provide the foundation upon which this research is built. These theories tell us that specific factors are likely to be important to policy change decisions within communities. Based upon these theories, as well as the specific literature presented in chapters six and seven, the following model is developed.

![Theoretical Model of Community Policy Change](image)

**Figure 1: Theoretical Model of Community Policy Change**
This model shows that factors such as stakeholders, policy entrepreneurs, political self-interest, policy knowledge, mass media coverage, citizen participation, and path dependence (policy history and sequence) directly influence decisions by political actors to adopt policies in favor of recreational water rights. This model, based on public policy literature, is the starting point for this research and will be examined and revised in chapter eight based upon the empirical evidence presented in this dissertation.

Based on the theoretical concepts presented in this chapter and in the model above, the following research questions are proposed and are explored in detail in subsequent chapters. The case presented above provides opportunities for an analysis of each of these research questions and therefore allows the construction of a model of policy change. Not only will the factors themselves be analyzed in the case study research presented in this dissertation, but the timing and direction of their influence (as depicted by the arrows in the model above) will also be analyzed to determine the specific influences of these factors on the process of policy change in Colorado communities related to recreational water rights.

The broad research question that this study is designed to analyze is how does policy change happen at the community-level in environmental policymaking? The following specific research questions require an analysis of significant aspects of this broad question in order to build a model that promotes an understanding of this very broad subject.
The following five questions focus on the level of influence and the role that groups and individuals play in the process of policy change. As stated above, actors such as stakeholders, policy entrepreneurs, politicians, and citizens are thought to have varying levels of influential capacity in the policymaking realm. This research will attempt to understand the actual levels of influence that these actors demonstrate in local policy decisions. These research questions reflect several well-established theories as well as some questions, such as the role that expertise plays in policy entrepreneurship, that have not been explored in the same detail. The following five questions are therefore posed in relation to the influence that individual and group actors have in the process of policy change.

- What was the role of stakeholder groups in the process of policy change in recreational water rights policy?

- What level of influence did policy entrepreneurs have in the process of policy change in recreational water rights policy?

- What was the role of issue experts in the process of policy change in recreational water rights policy?

- Were politicians promoting their own self-interest (or an institutional self-interest) when making policy decisions in the process of policy change in recreational water rights policy?

- What was the role of citizens in the process of policy change in recreational water rights policy?

The following three questions seek to develop an understanding of the role of information and knowledge in the process of policy change. As is explored in greater detail in chapter seven, mass media and information regarding policymaking are
thought to wield significant influence over policy change. The timing and sequence of policy change are also important considerations in modeling policy change, and information networks most likely play a role in how policies diffuse among places and over time. This research will analyze whether these assertions are true in the context of recreational water rights in Colorado.

- How did mass media coverage of recreational water rights policy influence the process of policy change in recreational water rights policy?

- How did knowledge of a new policy option spread among communities in the case of recreational water rights policy?

- How did early cases of policy change influence later community processes of policy change?

These eight specific questions allow the following question to be answered: why did some communities choose to apply for recreational in-channel water rights when other communities that may have benefited from the policy chose not to? This question is the basis of the revised model that is presented in chapter eight that explains the process of policy change within these Colorado communities.

These research questions are analyzed in the context of the case of recreational water rights law and policy in Colorado. The following two chapters present the background and important issues related to understanding the context of this research. Subsequent chapters outline research methods, analyze the research questions, and offer a model to explain policy change in recreational water rights in Colorado communities with the hope of offering insights into the process of community-level policy change in general.
2. Colorado Water Law: Case Study Background

The legal system of property rights governing the appropriation of water in Colorado is vital to understand in order to appreciate the importance of this most recent evolution of the water rights system in Colorado that is the focus of this research. It is notably important to any study of water rights policy in the West to begin with an historical overview of the legal system. This is especially true for a research study that attempts to understand the role of path dependence and policy timing in policy decisions. The recreational water right, being an in-channel non-consumptive use of water, is significantly different from most other water rights in Colorado. The legal differences and the importance of those differences can only be understood through a legal tutorial explaining the evolution of the prior appropriation water rights system.

Laws, generally, are assumed to be created based upon the principles of supply and demand. While this chapter will focus on the importance of demand-side drivers of institutional change in property rights law in Colorado, it is helpful to note that there are differing approaches to understanding how laws get created. Some would argue that “state policy making is a purposeful action, responsive to economic and political conditions within the state,” that policies and laws are created because they meet a need or a demand (Kinnaman, 2000, p. 421). In this theory, policymakers would reap the benefits of providing laws that conform to the needs and desires of their constituents. This is also the broad concept behind property rights theory, that individuals will agree
to contract for property rights when it benefits them and when these benefits outweigh the costs (Libecap, 1989). A second view of the creation of legal institutions begins with a supply-side view of institutional creation. It argues that governments should theoretically perform like markets, wherein they compete with each other to provide their constituents with the best policies and laws (Ogus, 1999). Those governments who provide the better policies will attract more residents and businesses. This theory of legal supply leads to the “prediction that, as a result of competition, there will be some convergence of national laws” by states emulating one another (p. 409).

Two legal property rights systems dictate appropriation and use of water in 48 states in the United States. Twenty-nine states use riparian law to govern allocation of water resources, nine states adhere exclusively to prior appropriation systems, and 10 states use some form of hybrid water rights system using both systems1 (Getches, 1997). The evolution of this second form of water rights- prior appropriation- arose primarily due to factors such as geography, hydrology, and political necessity. This evolution of prior appropriation water law is the focus of this chapter.

Colorado is “the leading prior appropriation state of the American West” (Abeln, 2005). The state’s strict adherence to adjudication of water rights and enforcement of those water rights strictly according to priority is unique in the United States. Prior appropriation is a complex property rights system, based on seniority of use. To

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1 Hawaii uses a water law derived from the ancient Hawaiian Kingdom as well as modern laws and Louisiana has adapted its water law from the French Civil Code.
understand the complex recreational water rights policy that this research focuses on, it is necessary to understand the concepts of prior appropriation water law in Colorado and how it evolved historically. This gives the reader sufficient background to appreciate the importance of this most recent evolution of water rights in the state, the recreational in-channel diversion water right. This chapter presents an overview of the history of water rights in the western United States and in Colorado, followed by details of the Colorado water rights system, specifically the process, administration, and concepts related to prior appropriation in Colorado and the evolution of instream uses of water. Finally, this chapter provides a brief description of each of Colorado’s water basins to enhance the reader’s understanding of the variations in water supply, political issues, and water uses across Colorado.

This chapter does not claim to address all important issues and concepts related to western water law or even Colorado water law. An entire industry of scholars has based their careers on attempting to understand the evolution of water rights institutions, water rights management, and the politics associated with water resources in the West. Topics such as reserved water rights for Native American tribes and the United States government, for example, are vitally important to this region, but are beyond the scope of this historical and legal overview. What this chapter does, rather, is provide an understanding of the concepts, legal cases, and historical evolution of the water rights system as it relates to the recent inclusion of recreational water rights in Colorado. Chapter three then discusses the many intended and unintended
consequences of this new water right, including the political, legislative, and legal consequences of the water right.

2.1 Property Rights Fundamentals

Property rights are those “social institutions that define or delimit the range of privileges granted to individuals to specific assets, such as parcels of land or water” (Libecap, 1989, p. 1). They are mutual agreements among people about the rights and duties associated with the use of a resource. What is owned in this system of social institutions is the right to use the resource or “socially recognized rights of action” (Alchian & Demsetz, 1973, p. 17). When granted a property right, the holder of such a right “expects the community to prevent others from interfering with his actions, provided that these actions are not prohibited in the specifications of his rights” (Demsetz, 1967, p. 347). The goal of property rights is to establish incentives “to achieve a greater internalization of externalities” of individual actions (p. 348). Without property rights to a resource assigned, users of the resource do not have to consider the full social cost of their actions and inefficient resource use will result (Libecap, 1989). These rights to use resources evolve because in a world of limited resources, the same resource cannot satisfy competing demands and in a capitalistic society, markets and property rights are generally relied upon to resolve conflicts of limited resources (Alchian & Demsetz, 1973, p. 16).
Property rights confer upon the owner rights to access a resource, or the ability to enter a defined property or space; withdrawal, or the right to obtain products from a resource; the right to regulate use or manage the resource; the right to determine who may enter or access the resource; and the right to transfer or sell the resource (Schlager & Ostrom, 1992). These authors state that when property rights are recognized and enforced by the government and the property rights holder can expect the right to be upheld in court, the rights are referred to as *de jure* property rights. This bundle of rights, specifically the rights of exclusion and transfer of a resource, promote investment in the resource and maintenance of the resource because through exclusion and transfer, “they can capture for themselves and for their offspring the benefits from investments” (p. 256). In this way, some property rights structures that involve exclusion and transfer of property rights can promote economic growth and high-value uses of resources, while others may retard economic growth (Libecap, 1989). It is important to note that usufruct property rights do not confer ownership of the resource itself, but only the *use* of the resource. This is the form of property rights relevant to this research study, as the water rights assigned in Colorado and the West are only for the use, not ownership, of a resource.

Open-access resources are inherently problematic because resource values will fall due to three factors (Libecap, 1989, p. 12). Individuals do not have to take the full social cost of their actions into consideration and will therefore misuse resources. Changing the resource to higher valued uses will not occur because it becomes more
costly and less effective. Finally, individuals will have little incentive to postpone their resource extraction and will deplete the resource quickly and irresponsibly.

Private property rights promote conservation of resources while open-access to resources promotes destruction of the resource or overexploitation (De Alessi, 1980). This competition to withdraw and use resources in an open-access system is what Hardin (1968) warned of in his tragedy of the commons when he argued that private property rights were key to solving problems of resource exploitation. If the owners of property rights have a high discount rate and value present benefits over future benefits to a large degree, however, this conservation of resources will not result and the resource may still be overexploited (Schlager & Ostrom, 1992).

Many scholars argue that private property rights are not the only solution to the open-access specter that Hardin suggests. Property rights regimes can range from the private property rights discussed here to state property or common property rights arrangements. Each of these can include appropriate incentives to reduce exploitation of the resource. Common property rights, contrary to traditional scholarly assumptions, may in some cases provide the necessary incentives and institutions to promote conservation and wise management of natural resources and privatization of property may not be necessary (Bromley, 1992; McCay & Acheson, 1987; McKean, 1992; E. Ostrom, 1990). Ostrom further argues that stating that private property rights are necessary does not add any insight into how those rights should be defined or what
processes will be instituted in order to manage and implement the property rights regime.

Changes in property rights systems in America “inevitably raise the question of appropriate jurisdictions” (E. N. Castle, 1978, p. 7), which was the case in western water law. The authority to establish property rights over water and mineral resources was granted to states by the 1866 Mining Act, which sanctioned appropriations of water on public lands and allowed states to dictate their own water laws, the 1877 Desert Land Act (Getches, 1997), which severed the water from public lands and made non-navigable waters on such lands available for appropriation, and subsequent acts which together

1) effectuated a severance of water from the land…
2) confirmed the right of the states and territories to recognize rights to water established prior to the federal acts…
3) granted the right to states and territories to legislate in regard to water and water use rights (Hobbs, 2007, p. 2).

The states, therefore, had been assigned jurisdiction over granting, legislating, and adjudicating water rights within their territories. The story of property rights development of the use of water resources in the western United States follows.

2.2 History of Water Rights in the Western United States

As the United States developed its political structures and laws, it developed a system for allocating use of water resources. This system, called riparian doctrine, developed out of European precedents but is an American legal creation (Getches, 1997). This system of allocating water use is based on an underlying principle that “the owner
of land bordering a waterbody acquires certain rights to use the water. Each landowner bordering on a waterbody may make reasonable use of the water on riparian land if the use does not interfere with reasonable uses of other riparians” (p. 15). Statutory systems evolved to replace this system of pure riparianism in most states, but the concepts of this law are applied in courts and by agencies when enforcing water rights in most of the United States.

When settlers moved west, they initially established settlements along the banks of streams and used the riparian concepts they had learned from their experience in the eastern U.S. (T. L. Anderson & Hill, 1975). As settlement increased in the West, so too did pressure on the resource and the potential benefits of establishing a new property rights regime, according to Anderson and Hill. It had become obvious by this point that riparian law was unable to account for the differences that exist between the eastern United States and the arid West. The “Doctrine of Prior Appropriation is a law of scarcity not of plenty” (Hobbs, 2007, p. 15). When settlers reached what was referred to as the Great American Desert, west of the 100th meridian, what they saw was a land that was only united in its aridity (Stegner, 1993). The land was far different from where they had come, “arid, hot, the air full of dust, nothing like the green world behind them” (Worster, 1985, p. 65). Aside from this aridity, the land varied in its topography, climate, and soil (Stegner, 1993).

While many historians and scholars of the American West focus on this aridity as the common linkage between the diverse geographic characteristics of the region
(Worster, 1987 for example) such as the colorful canyon lands of Utah, the steep snowcapped mountains of Colorado, the coastal areas of California, and the desert landscapes of Arizona and Nevada. Some scholars are quick to point out that the West is not an entirely arid region, but actually includes areas with the heaviest rainfall in the United States in the Pacific Northwest. These scholars argue that it is the variation of precipitation, rather than the total dearth of it, that makes the West unique and requires distinct institutional structures from the Midwest and eastern U.S. (Neel, 1994). The state of California is a good case in point, where “annual precipitation varies from under two inches in the Mohave Desert to more than ninety inches in the Sierra Nevadas” (p. 497). Regardless of the characterization of aridity or variability of water resources in the West, it is clear that the geographic characteristics of this region, specifically as it relates to water and the lack of water in many areas, have profoundly impacted the history, political development, and resource development of the American West (Hundley Jr., 1996). Water may not be the only important character of the American West, but is it certainly one of the most significant elements to consider when studying the West or describing the development of institutions in the West.

Americans eventually settled into the West and even celebrated its resources as they learned to deal with western exigencies (Worster, 1985). To produce crops for survival in this region, irrigation was a requirement. “Irrigation agriculture was intensive, it took time and care, and it produced extravagantly” (Stegner, 1993, p. 225). The Mormons of Utah were the first Americans of European ancestry to practice wide-
scale irrigation (Worster, 1985). Native Americans in the southwest had long practiced irrigation, and the ruins of their settlements include check dams, canals, and headgates (Bates, Getches, MacDonnel, & Wilkinson, 1993). Settlers in the West were required to build ditches to move water from stream beds to their crop fields and did so in rapid succession. The first ditches that were created in Colorado and the West were “narrow and short, designed to irrigate the bottom lands in the vicinity of the streams” and when these bottom lands became settled, “larger canals such as those built by the Union and Chicago-Colorado colonies became necessary” to transport water farther from the source (Dunbar, 1960, p. 120). Frederick Jackson Turner recognized that “no conquest was possible by the old individual pioneer method... expensive irrigation works must be constructed, cooperative activity was demanded in the utilization of water supply, and capital beyond the reach of the farmer was required” (as cited in V. Ostrom, 1953, p. 480). The state, ditch companies, and water districts would become important players in the development of water in the West, both financially and legally, as will be discussed later in this chapter.

Because of this investment-intense irrigation required for agricultural production in the West, “early settlers had little incentive to commit capital and labor to constructing water diversions and distribution systems if there were any risk of other users moving in upstream and cutting off supplies” (Ingram, 1982, p. 135). Irrigation was a necessity without which agriculture could not exist in the West and the riparian doctrine was soon exposed for its inefficacy in this landscape. Because there was not
enough water to supply all of these competing users, “there have been heads broken with irrigation shovels because of someone’s attempt to apply riparian law upstream, and take uncontrolled advantage of the water” (Stegner, 1993, p. 226).

In an irrigating country, appropriation becomes an essential criterion, and delicate refinements about more or less beneficial uses, and priority … and a great many other complications… there was nothing wrong with riparian law for the West except that downstream bank-owners sooner or later found themselves with riparian rights to a dry creek bed (p. 226).

Once the West’s arid lands had been conquered by white settlers through irrigation practices, floods of new hopeful settlers moved into the region. While Utah had been the first experiment in irrigation in the newly settled West, the eastern plains of the Rock Mountains, in Colorado, are where this use of water and its corollary legal doctrine blossomed (Worster, 1985). In 1870, the famous Union Colony in newly founded Greeley\(^2\) was formed (Worster, 1985). These “utopian-minded” idealists (including Greeley, Nathan Meeker, and General Robert Cameron) wanted to establish a farming community that would include private property as well as collective financing and community planning efforts (p. 84). There were several other likeminded communities in the West, but the Union Colony is recognized for its central role in developing the foundations of water law in the region.

Several of the Union colonists broke from the group in Greeley and moved upstream to establish their own community called the Fort Collins Agricultural Colony

\(^2\) The Greeley Colony was named after Horace Greeley, the New York Tribune editor and co-founder of the Union Colony who famously declared ‘Go West, young man!’
(Dunbar, 1960). “Came the droughty summer of 1874, and there was not even a trickle flowing past Greeley” (Worster, 1985, p. 87). These settlers in Greeley demanded that laws be enacted to protect prior appropriation water rights in Colorado and the two colonies agreed that some form of administration of priority in water rights was necessary (Dunbar, 1960).

Evolution of the prior appropriation system can be traced to three distinct movements in the 19th century. First, Spanish settlements in Arizona and New Mexico granted exclusive rights to the “use of water on nonriparian lands” and therefore had characteristics of prior appropriation (Tarlock, Corbridge Jr., & Getches, 2002). Second, Tarlock, Carbridge Jr. and Getches state that Mormons in Utah, with their development of irrigation practices, developed temporary system of property rights pending a permanent system of water rights approved by the federal government.

Finally, mining camps of the West had already faced similar scarcities in natural resources and so developed systems whereby those who appropriated a resource first had priority to use of that resource, or a “first in time, first in right” concept of natural resource appropriation (Schorr, 2005; Worster, 1985). These mining camp rules promoted the development of natural resources by providing security to that resource (Libecap, 1989). The precedent established by these mining camp property rights in California by 1850 reduced the costs associated with establishing a new property rights regime related to water while “increasing relative scarcity of water increased the benefits to definition and enforcement activity” which can help explain the timing of the
development of this new property rights system in Colorado and the West (T. L. Anderson & Hill, 1975, p. 177).

Colorado had already established the doctrine of prior appropriation in relation to its surface water resources based on these appropriation principles established in western mining camps in its territorial legislation, that “set a pattern that neighboring territories and states would follow, referring thereafter to the doctrine of prior appropriation as the ‘Colorado doctrine’” (Worster, 1985, p. 91). The Territorial Supreme Court had also opined in Yunker v. Nichols (1872) that the right to a source of water also includes the right to cross other private lands to build and maintain diversion structures in order to appropriate that water right.

In 1876, at the Colorado constitutional convention, these irrigation interests made their voices heard and “demanded preferential treatment as a class as well as individuals” (Dunbar, 1960, p. 121). Because farming provided the necessities of life in early Colorado, constitutional framers listened to these irrigators and included the following article in the Colorado Constitution:

The right to divert the unappropriated waters of any natural stream to beneficial uses shall never be denied. Priority of appropriation shall give the better right as between those using the water for the same purpose; but when the waters of any natural stream are not sufficient for the service of all those desiring the use of the same, those using the water for domestic purposes shall have the preference over those claiming for any other purpose, and those using the water for agricultural purposes shall have preference over those using the same for manufacturing purposes (Article XVI, Section 6).
Despite the recognition of domestic (municipal) uses of water in this article, the water rights law of Colorado water was solely an irrigation law until 1903 (Hobbs, 1999). This doctrine of appropriation was soon adopted by neighboring states; Nevada did so in 1885, followed by Arizona and Idaho in 1888, New Mexico and Utah in 1891, and Wyoming in 1896 (Dunbar, 1960).

While prior appropriation had been defined as a fundamental legal principle in water law in Colorado and other western states in these constitutional conventions and statutory definitions, there had not yet been any determination about the role that riparian law would play in the West. That changed in 1882 with the Colorado Supreme Court decision in *Coffin v. Left Hand Ditch Company*. A ditch company on St. Vrain creek with water rights under priority had built a diversion system and downstream from their diversions a group of farmers later built their own irrigation systems. In the drought year of 1879 there was not enough water to supply the downstream junior water rights. The Colorado Supreme Court held that,

> the common law doctrine giving the riparian owner a right to the flow of water in its natural channel upon and over his lands, even though he makes no beneficial use thereof, is inapplicable in Colorado. Imperative necessity, unknown to the countries which gave it birth, compels the recognition of another doctrine in conflict therewith. And we hold that… the first appropriator of water from a natural stream for a beneficial purpose has… a prior right thereto, to the extent of such appropriation.

This seminal case officially abrogated the doctrine of riparian rights and was later sited in other western states as the principle underlying their own prior appropriation laws (Dunbar, 1960; Schorr, 2005). Colorado’s reliance upon prior appropriation in
adjudication, constitution, and administration, as opposed to hybridization schemes (developed in states such as California that originally used riparian principles and later adopted prior appropriation concepts), or prior appropriation principles based on an administrative implementation of those principles, led to the description of this legal doctrine as the “Colorado Doctrine.”

Ongoing scholarly debate variously describes the doctrine of prior appropriation as the result of natural processes and legal requirements thereof, a radical agrarian reform movement, or capitalism and the desire to exploit and profit from natural resources. Webb (1931), in his early work *The Great Plains*, argued that the law of nature dictated the development of prior appropriation concepts. He argued that the aridity of the West logically resulted in such a legal practice. Others (see Worster, 1985 for example) counter that the doctrine emerged because it gave the men and women who settled the West a “greater freedom to exploit nature” (p. 89). The capitalistic zeal with which the West was settled and the motivation to get rich off the land and abundant resources of the West led these settlers to develop a system whereby they could be assured the bounty of those resources based on private property rights to those resources.

Still others argue that prior appropriation did not arise out of any desire to exploit or privatize the resource for monopolistic motivations. Rather, it was “radical, agrarian ideals of broadly distributed property and antimonopolism” that led to the creation of the Colorado Doctrine (Schorr, 2005). This idea of distributive justice as a
motivation for prior appropriation is somewhat recent in the ongoing scholarly debate over the reasons for this system of water rights, but Schorr argues that documentation of the considerations in Colorado's territorial legislature demonstrates a concern for "equitable distribution of water, a value not usually thought to be part of the prior appropriation milieu" (p. 11).

Schorr argues that the most important result of the Coffin v. Left Hand decision is not necessarily found in a direct reading of the rejection of riparian principles, but rather in understanding the legal context within which this decision was made. The downstream appropriators (Coffin and his neighbors) who diverted water out of priority relied on the argument that since prior appropriation was not codified in Colorado law until 1876, riparian rights dating before that would carry seniority to all water uses that came after that date. "Not only would speculators and corporations be able to reserve water rights prospectively by gaining control of riparian lands before water had been appropriated from them, they would have the power to oust settlers... from their prior water claims" (p. 63). The political climate in Colorado was one of fear of monopolization of public lands by railroad, ranching, and irrigation companies at the time.

By establishing the prior appropriation doctrine, Schorr argues that the courts and legislature ensured that water resources were distributed to as many users as possible, not just those with land abutting rivers and streams. Despite the common perception of the American West as a "land of corporations run amok and lawmakers
and judges all too willing to do their bidding,” legal history tells a story of Colorado law siding with local settlers far more often than absentee capital interests (Schorr, 2006, p. 355). Prior appropriation did, indeed, provide for western expansion and agricultural development because of the fact that water resources could be “parceled out to a large number of irrigators” (Ingram, 1982, p. 135).

While these views paint very different pictures of the motivations for the development of prior appropriation water rights in Colorado and the West, the underlying premise is that riparian water rights were insufficient for the purposes of western irrigation and development because they rely on steady and predictable precipitation (Worster, 1985). As will be described in the following section, precipitation in Colorado is far from steady or predictable. At the turn of the last century, scholars argued that it was the lack of settled water rights titles that posed the most significant hindrance to successful agricultural practices in the West (Teele, 1900). While the general principles of prior appropriation had been settled, the specific concepts of administration and enforcement continued to evolve into the 1900s. The evolution of these specific principles and practices in Colorado will be discussed in the subsequent sections.

### 2.2.1 Colorado’s Hydrology

Colorado and the West are markedly different from the rest of the country in terms of aridity of the climate. While Oregon and Washington receive 27 and 38 inches
of precipitation annually, Nevada only receives 9.46 and Colorado receives 15.47 inches (Western Regional Climate Center, 2006). Not only are the levels of annual precipitation in the West (outside of the Pacific Northwest) far lower than states in the Midwest and eastern U.S., but this precipitation is not constant. The variability of precipitation patterns is one of the important climatic characteristics to understanding water’s centrality to western development and culture. During seasons with high precipitation, “water that later will be sorely missed escapes the region in rivers and runoff. But the areas and periods of abundant rainfall and snowmelt are separated by vast spaces and times of scarcity” (Blomquist, Schlager, & Heikkila, 2004, p. 3). This pattern of runoff and drought makes storage of water and management of those water supplies imperative for agriculture, municipal water supply, and industry in the West.

Colorado is considered the “headwaters state” because all major rivers in Colorado flow out of state. This increases the burden placed on the state and its variable water supply. Originally, these many watersheds were dispersed into various territories in Nebraska, Kansas, New Mexico, and Utah (Hobbs, 1999). In 1861, “two years after the discovery of gold [in what is now Denver]… Congress united the sources of these great rivers into one great headwaters territory, Colorado” (p. 3). While the headwaters of all of these major rivers are now managed by one state, this also requires that Colorado is subject to many interstate agreements to provide downstream states with water from these river systems.
Because the rivers of Colorado flow out of state and downstream states rely on the water provided by these river systems, interstate compacts allocating water use to the various states have been instituted. Streams and rivers flowing from Colorado downstream are vital to the economies of 18 other states and Mexico (Colorado Division of Water Resources, 2006). Colorado is therefore party to two international treaties (both with Mexico), nine interstate compacts, two U.S. Supreme Court decrees, and two interstate agreements that apportion the waters of Colorado’s rivers among these states. Three methods are available to establish compacts or interstate agreements for the division of water resources in states: congressional legislation, lawsuits between the states that are decided by the U.S. Supreme Court, or compacts agreed upon by the states and signed (if necessary) by Congress (p. 1). The interstate compacts and agreements that are applicable to Colorado’s water supply and their dates of ratification are included in the table above (all information in this section regarding interstate compacts and agreements is found in the Colorado Division of Water Resources report referenced immediately above).
### Table 1: Colorado’s Interstate Water Agreements

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Date of Enactment or Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>International Treaties</strong></td>
<td></td>
</tr>
<tr>
<td>Mexican Treaty on Rio Grande, Tijuana, and Colorado Rivers</td>
<td>1945</td>
</tr>
<tr>
<td>1906 Convention with Mexico on the Rio Grande above Ft. Quitman, Texas</td>
<td>1906</td>
</tr>
<tr>
<td><strong>Interstate Compacts</strong></td>
<td></td>
</tr>
<tr>
<td>Colorado River Compact</td>
<td>1922</td>
</tr>
<tr>
<td>La Plata River Compact</td>
<td>1922</td>
</tr>
<tr>
<td>South Platte River Compact</td>
<td>1923</td>
</tr>
<tr>
<td>Rio Grande River Compact</td>
<td>1938</td>
</tr>
<tr>
<td>Republican River Compact</td>
<td>1942</td>
</tr>
<tr>
<td>Costilla Creek Compact</td>
<td>1944 (Rev. 1963)</td>
</tr>
<tr>
<td>Upper Colorado River Compact</td>
<td>1948</td>
</tr>
<tr>
<td>Arkansas River Compact</td>
<td>1948</td>
</tr>
<tr>
<td>Animas-La Plata Project Compact</td>
<td>1969</td>
</tr>
<tr>
<td><strong>U.S. Supreme Court Cases</strong></td>
<td></td>
</tr>
<tr>
<td>Nebraska v. Wyoming 325 U.S. 589</td>
<td>1945</td>
</tr>
<tr>
<td>(North Platte River)</td>
<td></td>
</tr>
<tr>
<td>Wyoming v. Colorado 353 U.S. 953</td>
<td>1957</td>
</tr>
<tr>
<td>(Laramie River)</td>
<td></td>
</tr>
<tr>
<td><strong>Agreements</strong></td>
<td></td>
</tr>
<tr>
<td>Pot Creek Memorandum of Understanding</td>
<td>2005</td>
</tr>
<tr>
<td>Sand Creek Memorandum of Understanding</td>
<td>1997</td>
</tr>
</tbody>
</table>

The parties to these agreements and court decisions include those outlined in the table below. Additionally, the method of allocation of water between the states is listed in the table.
### Table 2: Interstate Water Agreement Parties and Apportionment Methods

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Date</th>
<th>Parties to Compact</th>
<th>Method of Apportionment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interstate Compacts</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorado River Compact</td>
<td>1922</td>
<td>Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming</td>
<td>Acre-foot requirements</td>
</tr>
<tr>
<td>La Plata River Compact</td>
<td>1922</td>
<td>Colorado and New Mexico</td>
<td>Percentage allocation</td>
</tr>
<tr>
<td>South Platte River Compact</td>
<td>1923</td>
<td>Colorado and Nebraska</td>
<td>Prior appropriation</td>
</tr>
<tr>
<td>Rio Grande River Compact</td>
<td>1938</td>
<td>Colorado, New Mexico, and Texas</td>
<td>Percentage allocation</td>
</tr>
<tr>
<td>Republican River Compact</td>
<td>1942</td>
<td>Colorado, Kansas, and Nebraska</td>
<td>Acre-foot requirements</td>
</tr>
<tr>
<td>Costilla Creek Compact</td>
<td>1944</td>
<td>Colorado and New Mexico</td>
<td>Acre-foot requirements</td>
</tr>
<tr>
<td>Upper Colorado River Compact</td>
<td>1948</td>
<td>Arizona, Colorado, New Mexico, Utah, and Wyoming</td>
<td>Percentage allocation (except Arizona)</td>
</tr>
<tr>
<td>Arkansas River Compact</td>
<td>1948</td>
<td>Colorado and Kansas</td>
<td>Combined requirements for cubic feet per second and percentages</td>
</tr>
<tr>
<td>Animas-La Plata Project Compact</td>
<td>1969</td>
<td>Colorado and New Mexico</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>U.S. Supreme Court Cases</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nebraska v. Wyoming 325 U.S. 589</td>
<td>1945</td>
<td>Colorado, Nebraska, and Wyoming</td>
<td>Acre-foot requirements</td>
</tr>
<tr>
<td>Wyoming v. Colorado 353 U.S. 953</td>
<td>1957</td>
<td>Colorado and Wyoming</td>
<td>Acre-foot requirements</td>
</tr>
<tr>
<td><strong>Agreements</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pot Creek Memorandum of Understanding</td>
<td>2005</td>
<td>Colorado and Utah</td>
<td>Prior appropriation</td>
</tr>
<tr>
<td>Sand Creek Memorandum of Understanding</td>
<td>1997</td>
<td>Colorado and Wyoming</td>
<td>Cubic feet per second requirements</td>
</tr>
</tbody>
</table>
Striving for economic efficiency of water allocation may not have been the goal of these compacts since scholars argue that percentage allocation of water promotes greater net benefits and equitable risk sharing among the parties to the agreement (Bennett, Howe, & Shope, 2000), and as shown, only three of these agreements use this method for apportioning water supplies. It is more likely that politics and relative power among the states played a larger role in negotiations than did economic efficiency.

Colorado is divided by geography, quite generally, into a wetter western slope and an arid eastern slope, divided by the Continental Divide which runs through Colorado along the Rocky Mountains. The Front Range of Colorado, which consists of the majority of Colorado’s population and development, stretches from Fort Collins in northern Colorado to Pueblo in southern Colorado. This metro region sits along the foothills of the Rocky Mountains as they meet the Great Plains.

“In Colorado, agriculture and urban life take place in the arid plains and foothills east of the Rocky Mountains. Water... is transported hundreds of miles east from major surface water projects built on the water-rich western slopes of the Rockies” (p. 91). These major water projects include complex systems of ditches, reservoirs, tunnels, and management systems. The largest of these projects is the Colorado-Big Thompson Project which attempted to solve the “long-recognized anomaly of Colorado: more land than water east of the Divide, more water than land west” (Knight, 1956, p. 157). The project was built between 1938 and 1957 and supplies water to 30 cities and 693,000
acres of irrigated farmland in northeastern Colorado (Northern Colorado Water Conservation District, 2007). This massive project brings water from the Colorado River watershed under Rocky Mountain National Park through the 13 mile Adams Tunnel to the Front Range where it is stored in reservoirs and released as needed to Front Range water users that have purchased shares of Colorado-Big Thompson project water. Forty-two other transmountain diversion projects supply water-short basins in Colorado with needed water for development, irrigation, and other uses (CDWR, 2003).

Without these projects, agriculture and urbanization would be impossible along the Front Range of Colorado. The importance of these storage and diversion projects was demonstrated by the drought of 2002 where,

In contrast to an annual average of 16 million acre-feet of water available in Colorado watersheds, the drought year of 2002 produced only four million acre-feet (AF). Most of that had to be delivered downstream to make the interstate delivery requirements. Colorado lived on six million AF of water released from its nearly 2000 reservoirs that had been stored in good years, coming within one-half million AF of exhausting its live storage capacity (Hobbs, 2007, p. 1).

This storage is accomplished, primarily, during high runoff times of the year in order to capture the excess water from snowmelt or heavy rains. It is then stored to be used later in Colorado or delivered to downstream states as part of Colorado’s compact requirements.

Coloradoans have adapted to their dry and variable climate through the use of storage reservoirs, transmountain diversion projects, and interstate agreements concerning the apportionment of water, as discussed above. Each of these elements of
water provision has played a role in allowing competing uses of water, namely irrigation, municipal, and industrial, to co-exist with limited supplies of water. The next section discusses the legal concepts of prior appropriation and how the law of priority of appropriation dictates water use in Colorado.

### 2.2.2 Prior Appropriation Concepts in Colorado

All water “in or tributary to natural surface streams” in Colorado is subject to the prior appropriation doctrine (Colorado Revised Statutes, sec. 37-92-102 [1a]). The most important concept in Colorado water law, and prior appropriation in general, is that of priority. The Colorado Foundation for Water Education defines priority as,

> The ranking of a water right vis-à-vis all other water rights drawing on the stream system. Priority is determined by the year in which the application for the water right was filed. The date the appropriation was initiated determines the relative priority of water rights for which applications were filed in the same year. Priority is the most valuable aspect of a water right because priorities determine who may divert and use water in time of short water supply (Colorado Foundation for Water Education, 2004, p. 32).

This concept of priority is the basis upon which the entire system of prior appropriation operates. The purpose of Colorado’s water rights system and application process is to assign priority to water rights through adjudication of those rights (Hobbs, 2002).

“When there is not enough water for both senior and junior appropriators, the doctrine of priority allows the full senior right to be exercised before the junior can use any water” (Getches, 1997, p. 101). The value of the priority of a water right is protected
through administration and enforcement of the system of priority, as discussed in subsequent sections.

To establish a water right under prior appropriation doctrine, a potential appropriator must adhere to three principles (Getches, 1997, p. 74). First, the user must make a manifest intent to divert water from its course. This is done through means such as public notice and postings. Notice of intent to appropriate water used to be performed by placing advertisements in local newspapers and mailing notices to all parties that might be affected by the water appropriation (Hobbs, 1999). Colorado statute now requires that the water clerk for each water division in the state assemble a resume, or a list of all applications for water rights within that water division within the previous month (Colorado Revised Statutes, sec. 37-92-302 [3a]). This resume is then printed in newspapers within the water division, mailed to water rights holders within that division, and posted on the water court’s website.

Second, the user must divert the water through a diversion or other control mechanism. For many years, rights were granted only for water that was diverted from the stream, and therefore was not compatible to instream or non-consumptive uses of water. This has slowly changed in some states, including Colorado, where the definition of a diversion has been changed (Colorado Revised Statutes, sec. 37-92-103 [7]) to “removing water from its natural course or location, or controlling water in its natural course or location, by means of a ditch, canal, flume, reservoir, bypass, pipeline, conduit, well, pump, or other structure or device.” This allowance for control of water instream
did not always exist in Colorado water law and makes it more compatible with instream uses of water. In 1979, the Colorado Supreme court held that “there may be a constitutional appropriation of water without its being at the instant taken from the bed of the stream” (Colorado Water Conservation District v. Colorado Water Conservation Board [1979]) based on a statutory interpretation discussed in relation to instream flow uses below.

Third, the user must put the water to a beneficial use. Beneficial use is defined in Colorado law as “the use of that amount of water that is reasonable and appropriate under reasonably efficient practices to accomplish without waste the purpose for which the appropriation is lawfully made” (Colorado Revised Statutes, sec. 37-92-103 [4]). The goal of this requirement is to avoid waste of water supplies (CFWE, 2004). Originally, beneficial uses were limited to domestic (municipal), agricultural, and industrial uses in Colorado. Over time this has expanded to include uses such as fire protection, fish and wildlife, mining, power generation, recreation, snowmaking, and others (p. 7). The beneficial use that the water is placed to is “the basis, the measure, and the limit” of the water right (Getches, 1997, p. 118), meaning that regardless of how much water is listed in the water right decree, the appropriator only has the right to that much water which he can place to beneficial use.

When making application for a water right, the applicant must also prove that the intended use and amounts of water will not injure any other water right. Injury, in the context of water law, refers to “the action of another that causes or may cause the
holders of decreed water rights to suffer loss of water in the time, place, and amount
they are entitled to use that water” (p. 6). This concept is vital to understanding the
terms defined below.

A water right can be granted in Colorado for a project that has not been
completed. In other words, it is possible to get a water right for a use that cannot yet be
accomplished. This is referred to as a conditional water right. To prevent speculation,
Colorado law requires that the holder of a conditional water right complete “reasonable
diligence of the appropriation upon which such water right is to be based” (Colorado
Revised Statutes, sec. 37-92-103 [6]). This means that “reasonable progress towards
making a conditional water right absolute by putting unappropriated water to a
beneficial use” must be proven (CFWE, 2004, p. 32). This must be demonstrated in court
proceedings every six years after entry of the conditional decree. Water rights holders
can prove diligence by demonstrating progress towards completion of the appropriation
such as engineering, permitting, financing, or construction of the diversion or control
structures that will be necessary to accomplish the beneficial use of water. Once the
structures have been built, the water right can be made absolute through court
proceedings.

Transfers of water rights can be made through the sale, lease, or exchange of
water in Colorado. These transfers are often accompanied by a change of use, discussed
below. In Colorado, sale of water off of the land is allowed and often done. The
Colorado Supreme Court opinion in Strickler v. City of Colorado Springs (1891)
determined that water rights can be severed from the land and changed from irrigation
to municipal use, which opened the door for this to become commonplace in Colorado.
To change the use of a decreed water right, the appropriator must 1) get a new decree
for that right, 2) only use that much water which has historically been consumptively
used (both in time and quantity), and 3) prevent injury to other water rights, including
maintaining return flows into the stream which downstream water rights rely upon
(CFWE, 2004). While the water right retains its priority date after transfer to another
owner or use, this injury requirement applies both to water rights that are senior to the
water right being transferred as well as those that are junior to the water right
(Corbridge Jr., 1998). All users, including junior users, are entitled to “stream conditions
as they existed at the time the juniors initiated their appropriation” (as cited in
Blomquist et al., 2004, p. 95). A change of water right can include a change in the “type,
place, or time of use, a change in the point of diversion… a change in the means of
diversion, a change in the place of storage… or any combination of such changes”
(Colorado Revised Statutes, sec. 37-92-103 [5]).

With transfers or changes of use in water rights, the need to exchange water in
the river becomes an issue. An exchange “allows an upstream diverter to take water a
downstream diverter would otherwise receive, if the water is replaced at the time, place,
quantity, and suitable quality the downstream diverter enjoyed before the exchange”
(CFWE, 2004, p. 15). Under the rules governing exchanges, a user can change the point
of diversion on the river only if they do not harm users affected between the two points
of diversion, the old and the new. In the diagram below, if the farm were to sell its water right to the municipality upstream, the municipality would have to ensure that the intervening users on the river were not harmed by the exchange. Harm would occur because the intervening user is accustomed to a certain amount of water passing by their property for their use.

Figure 2: Exchange of Water Rights

If the municipality now diverts that water upstream of the intervening user, water may have been lost to the intervening user. In the case of exchanges, it is often the case that the new user or upstream user will have to replace the water that has been taken from the intervening users with another source of water.

It is important to note that return flows, water which returns to a stream or river after it has been used for some other beneficial use (CFWE, 2004), is considered someone else’s water right. This water may return to the stream through irrigation runoff, tributary groundwater return, or other means, but is considered part of the property.
rights of other downstream appropriators that depend on return flows to satisfy their own water rights.

Water rights in Colorado are granted based on the principles outlined above. Colorado law requires that appropriators make application for water rights by filing an application with the water clerk in the water division in which the appropriation would take place for a specified amount of water from a specified source of water (Colorado Revised Statutes, sec. 37-92-302). Colorado was the first state to develop special court proceedings for water adjudication (Getches, 1997), and is the only state to rely solely on this adjudication of water rights for granting rights under prior appropriation.

Opponents of the water right application, or parties that simply want to ensure that their rights are not injured by the new water right, can become party to a water right case by filing a statement of opposition with the same water clerk. The case is then reviewed by a referee to the court who either makes a decision in the case, often after the parties negotiate and settle their issues, or refers the case to the water court judge for trial. If the case goes to trial in water court, it proceeds very much like any other adjudication. The water court referee and water judge consider issues pertinent to each application as well as general issues such as injury to other water rights and injury to interstate compact obligations when deciding water rights cases. After either a trial decision is reached or a settlement is negotiated between the affected parties, a water right decree is entered by the court and becomes enforceable under the prior appropriation administration procedures described below. The significant elements, then, of a water right in Colorado

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include: the priority date, the location of diversion at the source of supply, and the amount of water for application to beneficial use (Hobbs, 2007, p. 6).

### 2.2.3 The Colorado Doctrine

An inscription in Colorado’s State Capitol reads, “Here is the land where life is written in water” (Ingram, Laney, & McCain, 1979, p. 298). In 1898, the Colorado Doctrine was described as “a system that is... strikingly illustrative of the adaptive tendency of all law to meet natural wants and accommodate itself to particular conditions (Gast, 1898). The two decisions in Yunker v. Nichols and Coffin v. Left Hand Ditch Company, along with early Colorado constitutional language, clearly state the principles of the Colorado Doctrine: 1) all waters of the state of Colorado are public resources to be used for beneficial use, 2) a water right is a usufructuary property right to use a portion of the public’s water resources, 3) water rights owners may cross another’s property to build and maintain their diversion structures, and 4) water users may use streams and aquifers to transport or store their water without losing the property right (CFWE, 2004; Hess, 1916). Colorado’s water law is based upon state constitutional principles of prior appropriation. All water rights in Colorado, therefore, must adhere to these principles. This section provides a history of the relevant statutory and legal changes with regard to prior appropriation in Colorado since the doctrine was adopted.
Almost immediately after statehood in 1879, the Colorado legislature granted authority to the judiciary to adjudicate water rights in the state, setting up a unique system in the U.S. relying on special water courts to grant water rights decrees (Hobbs, 1999). In 1893, the legislature determined that the laws associated with transfer of real estate would be applicable to water rights “so long as the owner accomplished the transfer of the original appropriation without enlargement or injury to other water rights” (p. 11). Colorado’s original water law was limited to irrigation water rights only. In 1903, the Colorado Legislature established water rights protection for municipal (domestic) and other uses of water (Hobbs, 1997).

The Colorado Constitution appears to demonstrate a preference for municipal over irrigation over industrial uses of water (as referenced in Article XVI, Section 6, above). In 1953, the Colorado Supreme Court decided the case Black v. Taylor and found that this priority of uses only applies to those water rights that have the same appropriation date. If two water rights share a priority date, the municipal use can condemn the lower use with just compensation for that condemnation. In practice, water rights holders generally negotiate rather than use the right of condemnation of lower-use water rights (Simpson, 2006).

It was not until 1951 that Colorado included groundwater resources in its water law statutes. The legislature defined groundwater as being tied to surface waters, but until 1957 did not establish a system for registration of wells or permitting of groundwater appropriations (Hobbs, 1999). In 1965, the legislature directed the State
Engineer to administer groundwater resources, but it was not until the 1969 Water Right Determination and Administration Act that water law in Colorado was decidedly refined and changed.

The 1969 Act made several changes to Colorado water law. First, it established seven water divisions in the state, consolidating an unorganized and disjointed system of water rights adjudication. Second, the Act made out-of-priority water use possible by creating a defined augmentation requirement and allowance (Hobbs, 1999). Augmentation means that the quantity of water that is depleted by out-of-priority use is replaced by a like amount and quality of water (CFWE, 2004). Third, it defined tributary groundwater as being subject to the law of prior appropriation, while non-tributary groundwater is not subject to these laws, but rather is subject to permitting requirements of the State Engineer (Hobbs, 1999). Tributary groundwater is that water which is hydrologically connected to surface waters through the water table, return flows, aquifers, and associated processes (Glennon, 2002). Fourth, it established the unified resume notice system that is now used in water rights application cases (Hobbs, 1999). Finally, the Act defined specific application, rulemaking, and administration procedures with regard to water rights in Colorado.

2.2.3.1 Changing Water Use in Colorado

Agriculture in Colorado consumes over 90 percent of Colorado’s water supply annually (United States Geological Survey, 2000). In Colorado, like elsewhere in the
United States, the economic impact of agriculture is declining. Despite this fact, agriculture is still a significant contributor to the Colorado economy, providing $1.3 billion in revenue from gross crop sales in 1997 (Carlson & Leeper, 2004). According to this study, seventy-five percent of these crops rely on irrigation for production including hay, corn, and pasture land for Colorado’s $3.2 billion livestock economy. As competing uses of water increase, agriculture’s share of Colorado’s water will inevitably decline. In the past, water scarcity has been met with technological advances to increase water supply (Vaux, 1986). This is no longer the case in Colorado.

The case of Strickler v. City of Colorado Springs, described above, paved the way for agriculture to municipal transfers of water and despite agriculture’s importance to the state’s economy and heritage, one million acres of farmland have been transferred to urban use in the last ten years (Hobbs, 2007). This trend is expected to continue in the next twenty years, as the population of Colorado is expected to grow by another 2.8 million (Colorado Water Conservation Board, 2004g). This urbanization of the state has largely been facilitated by municipalities purchasing adjacent agricultural water rights (Ingram, 1982) (and increasingly water rights from more remote irrigated lands). Agricultural water rights in Colorado generally hold the most senior priority dates since agricultural uses were the first defined water rights in Colorado and since the majority of water in the state has historically been diverted into irrigation. This valuable priority means that agricultural rights are the most valuable water rights in Colorado because
they are the most secure, meaning that they are the most likely to get their water in times of shortage.

In terms of economic efficiency, this is not a negative trend, as economists and other scholars have long argued in favor of transfer of water to higher-value uses in the West (Colby, 1990; Ingram et al., 1979). These economists have supported and encouraged market mechanisms such as sales, leases, and transfers of water in order to meet the increasing demands of urbanized populations. The negative aspects of this trend include the drying up of farmland, rural economies, and riparian habitat along stretches of river formerly productive and abundant from irrigation and agriculture (Ament, 2006).

The face of Colorado is changing rapidly and significantly due to these agricultural transfers, but most people associated with Colorado water acknowledge that as younger generations are less likely to remain on farms, and water in many cases is more valuable than land, a farmer’s water rights are his 401(k) retirement plan. An acre-foot of water is that amount of water that will cover an acre of land with one foot of water, which is measured at 325,851 gallons of water (CFWE, 2004). The price of an acre-foot of water has increased dramatically over the past decades. Eric Wilkinson of the Northern Colorado Water Conservancy District estimates that while the price of an acre foot of water varies greatly depending on the location, seniority, and quality of water, the average cost is roughly $15,000 for municipal and industrial water and $5,000 per acre foot for agricultural water (Wilkinson, 2006). This high value places more
pressure on irrigators to consider selling their water rights to municipal or industrial uses rather than keeping it in irrigation.

2.2.3.2 Evolution of Instream Uses

“Soon after the Constitution was ratified, the national government began a water development program based on the premise that rivers best serve society if they are controlled, diverted, and dammed” (McCool, 2005, p. 1903). This was no different, and perhaps more ingrained, in the West where water is a fickle, scarce, and valuable resource. The perspective of Colorado water law with regard to environmental values has changed dramatically in the past four decades. Loeffler (1965) argued that Colorado’s water must be reclaimed from the waste and overappropriation that was leading to the degradation of Colorado’s riparian resources and water quality. It was not necessarily the irrigator who was to blame for this deterioration in quantity and quality, but the increase in the population of Colorado cities, according to Loeffler. Many scholars and activists have argued for an increasing emphasis to be placed on the natural systems associated with water resources, the species dependent on those resources, and the communities of humans and non-humans that rise on the banks of those rivers, as opposed to simply the economic benefits associated with water use (Bates et al., 1993).

Under the prior appropriation system, minimal value has been placed on non-consumptive or environmental uses of water. “In the West, to waste water is not to
consume it- to let it flow unimpeded and undiverted down rivers” (Reisner, 1993, p. 12).

During the first one hundred years of the prior appropriation system, this mindset led to the “potentially irreversible degradation of the pristine ecological communities of the West” (Worster, 1985, p. 310). This history of water use led most rivers in Colorado to be overappropriated, which meant that many rivers saw only minimal flows that were insufficient to support aquatic life. An evolution in public preferences by the 1970s led to the adoption of instream flow laws to help protect the natural environment in many states in the West.

Most of the 20th century in the West was defined by the construction of major water diversion and storage projects (Quinn, 1968; Reisner, 1993; Worster, 1985). These projects continued on a massive scale until the 1970s and the issuance of the Carter Hit List of water projects, largely in the West (Ingram, 1982), and the growth of the environmental movement. Since most possible small-scale projects to relocate water had been undertaken by the start of the 20th century, the scale and grandeur of water projects in the West continued to increase as water supplies had to be brought greater distances to supply growing demands (V. Ostrom, 1953). The federal government, chiefly the Bureau of Reclamation and the U.S. Geological Survey, became a primary player in western politics, development, and water rights throughout the 20th century due to the role the government played in funding, building, and maintaining these water projects. With the coming of the environmental age, hundreds of these dams across the country
have been removed either for safety reasons or to promote river health and reclamation (McCool, 2005).

These competing values of development of water, depletion of flows for beneficial use, and environmental protection came to a head in the 1960s and 1970s and placed demands for new and unfamiliar water rights on western states. In fact, these environmental or non-consumptive uses of water had historically been considered wasteful among prior appropriation proponents (Stevens, 1996).

In 1973, the Colorado legislature passed the state’s instream flow statute requiring the Colorado Water Conservation Board (CWCB) to appropriate instream flows to protect the natural environment “to a reasonable degree” (Hobbs, 2007, p. 6). This legislation, Senate Bill 97, eliminated the wording requiring a diversion out of a channel for means of appropriation of water and granted the board the authority to appropriate instream flows (Hobbs, 1996). The board is the only entity that can hold an instream flow water right in Colorado. These rights do not require any diversion or control of water. The board may obtain water rights through application, grant, purchase, bequest, lease, exchange, or other agreement, but may not use eminent domain to do so (Colorado Revised Statutes, sec. 37-92-102 [4]).

This law was challenged in the Colorado Supreme Court and upheld in 1979 in *Colorado River Water Conservation District v. Colorado Water Conservation Board*. The court in this case decided that the legislature did have the power to change statutory requirements for water rights including the new instream flow law. Soon after, the
General Assembly reimposed diversion and control requirements for appropriations, stating that an appropriation must be “diverted, stored, or otherwise captured, possessed, and controlled and… applied to a beneficial use” (as cited in Hobbs, 1996, p. 6).

Over the past 40 years, nearly all of the western states have enacted laws to promote instream flows for environmental health and species protection (Dawdy, 1992). The states use a variety of tools to administer their instream flow laws. Some allow individuals to hold instream flow rights, while others like Colorado require that they be held by a specific government agency. The Colorado Water Conservation Board holds almost 2000 instream flow rights in Colorado on over 8000 miles of streams and rivers (Charney, 2005). While this referenced report prepared for the Colorado Water Conservation Board highlights the significant strides the state has made in protecting environmental resources through the use of instream flows, the problem of depleted rivers remains a significant problem in the state, calling into question the effectiveness of the program (Benson, 2006). “In practice, the CWCB typically bases its minimum flows on the amounts needed to preserve coldwater fish- generally trout- habitat” (p. 1287).

More recent decisions and statutes that have strengthened Colorado’s ability to protect the natural environment include the Colorado Supreme Court decision in Board of County Commissioners v. Upper Gunnison River Water Conservancy District (1992) where the storage, release, and administration of water for use downstream for recreation and fishing flows was upheld (CFWE, 2004). Second, in 2002, the General Assembly in
Colorado passed legislation to allow the Colorado Water Conservation Board to purchase or acquire instream flow rights to improve stream conditions, not only to protect them minimally (CFWE, 2004). The law also allows donation of water rights for instream flow purposes to the board (Benson, 2006).

Finally, in 2002, Aspen, Colorado looked to keep water in the Roaring Fork River to protect the trout fishery and negotiated with an irrigation company a temporary exchange of water right to keep water flowing in the river in this severe drought year (Benson, 2006). The State Engineer disallowed this change of water right, but the legislature enacted a bill the following year authorizing water rights holders to loan their water rights to the Colorado Water Conservation Board for up to 120 days for instream flow purposes (House Bill 1320 [2003]).

2.2.3.3 Administration and Enforcement of Water Rights in Colorado

As stated above, the value of a water right is its priority. That priority, however, is worthless unless the water right is enforced and administered in such a way that protects it. In Colorado, the State Engineer, Division Engineers, and water commissioners are charged with administering the system of prior appropriation and protecting those rights (CFWE, 2004). The engineers continually monitor Colorado’s water resources through a state-of-the-art satellite monitoring system that tracks water supplies in all river systems in real-time, according to Colorado’s former State Engineer (Simpson, 2006). The system of water monitoring, combined with the administrative
capacity and enforcement ability of the engineers ensures that water rights are protected and enforced in Colorado.

The manner in which these rights are protected is through a “call” placed on a water right (CFWE, 2004). If a water right holder is not receiving his adjudicated amount of water, that person can ask the local water commissioner to place a call. The commissioner then will notify water rights owners upstream of the calling water right that are junior in priority that they are no longer able to divert water until the calling right is satisfied. This may mean that only a handful of water rights are shut down, but in a dry year, the calling right may be a right from the 1870s, which means that all water rights junior in priority cannot be diverting. The priority date, or calling right, on a particular river may fluctuate daily or even hourly in the event of a large precipitation event.

The State Engineer and Division Engineers in Colorado have the capability to respond immediately to changes in water supply (Simpson, 2006). For example, if there is a large rainstorm in Denver, with its miles of impermeable surface, there will almost instantly be high levels of runoff into the South Platte River basin. Because of satellite monitoring technology, the engineers and water commissioners are able to respond and notify water rights holders that may have been shut down that they will be able to divert a certain amount of water from the runoff that is flowing downstream for a period of time.
One caveat of note in Colorado water administration is that project water, that water which is brought into a water basin from outside of the basin (as in the example of the Colorado-Big Thompson transmountain diversion discussed above), is not subject to the same rules as native basin water. Since the appropriator has invested in bringing that water into the basin, and the other water users of that basin have not historically depended on the water since it is non-native to the basin, project water owners can impound it, release it, exchange it, and use it at their discretion within the rules governing their purchase of that water. The Colorado Supreme Court, in City and County of Denver v. Fulton Irrigating Ditch Co. (1972) found that this water could be used to extinction in the non-native basin, not requiring return flows for use downstream.

2.2.4 The Public Trust Doctrine

Many western states require water rights to be granted or denied based upon whether they are consistent with the public interest (Getches, 1997). This concept is referred to as the public trust doctrine. It assumes state ownership of water resources, including the beds and banks of streams and lakes (CFWE, 2004). This doctrine has been applied widely, notably in California, to enhance stream flows for environmental protection and recreation. Colorado, however, has rejected the public trust doctrine as a basis of state water law, as determined by the Colorado Supreme Court in People v. Emmert (1979).
2.3 Colorado Water Basins

One of the most significant changes to Colorado water law that the 1969 Water Right Determination and Administration Act created involved apportioning the state into seven water divisions along major watershed boundaries (Hobbs, 1999). This consolidation of water administration and adjudication replaced 70 water districts (organized along county and locality boundaries rather than watershed boundaries) and allowed for a more organized and logical water rights process in Colorado. These seven water districts are divided according to the map in figure two.

Figure 3: Colorado’s Water Divisions

This section will highlight the important characteristics of each major water basin in the state to provide the reader with an understanding of the complexities and regional
issues that Colorado water users and administrators face. The water divisions correlate with the seven water districts except in one case; the North Platte basin is included in Division Six with the Yampa, White, and Green rivers.

### 2.3.1 South Platte River Basin

The South Platte basin includes the South Platte River and all northeastern plains rivers in Colorado and is administered by the Division One engineer and court in Greeley (Hobbs, 1999). The South Platte basin includes more irrigated acreage than any other water basin in Colorado (CWCB, 2004g). The basin is not only an agricultural basin, however. The Denver metropolitan area and the northern Front Range cities are all located in the South Platte River basin. The waters of the South Platte are far from sufficient to supply these multiple needs, so 27 transbasin diversions from Colorado’s western rivers (such as the Colorado River and its tributaries) have been built to supply the eastern plains with needed water (CDWR, 2003). Seventeen of these transmountain diversions bring water to the South Platte River basin.

The issues of concern for this basin in the future include the competition of uses between agriculture and municipal (Interbasin Compact Committee, 2007f). Included in this concern over future water supplies is the over-reliance on non-renewable groundwater supplies that the southern metro suburbs in Douglas, Arapahoe, and El Paso counties have developed along with the “explosive growth” in these counties. Agricultural to municipal water transfers have supplied much of the increase in
municipal water supply since there have been no major water storage or diversion projects in the past 20 years in this basin (IBCC, 2007f). The South Platte River basin has experienced significant change in water use patterns as population has increased along the Front Range and agricultural use has diminished. This will continue to take place with the South Platte basin expecting a 65 percent population increase between 2000 and 2030, from 2,985,600 to an expected 4,911,600 (CWCB, 2004g).

2.3.2 Arkansas River Basin

The Arkansas River basin includes the Arkansas River and all southeastern plains rivers and is administered by the Division Two engineer and court in Pueblo (Hobbs, 1999). The Arkansas River basin has historically been a highly agricultural basin, but that is changing as populations in cities such as Pueblo and Colorado Springs expand and other cities, such as Aurora, purchase Arkansas agricultural water for use in municipal water supplies (CWCB, 2004a). To supply these multiple uses, 10 of the 27 transmountain diversions from Colorado’s western rivers feed the Arkansas River basin (CDWR, 2003).

The Arkansas River basin is dealing with several water-related issues currently. Due to compact obligations and existing uses, there is little to no additional water for new uses in the basin (IBCC, 2007a). Additionally, agricultural water transfers are putting increasing pressures on rural economies that were formerly dependent on agriculture. Concerns over water quality are increasing due to low flows in the lower-
Arkansas and the corollary high salinity levels. Finally, the basin lists recreational in-channel diversion water rights, the topic of this research project, as a major impact on the “development of augmentation plans for agricultural transfers” (IBCC, 2007a). The Arkansas River basin has changed dramatically over the past several decades and will continue to do so as population is expected to increase from 835,000 in 2000 to 1,293,000 in 2030, an increase of 55 percent (CWCB, 2004a).

### 2.3.3 Rio Grande River Basin

The Rio Grande River basin includes the Rio Grande and San Luis Valley rivers and is administered by the Division Three engineer and court in Alamosa (Hobbs, 1999). The Rio Grande basin is still largely rural and agricultural, but is witnessing substantial population growth in some areas of the basin. Population projections predict that the basin will grow from 46,400 in 2000 to 62,700 in 2030 (CWCB, 2004e). This 35 percent growth increase will require significant supplies of augmentation water in order to provide for increased domestic water consumption. In a basin where overappropriation of rivers is a significant hurdle to developing any new water supplies, this will be a difficult challenge (IBCC, 2007e). Other problems that the basin faces include the over-reliance on groundwater for agriculture and the unsustainable levels of groundwater pumping that have taken place due to the fact that the surface water supplies are overappropriated and subject to the Rio Grande River compact. The Rio Grande River
basin is the only basin in Colorado that does not have a recreational in-channel water right as of 2007.

2.3.4 Gunnison River Basin

The Gunnison River basin includes the Gunnison River and other central western rivers and is administered by the Division Four engineer and court in Montrose (Hobbs, 1999). This river basin includes diverse water user groups. There is still significant agriculture and irrigation in much of the basin, but population growth is accelerating in the lower portions of the Gunnison basin (CWCB, 2004c). Tourism and recreation is a significant contributor to the local economies in much of the basin. Two major concerns regarding future water supplies in the Gunnison basin include the potential for transbasin diversions out of the Gunnison River headwaters to the Front Range, as well as issues associated with federal water rights in the Black Canyon of the Gunnison National Park and the operation plans for the Blue Mesa/Aspinall reservoirs (IBCC, 2007c). The population in the basin is expected to increase by 82 percent between 2000 and 2030, the third highest level of population growth predicted in Colorado, from a population of 88,600 to 161,500 (CWCB, 2004c).

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3 The Blue Mesa Reservoir units store water to provide downstream states with water under the Colorado River Compact and also provide significant recreation opportunities and local tourism revenue.
2.3.5 Colorado River Basin

The Colorado River basin includes the Colorado River as it travels through Colorado, from its source to the state boundary and is administered by the Division Five engineer and court in Glenwood Springs (Hobbs, 1999). The Colorado River basin will experience the highest population increases between 2000 and 2030-99 percent—from a population of 248,000 to 492,600 (CWCB, 2004b). This development, especially in the headwaters, presents problems for the current levels of storage in the basin. Agriculture is still important, especially in the lower basin, but recreation and environmental issues are becoming significant considerations in water use in this basin (IBCC, 2007b). The Colorado River Compact dictates much water use, and there is a concern that in the event of a prolonged drought, that there might not be enough supply to meet Colorado’s compact obligations. Additionally, recovery of several species of endangered fish in the Upper Colorado River dictates the management of significant water resources in the basin. Finally, there is some concern over the potential for transbasin diversions from the headwaters of the Colorado River and the impacts that this development may have on in-basin water uses (IBCC, 2007b).

2.3.6 Yampa/White/Green and North Platte River Basins

The Yampa River basin includes the Yampa, White, Green, and North Platte rivers as well as all other northwestern Colorado rivers and is administered by the Division Six engineer and court in Steamboat Springs (Hobbs, 1999). The North Platte
basin will see relatively small population growth in the coming years, from 1,600 in 2000 to 2,000 in 2030 (CWCB, 2004d). The primary water use and supply concerns in this basin are related to the equitable apportionment decrees that affect the basin as well as endangered species recovery in Nebraska that dictates flow regimes on the North Platte (IBCC, 2007d).

The other river basins that comprise this district, the Yampa, White, and Green, will see a more dramatic population increase of 56 percent, from a population of 39,300 in 2000 to 61,400 in 2030 (CWCB, 2004h). Agriculture and irrigation, as well as tourism and recreation, are significant economic drivers of water use and development in the basin (IBCC, 2007h). Potentially the most significant issues in terms of water use and supply that this basin faces have to do with the development of gas and oil shale resources and the industrial water needs for these activities, which can be significant (IBCC, 2007h). This industry has yet to fully develop, but has the potential to greatly affect water supplies in the basin.

2.3.7 Dolores/San Miguel River Basin

The Dolores/San Miguel River basin includes the Dolores, San Juan, Animas, and all other southwestern rivers in Colorado and is administered by the Division Seven engineer and court in Durango (Hobbs, 1999). This series of several smaller river basins will face dramatic population increases in the coming years, from 90,000 in 2000 to 171,600 in 2030, an increase of 89 percent (CWCB, 2004f). This is a very diverse area of
Colorado demographically and economically. Several of the municipalities are transitioning from an agricultural and mining-based economy to a recreation and tourism-based economy (IBCC, 2007g). Other areas of the basin retain their agricultural and irrigation heritage. While water supplies are not significantly limited, infrastructure to meet water demand is a challenge for this basin. Many of the issues of the Colorado River Compact affect this river basin as well, as do water rights issues involving the Southern Ute tribe and compact obligations with New Mexico (IBCC, 2007g).

2.4 Conclusion

As should be clear from this overview of Colorado’s river basins and water districts, Colorado’s economy is continuing to change from an agricultural-based economy to one reliant on urban economic drivers as well as recreation and tourism. Population growth for the state as a whole is expected to grow from 4,335,500 in 2000 to 7,156,400 in 2030, an increase of 65 percent (IBCC, 2007a). At the same time, there is essentially no ‘new water’ available for appropriation within Colorado from the waters of the Platte, the Arkansas, and the Rio Grande watersheds, and only a limited quantity of water, perhaps 400,000 acre feet, that remains to be put to actual beneficial consumptive use under Colorado’s allocation of Colorado River Compact waters (Hobbs, 2007, p. 14).

This limited water supply, combined with the expected population growth and the ongoing drought in Colorado, prompted the Colorado General Assembly to pass the Colorado Water for the 21st Century Act (2005) which attempts to develop a statewide understanding of the issues that each river basin will face in the coming decades by
establishing basin roundtables involving stakeholders and water users in each basin. In the future, water rights issues and water supply issues will likely become increasingly complicated as water supplies are continually overappropriated and populations increase in Colorado and in the other states that rely on Colorado’s rivers.

With this history and understanding of Colorado water law principles and politics, the case study setting for this research is outlined in the next chapter. The evolution of water rights for in-channel recreational purposes is a newly evolving and complicated case of policy change at both the statewide policy level as well as the local policy level in a number of Colorado communities. This case of policy change, and the specific community cases presented in the following chapters, forms the basis of this research study and the model development presented herein.
3. The Recreational In-Channel Diversion

In the last two decades of the twentieth century, there was a tremendous growth in Colorado, and elsewhere, of recreational boating on rivers, particularly the sports of whitewater rafting and kayaking. Because of this changing market at the end of the twentieth century, Colorado communities began to seek water rights to capitalize on this new boating economy. Beginning in 1998, 12 Colorado communities filed for a new recreational water right, the recreational in-channel diversion (RICD), which allows communities to keep a specified amount of water in the stream channel for recreational boating. Eleven of these applications have since been granted and one is pending. This water right is a key departure from traditional consumption-based water rights in western states as discussed in chapter two, and marked a significant shift in water policy in Colorado. While still named a diversion in keeping with the traditional water rights system, which requires that appropriators divert or control the water to establish a water right (Worster, 1985), the control of water under the RICD consists of placing boulders and engineered structures in the channel to create riffles, waves, and obstacles for boaters to enjoy. Generally, these structures are designed to blend into the natural surroundings and can, at times, provide improved habitat for aquatic life. The water right associated with these whitewater courses requires minimum stream flows (determined by the municipality’s specific request) through a specific reach of stream during specified times of year. These water rights, like all water rights in Colorado, are
adjudicated and managed according to the principles of prior appropriation as outlined in chapter two.

This chapter will use a narrative approach to outline the legal precedent and legislative history related to the RICD in Colorado. It is important to understand the statewide legal and legislative decisions that led to policy change in Colorado water law in the case of recreational in-channel water rights in order to understand the context in which each community made its decision whether or not to apply for a recreational water right. The battle over recreational in-channel water rights in Colorado simultaneously played out in two statewide arenas, the legal and legislative venues, as well as within communities interested in applying for the water right. This chapter gives an overview of the statewide legal and legislative process that led to the creation of the recreational in-channel diversion water right. The following chapters deal specifically with the processes within each community.

3.1 The RICD Evolution

A state formerly dependent on agriculture, mining, and other traditional economic drivers, Colorado’s economy has changed considerably in the past several decades. Recreation has become one of Colorado’s largest economic sectors. Tourism is the second largest industry in Colorado and much of that tourism is outdoor recreation oriented. Colorado is ranked sixth in the nation for parks and recreation opportunities (Colorado Office of Economic Development, 2005). Water sports have become a large
part of Colorado’s economy. The rafting industry “brought in a record-setting $135 million during the 2005 season, making it Colorado’s number one summer tourism industry” and brought in $139 million during the 2006 rafting season (Greiner, 2006). Colorado boasts the most popular stretch of river in the nation for whitewater rafting—the Arkansas River (“Staying Current on Colorado’s Rivers,” 2006). Kayaking has also become a major recreational activity on Colorado’s rivers. Not only is commercial kayaking an important industry in Colorado, but like other outdoor sports such as skiing and rafting, it is also a recreational activity many Coloradans enjoy and tourists come to Colorado to experience. Mountain communities, in particular, which once relied almost entirely on winter recreation revenue from the ski industry, have begun to emphasize summer tourism-related activities as a means for providing year-round recreation and economic stimuli (Abeln, 2005).

3.1.1 Early Cases

In 1986, the City of Fort Collins applied for a water right for 55 cubic feet per second (cfs) on the Cache La Poudre River (in the South Platte River basin) “for municipal purposes, including recreational, piscatorial, fishery, wildlife, and other beneficial uses” (City of Thornton v. City of Fort Collins [1992]). While this water right was a small water right compared with current water rights decrees for recreational in-channel uses, the Fort Collins case established the legal framework for subsequent communities to establish much larger rights. Fort Collins claimed that a nature corridor
the city had recently built constituted a diversion under Colorado law. Opponents such as the Colorado Water Conservation Board objected to this application arguing that this constituted an instream flow which is not an allowed use under Colorado water law\(^1\).

Fort Collins then amended its water rights application, limiting its diversion request to two fish ladder structures that also served as boat chutes. The case was appealed to the Colorado Supreme Court by both the City of Thornton\(^2\), objecting to the approval of one water right, and the City of Fort Collins, objecting to the denial of a second water right.

Opponents of the water right argued, among other legal matters, that one of the two structures did not constitute control of water for purposes of an appropriation. The structure in question diverted water from the Cache La Poudre River back into its historic channel for recreational, piscatorial, wildlife, and other uses. The Colorado Supreme Court granted Fort Collins its water rights for recreational purposes, stating that “controlling water within its natural course or location by some structure or device for a beneficial use thus may result in a valid appropriation,” and further opining “that one of the salient features of an instream flow is absence of a structure or device, whereas diversion or control requires a structure or device.” This interpretation of the 1969 Water Right Determination and Administration Act meant that water controlled in its course could constitute a diversion for purposes of appropriation in Colorado.

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\(^1\) Except when held by the CWCB, as discussed in chapter two.

\(^2\) The City of Thornton is a suburb of Denver located approximately 55 miles south of Fort Collins on the northern edge of the Denver metropolitan area, not on the Cache La Poudre River.
After Fort Collins’ water right was decreed, the City of Littleton (City of Littleton Application for Surface Water Rights [1994]) was awarded a recreational water right in keeping with the Fort Collins case precedent. These early in-channel recreational uses established precedent upon which later RICD cases would proceed. These subsequent water rights filings significantly altered the state of Colorado water law.

The City of Aspen later filed a request for a water right that is different, but also worth mentioning here (City of Aspen Application for Surface Water Rights [2000]). The legal arguments in Aspen’s case were similar, but the city used a traditional diversion structure to divert the flow of the river into the historic channel for use in a kayak course according to the town’s water attorney (Covell, 2006). This means that Aspen’s in-channel water right is dissimilar from those water rights where no actual diversion takes place.

3.1.2 Golden, Vail, and Breckenridge

In 1998, Golden, Colorado applied for a recreational water right to maintain flows in its newly built kayak course. Golden relied on legal precedent established in City of Thornton v. City of Fort Collins. Based on this precedent, Golden’s water right application for 1000 cfs was granted by the water court (City of Golden Application for Surface Water Rights [1998]). Of the eight objectors to Golden’s water right application, five “object either overtly or impliedly to the application due to... its resemblance to an

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3 After Golden had filed its recreational water right application.
instream flow” (Beatie & Fosnaught, 1998, p. 278). In its decision, the Division 1 Water Court stated that the “City of Golden derives substantial economic benefit from the recreational use of the Course. This benefit has been an important factor in the economic redevelopment of the Golden downtown area” (as cited in Abeln, 2005, p. 525). The court further noted that since the water right is a non-consumptive use of water, the water is available to downstream users.

The case was appealed to the Colorado Supreme Court by the State of Colorado. These objectors argued that because Golden does not divert water from the stream, its water right is an instream flow, which can only be appropriated by the CWCB. In a split decision in State Engineer v. City of Golden (2003), the Colorado Supreme Court affirmed by operation of law the lower water court decision and Golden was granted its water right for the kayaking course.

At the same time Golden’s application was progressing through legal channels, two other Colorado towns, Vail and Breckenridge, applied for recreational water rights and were eventually granted those water rights in the amounts of 400 and 500 cfs respectively (Eagle River Water and Sanitation District Application for Water Rights [2002]; Town of Breckenridge Application for Water Right [2002]). When appealed to the Colorado Supreme Court, these two cases were also affirmed by operation of law (State Engineer v. Eagle River Water and Sanitation District and State Engineer v. Town of Breckenridge [2003]).

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4 In Colorado, when the high court cannot reach a majority opinion, the lower court’s decision is affirmed by operation of law. In the Golden, Vail, and Breckenridge cases, Justice Hobbs recused himself from participation in the cases, which led to a 3-3 split decision.
Though a victory for the towns involved in these cases, a split decision from the Colorado Supreme Court meant that no statewide precedent had been set by these cases.

Attorneys and water experts agree that the pivotal point in the legal battle over recreational in-channel water rights was the recusal of Justice Hobbs who did not take part in the Colorado Supreme Court trial of these three cases, which led to the split decisions that affirmed the lower water court decisions. The communities claiming water rights in these cases, Golden, Vail, and Breckenridge, requested Hobbs recuse himself because one of his former clients was a party to the case ("Disclosure of Potential Conflicts of Justice Hobbs," 2003). Justice Hobbs denied the request, but recused himself from the case. Glenn Porzak, the attorney for the three communities involved, said,

after all of the legislative battles, after all of the trial court battles, it ultimately came down to that decision and who knows what would have happened if we had lost... I think it would have changed the entire momentum in the state legislature. It would have changed the willingness of other towns and cities [to apply for recreational water rights] (Porzak, 2006).

Others involved in the cases agree. An attorney for the State of Colorado stated, “if he’d have been in that case, we wouldn’t have been in that split and we wouldn’t be in this situation today” (Murphy, 2006).

In each of these early recreational water rights cases, the State Engineer’s Office, which administers and enforces water rights, and the Colorado Water Conservation Board aggressively litigated these cases for the State of Colorado in opposition to the municipal water rights claims. These agencies represented the State of Colorado’s
concerns over the limits that these water rights place on future development of water storage and supply. Many people on both sides of this issue have argued that it was the large amounts of water being requested that led these state agencies to pursue litigation in such an aggressive manner (Kowalski, 2006; Murphy, 2006; Wilkinson, 2006 for example). Others insist that the State of Colorado was opposed to the very idea of this new water right because it was unlike a traditional water right in virtually every way (Natapow, 2006; Peternell, 2006; Porzak, 2006 for example). The legal and political issues presented in these cases will be discussed in the following sections.

While the Fort Collins case had set the legal precedent upon which Golden, Vail, and Breckenridge argued their cases, these three early cases were viewed as landmark cases. Not only were these cases asking for an extension of a newly established water right, but they were doing so for significantly larger volumes of water than had ever been requested before in Colorado for recreational uses. “Because they claimed so much, it triggered a lot of concern,” according to Colorado’s former State Engineer (Simpson, 2006). “The controversy has… little to do with the issue of recreation and has mostly to do with the quantity and timing of the recreation” (Robbins, 2006). This perception that these cases may change the face of water law in Colorado led opponents and proponents to engage in a protracted battle both in court as well as in the state legislature.
3.1.3 Legislative Responses

In 2001, the Colorado General Assembly, at the request of the Colorado Water Conservation Board, pursued legislation to define and restrict these recreational water rights. The Golden, Vail, and Breckenridge cases were still pending, but these communities’ water rights applications were grandfathered and legislation did not affect these communities. The legislature and state agencies feared, and have since been proven correct, that other Colorado municipalities would follow suit and apply for the new water right, and therefore initiated legislation to define the new water right. Senate Bill 216 (2001) had several effects on subsequent recreational water rights applications. The bill limited applications for recreational water rights to municipalities and other subdivisions of state government. It also declared that recreational diversions are a beneficial use of Colorado’s water. The legislation defines a “recreational in-channel diversion” water right as being controlled in its natural course, as opposed to the traditional requirement of diverting water out of its course. Finally, it defines an RICD as serving “reasonable recreational experience(s)” (Colorado Revised Statutes, sec. 37-92-103 [2001]). This last element of the legislation has proven particularly controversial.

The CWCB, under Senate Bill 216, was given the duty of reviewing each RICD application, holding a public hearing on the issue, and making recommendations to the water court as to whether the court should grant or deny the water right request. In many cases, the relationship between the CWCB and the applicant community turned divisive and adversarial. Some water policy experts argue that the CWCB attempted to
implement a poorly articulated legislative decree, which involved a steep learning curve on the board’s part because the statutory language was unclear and it was a newly emerging area of water law (George, 2006; Kowalski, 2006).

In 2005, the Colorado General Assembly again addressed the issue of the RICD (Senate Bill 62 [2005]), attempting to restrict it further and place a universal cap on the amount of water that a community can request. This legislation failed, largely due to a coordinated campaign by environmental and recreation groups. The proposed cap on the allowable volume of the water right angered potential RICD communities throughout Colorado. Opponents of this legislation, including Drew Peternell of Trout Unlimited, argue that “the reality is the amount of water you need will depend on the stream that you’re looking to put your RICD in and it will depend on the kind of experience you’re trying to create. So the one size fits all approach like that just doesn’t make sense” (Peternell, 2006).

3.1.4 Gunnison and Post-Senate Bill 216 Cases

After the General Assembly enacted Senate Bill 216 in 2001, several more Colorado communities filed water rights applications for recreational in-channel diversions. Among these applicants was the Upper Gunnison Water Conservancy District on behalf of Gunnison County’s kayak course. Gunnison’s case provided the next major legal challenge to recreational water rights in Colorado. Gunnison requested a water right including flows up to 1500 cfs during peak flow to support its kayak
course. Again, the Colorado Water Conservation Board actively objected to this application and appealed the case to the Colorado Supreme Court after the water right had been granted by the water court (Colorado Water Conservation Board v. Upper Gunnison Water Conservancy District [2005]).

The Gunnison case provided the statewide legal precedent that RICD supporters had not found in State Engineer v. City of Golden, State Engineer v. Eagle River Water and Sanitation District, and State Engineer v. Town of Breckenridge. The Colorado Supreme Court, based on the legislative statute that had been passed, found that both the Colorado Water Conservation Board and the district water court had acted erroneously in the case. The “limited fact finding authority on enumerated factors as applied strictly to an applicant’s claimed stream flow and intended recreation experience” that the CWCB was given by the legislature had been exceeded by the state agency. Additionally, the court determined that the water court had not considered all of the factors it was statutorily obligated to consider before granting a water right under the RICD statute. The case was sent back to the water court and the CWCB for reconsideration. Rather than proceed to a second trial in water court, the Upper Gunnison Water Conservancy District and the CWCB negotiated a decree for lower flows (1200 cfs at peak flow), which the water court approved.

Because many communities had struggled with the Colorado Water Conservation Board’s hearing process and lack of support for RICD applications, as is discussed in later chapters, this legal precedent was welcomed as a victory by RICD
supporters (Covell, 2006; Porzak, 2006). The Gunnison case was a landmark case in the history and evolution of RICD law and policy. As is discussed in chapter seven, Gunnison’s case is more directly relevant to recent cases than the Golden, Vail, or Breckenridge decisions because it was litigated under the Senate Bill 216 guidelines and resulted in a written opinion from the Colorado Supreme Court rather than an affirmation by operation of law.

Table three details the communities that had filed applications for recreational in-channel water rights in Colorado by 2007. The communities are listed along with the river basin they are located in. This does not, however, mean that the community sits on the mainstem of the river. Communities that are located on the mainstem of the river are specified in the table (MS). RICD applications have been filed in six of Colorado’s seven water districts, with the Rio Grande basin being the only water district without a pending or decreed RICD water right. The amount of water decreed to the applicant community (or in the case of pending application, the amount requested by the community) is listed under the heading “cubic feet per second.” This includes the highest flow rate decreed, but the applications often include lower levels of flows in months when the river’s hydrograph is not as naturally abundant.
Table 3: RICD Applications

<table>
<thead>
<tr>
<th>Community Name</th>
<th>River Basin</th>
<th>Cubic Feet Per Second Flow Rate</th>
<th>Year of Application</th>
<th>Application Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-SB 216</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Golden</td>
<td>South Platte River</td>
<td>1000</td>
<td>1998</td>
<td>Decreed</td>
</tr>
<tr>
<td>Vail</td>
<td>Colorado River</td>
<td>400</td>
<td>2000</td>
<td>Decreed</td>
</tr>
<tr>
<td>Breckenridge</td>
<td>Colorado River</td>
<td>500</td>
<td>2000</td>
<td>Decreed</td>
</tr>
<tr>
<td>Post-SB 216</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longmont</td>
<td>South Platte River</td>
<td>350</td>
<td>2001</td>
<td>Decreed</td>
</tr>
<tr>
<td>Pueblo</td>
<td>Arkansas River (MS)</td>
<td>400</td>
<td>2001</td>
<td>Decreed</td>
</tr>
<tr>
<td>Gunnison</td>
<td>Gunnison River (MS)</td>
<td>1200</td>
<td>2002</td>
<td>Decreed</td>
</tr>
<tr>
<td>Steamboat Springs</td>
<td>Yampa River (MS)</td>
<td>1400</td>
<td>2003</td>
<td>Decreed</td>
</tr>
<tr>
<td>Silverthorne</td>
<td>Colorado River</td>
<td>600</td>
<td>2004</td>
<td>Decreed</td>
</tr>
<tr>
<td>Chaffee County</td>
<td>Arkansas River (MS)</td>
<td>1800</td>
<td>2004</td>
<td>Decreed</td>
</tr>
<tr>
<td>Avon</td>
<td>Colorado River</td>
<td>1400</td>
<td>2005</td>
<td>Decreed</td>
</tr>
<tr>
<td>Durango</td>
<td>San Juan/ Dolores Rivers</td>
<td>1400</td>
<td>2006</td>
<td>Decreed</td>
</tr>
<tr>
<td>Carbondale</td>
<td>Colorado River</td>
<td>1600</td>
<td>2006</td>
<td>Pending</td>
</tr>
</tbody>
</table>

To understand these water rights volumes in perspective, the Denver Water Board holds a water right in Dillon Reservoir, which feeds Denver through the Roberts Tunnel supply system and is decreed for 1020 cfs, but Denver does not divert more than 750 cfs as a maximum. This “provides the water supply for approximately 1/3 of Denver” (Kowalski, 2007). These 12 cases comprise the entire universe of communities that have applied for, or started to apply for, recreational water rights. There have been no other communities that began the process and stopped, or that undertook the work to apply for a water right only later to abandon the process.

Table four describes the basic legal process that each community navigated. Early cases in Golden, Vail, and Breckenridge did not include a CWCB hearing as was
later required under Senate Bill 216. It is important to note that the order of applications listed below does not necessarily correspond to the order in which communities’ cases went before the CWCB or to trial. For example, Longmont filed its application in 2001 in order to secure its priority date of appropriation, but the community then waited to watch the evolution of statutory regulations and processes under Senate Bill 216, according to the city’s water attorney (Petros, 2006). Gunnison, then, was the second case to go before the CWCB and the first case that went to trial in water court under the statute passed in 2001. The specifics of each case will be detailed in chapter five.

Table 4: RICD Community Legal Process

<table>
<thead>
<tr>
<th>Community Name</th>
<th>CWCB Hearing</th>
<th>CWCB Recommendations</th>
<th>Water Court Trial</th>
<th>Supreme Court Trial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden</td>
<td>No</td>
<td>N/A</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Vail</td>
<td>No</td>
<td>N/A</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Breckenridge</td>
<td>No</td>
<td>N/A</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Longmont</td>
<td>Yes</td>
<td>Approval (after negotiating for reduced flow rates)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Pueblo</td>
<td>Yes</td>
<td>Approval, but requiring reduced flows and limitations</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Gunnison</td>
<td>Yes</td>
<td>Approval, but requiring reduced flows and limitations</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Steamboat Springs</td>
<td>Yes</td>
<td>Denial</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Chaffee County</td>
<td>Yes</td>
<td>Approval (after negotiating for reduced flow rates)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Silverthorne</td>
<td>Yes</td>
<td>Approval</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Avon</td>
<td>Yes</td>
<td>Approval</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Durango</td>
<td>Yes</td>
<td>Denial</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Carbondale</td>
<td>Pending</td>
<td>Pending</td>
<td>Pending</td>
<td>Pending</td>
</tr>
</tbody>
</table>
This table simply compares the basic process that each community went through since this process changed over time based on statutory requirements and objection from state agencies. The table details whether each community held a CWCB hearing, what the results of that hearing were, and whether the community’s case went to trial and to the Colorado Supreme Court.

### 3.1.5 Current Law

In the 2006 legislative session, the year after the Supreme Court decision in the Gunnison case, the legislature again addressed the issue of recreational water rights. This time, sponsors of Senate Bill 37 (2006) hoped to address several issues that had been outstanding since the 2001 legislation had been enacted. First, the role of the Colorado Water Conservation Board needed to be redefined and restricted according to bill sponsors.

Many of the communities that have applied for RICDs since 2001, when the CWCB was given its advisory role by the legislature, argue that the CWCB was hostile to the very idea of a recreational water right and attempted adversarial legal and legislative tactics in order to restrict and nullify the water right. The Colorado Water Conservation Board includes a voting member from each of the state’s water basins, appointed by the Governor of Colorado for three year terms. The make-up of the CWCB includes nine voting members, seven of which in 2006-2007 came from traditional water user backgrounds (municipal, agricultural, water supplier) (CWCB, 2006). Some
involved in water law in Colorado argue that these backgrounds color the board’s views on the recreational water right. The sponsors of Senate Bill 37, therefore, thought that the role of the CWCB needed to be restricted and redirected (Curry, 2007; Isgar, 2007). Both of these sponsors’ districts include RICD communities, but the two sponsors fall on opposing sides of the RICD debate. Representative Curry supported Gunnison’s RICD application when she was the manager of the Upper Gunnison Water Conservancy District and Senator Isgar opposed Durango’s RICD application.

Secondly, the meaning of the term “minimum water for a reasonable recreational experience” had never been defined in 2001 and the courts had asked the legislature for further clarification on this matter. This term has been subjectively interpreted depending on the context, with proponents of RICDs stating that in order for a kayak course to draw tourists and generate an economic base for the community, a variety of flows are required, including expert level (or higher volume) flows. Opponents of RICDs state that reasonable recreational experiences are those that require less water and those that do not divert water from other uses, indicating that they would support low volume RICD flows only.

After intensive negotiations with stakeholder groups, Senate Bill 37 passed the Colorado General Assembly and is the current state of Colorado law (Colorado Revised Statutes, sec. 37-92-103 [2006]). The new law redefined and limited the role of the CWCB in the RICD application process. It also limits an RICD water right to April through Labor Day each year, unless it can be otherwise justified by the applicant community.
The most significant statutory changes to note in Senate Bill 37 include no longer requiring the CWCB to hold public hearings on each RICD application. Additionally, limits were placed on a community’s ability to call its water right if the community cannot expect to get 85 percent of the decreed volume of water as a result of the call (if the water right is more than 50 percent of the historic annual flow of the river). Also, a presumption of non-injury significantly restricts the RICD water right. This non-injury language makes it possible for a junior water right to deplete the senior RICD right as long as that depletion does not exceed two percent of the RICD flow or 1/10th of one percent of the decreed flow volume. These restrictions on the water right are unique to RICDs; no other water right in Colorado has these types of limitations and requirements placed on the applicant. The new law does not, however, define the term “reasonable recreational experience.” This will be left to the courts to continue to interpret.

As of 2007, no communities have applied for a water right under the new law passed in 2006. The one pending application, in Carbondale, was submitted before the provisions in Senate Bill 37 took effect. Table five outlines the significant legal issues dealt with in each of the three rounds of legislation pertaining to RICDs. All of the legislative changes that have taken place between 2001 and 2007 applied only to RICD applications that were submitted after the enactment of the new legislation. In water rights, it is exceedingly rare for statutory language to apply retroactively.
Table 5: RICD Legislative Issues

<table>
<thead>
<tr>
<th>Legislation</th>
<th>Date of Passage (or defeat)</th>
<th>Issues Dealt With in Legislation</th>
<th>Unanswered Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate Bill 216</td>
<td>May 9, 2001</td>
<td>• Whether whitewater recreation is a beneficial use of water&lt;br&gt;• Whether kayak courses control the water for purposes of appropriation&lt;br&gt;• The appropriate role for the CWCB to play in RICD law</td>
<td>• How is ‘minimum amount necessary for a reasonable recreational purpose’ defined?&lt;br&gt;• What is a ‘reasonable recreational experience’?</td>
</tr>
<tr>
<td>Senate Bill 62</td>
<td>March 30, 2005 (defeated)</td>
<td>• Limits RICDs to 350 cfs&lt;br&gt;• Increases CWCB role in process&lt;br&gt;• Defines control structure to involve a structure with sides and a bottom&lt;br&gt;• Limits recreational use to kayaking, canoeing, inner tubing, boating, and rafting</td>
<td>• How is ‘minimum amount necessary for a reasonable recreational purpose’ defined?&lt;br&gt;• What is a ‘reasonable recreational experience’?</td>
</tr>
<tr>
<td>Senate Bill 37</td>
<td>May 1, 2006</td>
<td>• Restricts the role of the CWCB&lt;br&gt;• Defines a control structure as being engineered&lt;br&gt;• Defines recreation as non-motorized boating&lt;br&gt;• Limits RICD applications to April 1 to Labor Day&lt;br&gt;• Establishes a presumption of non-injury for a junior water right to affect a senior RICD&lt;br&gt;• Restricts the ability to call an RICD water right</td>
<td>• How is ‘minimum amount necessary for a reasonable recreational purpose’ defined?</td>
</tr>
</tbody>
</table>
These legislative changes met with varying levels of opposition in the Colorado General Assembly. Senate Bill 216 (2001) passed the House 58-7 and passed the Senate 22-13. Senate Bill 62 passed the Senate 19-15 but was defeated in the House 21-43. Senate Bill 37 passed the House 59-6 and the Senate 35-0.

The following timeline provides an overview of the significant events in the evolution of RICD water rights in Colorado. In these figures, the events below the timeline are cases and decisions of the Colorado Supreme Court or actions of the Colorado General Assembly on recreational in-channel water rights.
Figure 5: RICD Timeline 2004-2006
3.2 RICD Legal Framework

In the early recreational water rights cases, legal issues had to be dealt with that later cases would not have to address. As described in the previous chapter, to establish a water right in Colorado’s prior appropriation system, a water user must give notice of intent to appropriate, must divert or control the water, and must apply that water to a beneficial use. These last two requirements proved particularly controversial and provided the most significant legal hurdles for Golden, Vail, and Breckenridge.

3.2.1 Whitewater Park Structure and Purpose

The water rights in question in these RICD cases are requested in order to provide adequate stream flows and future protection for whitewater parks (also referred to as kayak courses) in Colorado communities. These whitewater parks are designed to narrow the flow of the river, creating increased velocity and waves in which kayakers and rafters can perform tricks according to Gary Lacy, whose firm designed 11 of Colorado’s 12 RICD kayak courses (G. Lacy, 2007). These structures consist of large boulders, man-made imitation boulders, grout or concrete, and significant hydraulic engineering to accomplish the task of creating waves and currents as desired.

Figure five, below, shows an example of the structures found in a typical kayak course at low flow so that the structures are visible. This course is in Breckenridge, and is similar to many other courses, although all courses vary in design, purpose, skill level, and number of structures.
Figure 6: Breckenridge Whitewater Park Structures at Low Flow

Figure six, below, shows a similar structure in Steamboat Springs at high flow to demonstrate the velocity of waves and the purpose of the hydraulic engineering. These kayak course, or whitewater park, projects are often completed with the idea of improving riparian habitat, river access, walking trails, park facilities, or providing community gathering places, as well as providing kayakers and rafters with venues to enjoy their sports. The majority of these courses are paid for using community funds or grants, as detailed in chapter five.

In many cases, these river improvement projects can positively affect natural riparian processes and habitat by creating eddies, currents for aeration, and feeding
spots. They also, however, increase the potential for human/wildlife interaction, which can negatively impact the natural processes (Cole, 1993). Cole argues that some degree of environmental impact is inevitable when recreational amenities are provided. Whitewater park designers acknowledge this, but also point out that all of these courses have been built in areas that were not pristine ecological habitats. Most of these courses are built in areas such as downtown locations, or stretches of river that were in need of restoration for both recreational and habitat reasons (G. Lacy, 2007).

![Steamboat Springs Boating Park at High Flow](image)

**Figure 7: Steamboat Springs Boating Park at High Flow**
3.2.2 RICD Legal Issues

Colorado water law traditionally required diversion, or removal, of water from a stream in order to meet the second requirement for appropriation. The Water Right Determination and Administration Act of 1969, however, created an allowance for instream flows to be appropriated by the Colorado Water Conservation Board to protect the natural environment “to a reasonable degree.” All other appropriations must “capture, possess, or control water in order to effectuate a valid appropriation.” This change in wording to control provided grounds for communities, starting with Fort Collins, to claim water rights for purposes such as recreation. Communities starting with Golden proved control of water through hydrologic analyses of their kayak structures, demonstrating that the structures were controlling the flow and movement of the water in-channel.

The next legal hurdle for these early cases was to prove that the communities were putting the water to a beneficial use. It is well established in scholarly literature that there are specific and measurable economic benefits to outdoor recreation (Burt & Brewer, 1971 for example). According to Colorado Supreme Court Justice Gregory Hobbs, Jr.,

The water courts ruled that they’re putting structures in the stream, they’re funneling and re-channeling the water, they’re creating waves, and more importantly- they’re creating money. So it looks like an economic use of water. The water courts rule that it’s really not an instream flow because of those features (Hobbs, 2006).
This traditional reliance on proof of economic benefit of the water appropriation allowed Golden, Vail, and Breckenridge to show evidence that their kayak courses increased local revenue and therefore provided beneficial use of water. In Golden’s case, an economic impact study of the kayak course claimed that the course generated between $1.4 and $2 million per year for the local economy (Hagenstad, Henderson, Raucher, & Whitcomb, 2000). In Vail and Breckenridge similar studies showed that the courses contributed $1.8 and $1.4 million per year, respectively (Raucher, Whitcomb, & Ottem, 2002). In this manner, the communities applying for early recreational in-channel water rights demonstrated beneficial use of the water they were requesting.

Because Senate Bill 216 (2001) established RICDs as statutorily defined beneficial uses, communities that filed applications after enactment of this law did not have to prove beneficial use. They do, however, continue to have to prove that the amount of water they are requesting is the appropriate amount of water for the intended purpose and that it is the minimum amount of water that they need in order to accomplish that purpose. The communities also have to prove that the kayak structures are able to control the amount of water that is being requested.

The legal issues presented by the opposition to these cases have been relatively consistent over the course of recreational in-channel water rights legal history. The State of Colorado, as represented by the Attorney General, has consistently argued three

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1 In these cases, the Attorney General is representing the interests of the State of Colorado, specifically the Colorado Water Conservation Board and the State Engineer.
primary legal issues in its opposition to recreational in-channel water rights. First, prior to legislation and since legislation, the State argued that the amount of water being requested in these applications is far more than is necessary to provide a recreational experience. This argument has ranged from assertions that the water right is wasteful due to the high flows being requested, to assertions that these high flows do not meet the 2001 statutory guidelines that the water right be the “minimum amount necessary” for a “reasonable recreational experience” (Senate Bill 216 [2001]). Colorado water law includes a no waste provision, as discussed in chapter two, and the state has consistently expressed concerns over the high volume flows that are being requested for recreational water rights.

Supporters of RICD water rights insist that higher volume flows are necessary to attract the level of skilled boaters that they desire in attempting to create world-class recreational facilities in their communities. “You can boat the river at lower flows... you can also ski down a barely inclined hill. It just isn’t the same,” states the City of Golden’s Public Works Director (Hartman, 2006). To many of these communities, the high flows are necessary to attract the tourist revenue and create the economic benefit they are seeking. Research has also demonstrated that “variations in instream flow strongly affect fishing and white-water recreation experiences” (Daubert & Young, 1981, p. 675).

Second, the State has argued that these recreational water rights preclude maximum utilization of the state’s scarce water supply. This argument essentially states
that by tying up water and rivers with a recreational water right, future exchanges, upstream development and storage, and transfers of water rights may be precluded. This concept of maximum utilization has been used in Colorado historically to “promote efficient use of water in the state” (Abeln, 2005, p. 532). If this is so, the State argues, the important concept of maximally utilizing the limited water resources in Colorado is harmed. Maximum utilization, according to the State and many RICD critics, requires flexibility to move water from water rich areas of the state to water scarce areas of the state. Like any water right, RICDs mean that all junior rights on the same stream have to prove that they do not harm the RICD in order to be granted. Downstream rights may not be affected because the RICD is non-consumptive. Upstream water development potential, however, can be restricted because it would be difficult to prove non-injury unless the RICD sits in a basin that happens to have excess water. Some of these larger RICD filings “in essence control the future of that stream,” argues CWCB board member and manager of the Northern Colorado Water Conservancy District, Eric Wilkinson (Wilkinson, 2006).

RICDs, supporters argue, are not unlike other water rights in Colorado in this sense. “That’s the nature of a water right… in Colorado, that you establish a water right on the stream and people who come in in the future and want to do something different have to make sure that your water right isn’t injured,” according to Pueblo’s water counsel in the RICD case (A. Castle, 2006). Proponents of RICDs say that RICDs, like any water right, are intended to protect the investment that an appropriator makes and
ensure that any reductions in the flow of the river or availability of water do not harm their intended use. Other supporters argue that these RICDs are the “ultimate maximum utilization, because not only do you get this huge economic benefit… but you’re not consuming a single drop, so every drop of water is available for reuse downriver” (Porzak, 2006).

Third, water courts and state agencies are asked to consider potential impairment of compact obligations in considering new water rights. If a new water right were to make it impossible or unlikely that Colorado can meet its compact obligations under any of the interstate compacts it is bound to, or that Colorado cannot fully utilize its allotted share of the compact entitlements, then the court has the ability to deny the water right request. Each compact that Colorado is a party to requires that a certain amount of water be sent to downstream states. Opponents have argued that if a community were to be granted an RICD close to the state line, that it would require Colorado to send water to satisfy that RICD which would not be consumed and would flow out of state to be used by others downstream, which limits Colorado’s ability to use all of the water to which it is entitled under the various compacts. A staff member with the CWCB explained that “the dangers of high RICD water rights are that we will over-deliver to downstream states water that is essentially Colorado’s to consumptively use pursuant to the different compacts” (Kowalski, 2006).

Supporters of RICDs argue that this water does not necessarily have to come from Colorado’s portion of water- that there is enough water already flowing out of
Colorado to meet its compact obligations and that these kayak courses do not impact compact entitlements of Colorado or other states (MacDonnel, 2006). The question becomes one of timing- how much water during what parts of the year needs to be delivered to downstream states? Colorado stores water in reservoirs during the high flow time of year, when RICDs are calling the largest amounts of water, so if RICDs prohibit storage of that water, these water rights could potentially impact compact obligations and entitlements (Robbins, 2006).

Three other, more technical, considerations were also considered in these legal proceedings. Courts, the State, and communities have had to deal with whether the RICD is located on an appropriate reach of stream, whether the community can provide river access to the public, and whether there is any injury to instream flow rights held by the CWCB and any other water rights held by objectors to the cases. These considerations were included in legislation in order to ensure consideration of these elements in the approval or denial of any RICD water right application.

The three early cases in Golden, Vail, and Breckenridge, established case law that supported the water right, but each subsequent community would then have been faced with presenting extensive economic analyses to prove beneficial use of the water. Communities interested in obtaining a water right also continued to face consistent opposition from the State of Colorado based on the legal concepts outlined above. In order to establish a statutory definition and process through which communities must
go to gain a recreational in-channel water right and to clarify this evolving area of law and policy, the Colorado General Assembly passed legislation in 2001 and again in 2006.

### 3.3 RICD Issues and Politics

As should be obvious from this chapter’s discussion of the legal and legislative debates that marked Colorado’s process of policy change to include recreational in-channel water rights as a legitimate use of the state’s water supply, there are divergent viewpoints regarding these water rights, their legitimacy, their purpose, and the risks associated with appropriating water for this purpose. Policy opinions have become entrenched among groups and individuals supportive and opposed to this new recreational water right in Colorado. The following description and tables outlining the opposing viewpoints are based upon interview data with Colorado experts in water law and politics. Interview subjects were asked to describe the views of their own interest group, if applicable, as well as others who share the same opinion. Subjects were also asked to describe the viewpoints of opponent groups on the issue of RICD water rights. Interviews were conducted with subjects affiliated with all stakeholder categories identified through interviews, legal and legislative analysis, and mass media content analysis, in order to obtain a complete understanding of opposing views. A total of 33 interviews informed this summary, as detailed in Appendix B.
3.3.1 Opponents of Recreational In-Channel Water Rights

Opponents of this new water right primarily include water suppliers, agricultural interests, and the State of Colorado. Water suppliers and developers are those entities that supply water to communities for purposes of domestic use. These entities also include many water conservancy and conservation districts, which build and maintain water storage projects and supply water for purposes of irrigation and development, depending on the needs of the river basin. Most of these entities hold senior water rights, but fear that this new recreational water right will place restrictions on what they can construct in terms of water development and storage in the future.

Agricultural interests, or irrigators, are also opposed to the recreational water right. Their concerns have little to do with the present use of their water, since they generally hold the most senior water rights in Colorado. Their concerns are again based on the prospects of future water use and development. As agriculture becomes less profitable in Colorado, many farmers and ranchers sell their water rights to municipalities for high prices. The municipalities then transfer those water rights through a complex system of reservoirs and ditches to supply their urban populations with water. This has taken place extensively in the Arkansas River basin and in the South Platte River basin, as described in chapter two. Some agricultural water users fear that recreational water rights will diminish flexibility in water use and prevent these types of transfers in the future. Other agricultural interests fear that by limiting flexibility of municipalities to get water from other sources, recreational water rights will
encourage municipalities to purchase agricultural water rights and hasten the decline of agriculture in Colorado.

The third major opponent of recreational water rights, and the entity that has fought them most aggressively in court and legislation, is the State of Colorado. The State, through the water resource agencies of the State Engineer’s Office and primarily the CWCB, has been “pretty hostile to these water rights” (Covell, 2006); and “borderline arbitrary and capricious in their actions” (Curry, 2007). Staff and board members affiliated with these agencies state that their concerns are based on their belief that the recreational water right will impair Colorado’s ability to maximally utilize its water and limit flexibility to provide water supplies for a growing population on the Front Range (Kowalski, 2006; Murphy, 2006).

There are no state agencies in Colorado that have overtly supported RICD water rights, although the Division of Wildlife states that at times these water rights can benefit wildlife and the agency has therefore remained neutral on the issue (McNeill, 2007). The recreational water rights debate largely took place under the governorship of Governor Bill Owens, a Republican. While he did not frequently speak against such water rights, his appointments to the Colorado Water Conservation Board are the most accurate measure of his attitude towards RICDS. As outlined above, the CWCB was largely comprised of traditional water users during this era of policy change. Recent changes in the political make-up of the CWCB as well as the election of Governor Bill Ritter, a Democrat, indicate that the state agencies may not be as opposed to RICDs in
the future. The Denver Post reported that, “kayak parks and other recreational water uses will be considered “more fairly” after political changes on the Colorado Water Conservation Board, state water officials said” (Lipsher, 2007).

3.3.1 Supporters of Recreational In-Channel Water Rights

Supporters of the recreational water right include environmental groups, recreation groups, law firms representing RICD communities, and communities whose economies are largely recreation-based. Environmental groups have piggybacked on this water right cause because it maintains flows in rivers that are increasingly depleted and overappropriated. Although Colorado allows instream flows to protect habitat and species, these water rights must be held exclusively by the Colorado Water Conservation Board and are for minimal flows to support habitat and aquatic life and are therefore ineffective according to some environmental advocates. Recreation groups, including whitewater recreation industry groups such as the Colorado Whitewater Association, have supported the water right because it not only promotes their personal enjoyment of the river, but it also protects flows from further depletion in the future and thus protects the future of recreational industries. Communities that have applied for, or plan to apply for, the water right have also supported the new water right and legislation that protects it. These communities largely see it as a benefit to their local economies to maintain stream flows and build river recreation opportunities. Secondarily, many of these communities see it as a means to protect flows in the river for aesthetic and
environmental purposes. The law firms and attorneys that represent these communities have, in many cases, been outspoken about the benefits and importance of recreational water rights to Colorado’s economy.

Because the economic benefits from these recreational activities are limited to local communities, there have not been notable levels of political support from tourism associations or industry associations. The economic growth that has taken place in Colorado as a result of the creation of recreational water rights has been enjoyed by these communities, but statewide industries of kayak manufacturers or suppliers have not grown because of this water right. Within local communities, as noted in this chapter’s section on Golden, Vail, and Breckenridge, there have been significant economic impacts. Specifically, within these communities, outfitters, retail whitewater suppliers, and tourism-based businesses benefit. In some communities, as detailed in chapter five, there are significant whitewater industries, including outfitters, supply shops, and tourism businesses². In other communities, there is no dramatic economic gain expected from the whitewater park or the water right³.

Table six outlines the categories of supporters and opponents of recreational water rights in Colorado as well as the most commonly mentioned reasons underlying their political positions.

² Most notably in Chaffee County, Vail, Steamboat Springs, Golden, Durango, and Gunnison.
³ Primarily in Pueblo and Longmont.
Table 6: Political Views of Recreational Water Rights in Colorado

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pro-RICD</strong></td>
<td></td>
</tr>
<tr>
<td>Environmentalists</td>
<td>Environmental groups have supported RICDs as a means to protect stream flows and habitat.</td>
</tr>
<tr>
<td>Recreational Groups</td>
<td>Outfitters, recreation non-profits, and other groups that focus on water-based recreation are supportive of the RICD because it provides water for a growing business and tourism sector as well as personal recreational enjoyment.</td>
</tr>
<tr>
<td>Law Firms</td>
<td>Lawyers who have represented the municipalities in court and legislation say that it is a legitimate and beneficial water right that communities should take advantage of.</td>
</tr>
<tr>
<td>Recreation-based Communities</td>
<td>Recreation-based cities and towns support recreational water rights because it may benefit their economies through increased tourism revenue.</td>
</tr>
<tr>
<td><strong>Anti-RICD</strong></td>
<td></td>
</tr>
<tr>
<td>Major Municipal Water Providers</td>
<td>Municipal water providers that anticipate needing a great deal of water development and storage for growth are opposed to RICDs because they limit exchange potential and upstream development.</td>
</tr>
<tr>
<td>Water Conservation/</td>
<td>Charged with developing water rights and storage projects, these entities are often opposed to RICDs because they prevent exchanges and upstream water development.</td>
</tr>
<tr>
<td>Conservancy Districts</td>
<td></td>
</tr>
<tr>
<td>Agricultural Community</td>
<td>Irrigators are concerned about the affect that RICDs may have on agriculture to municipal water transfers.</td>
</tr>
<tr>
<td>State of Colorado</td>
<td>The State, through the CWCB and State Engineer, has opposed RICDs for various policy reasons such as compact impairment issues and maximum utilization of the state’s water supply.</td>
</tr>
</tbody>
</table>

Chapter six will analyze the degree of influence that these groups had on the state-level process of policy change as well as community policy change.
Because of the complicated nature of this policy issue, a thorough understanding of the external factors such as legal precedent and case law as well as statutory regulations is essential to understanding the timing and sequence of community decisions to apply for recreational in-channel water rights. With this understanding of the legal and legislative history behind RICD law and policy in Colorado, as well as the opposing viewpoints on this issue, it is now possible to analyze the research questions posed in chapter one and build a model of policy change within Colorado communities. Methods used in this research study are outlined in chapter four, followed by data analysis in chapters five, six, and seven.
4. Methods

This research study was conducted using a comparative case study research design. Case study research using qualitative data is appropriate in this context because of the research questions being asked. Specifically, because this research asks “how” and “why” questions, a research design that seeks to explore intricacies of social processes is necessary to fully understand the processes of policy change at work within Colorado communities.

This chapter will describe in-depth the case study methods used for this research study. It will begin with a description and justification of the use of case study research, followed by a description of the importance of a multiple-case study. Next, this chapter will outline the procedures used to select cases for study. A detailed description of the data collection methods and interview protocol that were used to gather data is then included, followed by sections on the coding, media data analysis, and case study analysis protocol. Based on the reader’s understanding of the methods employed in this study, the following chapters will then present the evidence and findings from these case studies.

As highlighted in chapter one, this use of case study research is similar in nature to much research on community policy processes. Studies that analyze multiple factors influencing policy change within communities rely on this case study research design because it allows for in-depth analysis of multiple factors at work in community
decision processes. This type of research can take the form of single case study research (D’Anieri, 2007; Hay, 2005; Orozco Quintero, 2007; Rutherford, 2006), which has the advantage of allowing in-depth analysis of one case. Other studies of community environmental policy processes, however, use a multiple case study design (Clark, 2007; Henry, 2004; Layzer, 2002) in order to understand the influence of important variables in a comparative context.

In policy processes, it is not only important to understand the influential factors, but it is also important to understand their relative influence in multiple settings. Multiple-case studies “can strengthen research findings in the way that multiple experiments strengthen research findings” by confirming findings from one case among a group of cases, or by allowing for a broader understanding of a phenomena across multiple cases (Darke, Shanks, & Broadbent, 1998, p. 278). Because the research questions in chapter one seek to understand the importance of multiple influential factors on policy change, a multiple case study research design will be employed here to understand the details of policy influences within communities as well as the relative importance of those influences across communities.

Yin (1981, p. 58) calls for a specific definition of the terms and methods employed in case study research for a more rigorous application of the method to be employed. Based on this call for specific terminology, the research strategy employed in this study is the case study. The type of evidence, or data, that are used in this study include interview data as well as legal, legislative, and media documentation of the policy
process related to recreational water rights in Colorado. The data collection method in this case is more historical than it is ethnographic, relying on documentation as well as participant perceptions as related in interviews to form the basis of the dataset. This case study research is conducted primarily using qualitative data, as described below.

Methodologists argue that a case study is different from other methods because of its reliance upon covariance “demonstrated by a single unit and its attempt, at the same time, to illuminate features of a broader set of units” (Gerring, 2004, p. 343). This is not to say that it must only study one case. The set of cases to be studied can be either small-N or large-N, qualitative or quantitative. A case study “investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident”(Yin, 2003, p. 13). Because this study attempts to understand what Yin describes as complex social phenomena, case study method is the most appropriate and allows understanding of the complete process of policy change within a community.

Since “quantification produces precision” but also loses accuracy in cases of great complexity (G. King, Keohane, & Verba, 1994, p. 44), qualitative data are more appropriate for the study proposed here. Weiss (1994, pp. 9-10) outlines several instances that are relevant to this research study where qualitative data are more appropriate than quantitative data. First, this study will attempt to develop detailed descriptions of the process undertaken by Colorado communities in deciding to apply for RICD rights. Second, it will attempt to integrate multiple perspectives from
participants who could not have observed the entire process, but whose collective stories may comprise the truth. Finally, process description is an important element of this research design.

Scholars such as Allison (1971) and Raymond (2003) effectively employ qualitative case study methods to explain complex social processes and community decision-making during the Cuban missile crisis and in policies regarding privatization of public lands. These studies demonstrate that case study research can generate effective explanations of policy decisions in complex contexts. Layzer’s (2002) analysis of environmental policymaking through a series of case studies similarly demonstrates the suitability of case study research to analyzing the institutions and processes influencing policy decisions within social and political contexts. The results of case study research are often “novel, testable, and empirically valid” (Eisenhardt, 1989, p. 532).

While case study research is highly useful in studies where the research goal is to investigate new or emerging concepts in the field, it can also be used to provide rich description, develop theory, or test theory (Darke et al., 1998). When using case study research to test theory, specification of theoretical concepts is necessary. The results of the case studies, then, are compared with the theoretical factors specified to determine if the theory holds true, needs to be refined, or is false. This study uses this method, first by outlining the theoretical concepts to be studied in chapter one, then by using a case study design to understand the empirical reality of community policy processes. This
research design will allow for a rich understanding of the influences over local policy processes in RICD communities in Colorado.

4.1 Case Study Research Design

The case study protocol used in this research involves a comparative case study design wherein communities that have chosen to apply for recreational water rights are compared to those communities that have chosen not to do so. Within each community, data were gathered from multiple sources to form the basis of the case study analysis. An in-depth case narrative of each case was then compiled to analyze single-case influences on community policy processes. These cases were then compared in a cross-case analysis to determine the variables and influences that were important across RICD communities. This cross-case analysis forms the basis of the model and hypotheses presented in this dissertation. In addition to the community case studies, data were collected on the statewide political and legal process of policy change. These data inform all analyses of statewide processes and influences in the evolution of RICD water rights in Colorado.

4.1.1 Case Selection

To avoid selecting on the dependent variable (G. King et al., 1994, p. 108), which in this case is a community’s decision to apply for recreational water rights, it was important to include both policy adopters as well as non-adopters in this case study.
design. With this component built into the research design, it is possible to make statements about policy change and reasons for community decisions to apply for recreational water rights without selection bias. A total of 18 communities inform this research. Twelve adopter communities and six non-adopter communities, as detailed below, have been studied.

4.1.1.1 Adopter Case Selection Criteria

For this research study, a sample of cases was not selected, but rather the entire universe of 12 adopter communities was studied. When the universe to be studied is small-N, random sampling is inappropriate because it is unlikely to provide the variation on important variables necessary to explain the universe as a whole. In small-N studies, it is important to base case selection on a priori knowledge of the universe of cases (G. King et al., 1994, p. 199). Weiss (1994) states that the sample should be chosen to maximize range rather than selecting based on a probability sample. Based on this a priori knowledge, many important differences exist among RICD applicant communities and it is therefore not possible to select one or two communities from which generalizations can be drawn. Additionally, the total universe of adopters is small and therefore lends itself to study without prohibitive resource expenditures.

Yin (2003) argues that there are tradeoffs when conducting multiple case studies in comparison with a single-case design. The primary tradeoff is time and in this case, depth of study. Gerring (2004) phrases the tradeoff as one of depth versus
representativeness. By conducting a larger number of case studies, the researcher may be able to say with greater confidence whether the research can be generalized to a larger universe of cases than that which is studied. It will, however, be more difficult to study each case in the depth of detail that would be undertaken in a single case study design.

There are important differences that exist between water basins in Colorado, the Western slope and the Front Range, media markets, and political contexts. It is, therefore, necessary to avoid sampling communities since representativeness would be limited. It is essential to conduct case studies of all RICD applicants to understand the process that each community went through in order to draw generalizations about the universe of adopters as a whole and potentially generalize findings beyond this small universe. Each of the 12 communities that have applied for an RICD water right was therefore studied. This universe of 12 communities comprises the entire set of communities that has undertaken an application for RICD water rights. There are no cases where a community began the application process or decided to apply for a water right, only to withdraw the application later. These cases, then, are a complete sample of all communities that have decided to apply for a recreational in-channel water right in Colorado.
4.1.1.2 Non-adopter Case Selection Criteria

Because it is important to avoid selection of cases on the dependent variable to avoid selection bias (Collier & Mahoney, 1996; G. King et al., 1994), communities that have chosen not to apply for recreational water rights must also be studied. As discussed in chapter two, all Colorado communities have the opportunity to apply for recreational in-channel water rights. Clearly, some communities will be more likely to do so based on geographic suitability for kayak courses and whitewater recreation. Because there are myriad political, institutional, and geographic reasons why communities might self-select to build a kayak course, this research design must take those variations into account.

To apply for a recreational water right, a community must build a kayak course as defined by state statute. Non-adopter communities for this case study research were therefore selected from a list that was compiled by the researcher of all Colorado communities that have built a kayak course or that have definite plans to do so. This determination related to community plans to build a kayak course was made based on a combination of information gathered from interview subjects, media coverage of kayak courses in Colorado, and web searches on the subject. Communities were then contacted to determine if they did, in fact, have plans to build a kayak course. Based on this list of possible adopter communities, those communities that have not applied for a recreational water right were included as non-adopters. Clearly there are important
differences between communities that decide to build kayak courses and those that are located on a river but do not build a course; however, for this research study, communities that did not build a kayak course could not have legally applied for a recreational in-channel water right (as described in chapter three) and were therefore inappropriate to include as non-adopters.

The table, below, is a complete list of all communities in Colorado that have built or have definite plans to build a kayak course or whitewater park, delineated according to those that are included as adopters and those that are non-adopters for purposes of this study. Case studies were then conducted on these communities. Because these non-adopter communities have either decided not to apply for a recreational water right or have not considered the option, these case studies were less detailed since the processes at work in the adopter communities were generally not apparent in the non-adopter communities. In each of these communities, questions were asked of interview subjects to determine that the community falls confidently within the non-adopter category, and has no plans to consider applying for an RICD in the future.
Table 7: Case Study Communities

<table>
<thead>
<tr>
<th>Community</th>
<th>River Basin</th>
<th>Study Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden</td>
<td>South Platte</td>
<td>Adopter</td>
</tr>
<tr>
<td>Vail</td>
<td>Colorado</td>
<td>Adopter</td>
</tr>
<tr>
<td>Breckenridge</td>
<td>Colorado</td>
<td>Adopter</td>
</tr>
<tr>
<td>Longmont</td>
<td>South Platte</td>
<td>Adopter</td>
</tr>
<tr>
<td>Pueblo</td>
<td>Arkansas</td>
<td>Adopter</td>
</tr>
<tr>
<td>Gunnison</td>
<td>Gunnison</td>
<td>Adopter</td>
</tr>
<tr>
<td>Steamboat Springs</td>
<td>Yampa</td>
<td>Adopter</td>
</tr>
<tr>
<td>Silverthorne</td>
<td>Colorado</td>
<td>Adopter</td>
</tr>
<tr>
<td>Chaffee County</td>
<td>Arkansas</td>
<td>Adopter</td>
</tr>
<tr>
<td>Avon</td>
<td>Colorado</td>
<td>Adopter</td>
</tr>
<tr>
<td>Durango</td>
<td>San Juan/Dolores</td>
<td>Adopter</td>
</tr>
<tr>
<td>Carbondale</td>
<td>Colorado</td>
<td>Adopter</td>
</tr>
<tr>
<td>Denver</td>
<td>South Platte</td>
<td>Non-Adopter</td>
</tr>
<tr>
<td>Boulder</td>
<td>South Platte</td>
<td>Non-Adopter</td>
</tr>
<tr>
<td>Fort Collins</td>
<td>South Platte</td>
<td>Non-Adopter</td>
</tr>
<tr>
<td>Lyons</td>
<td>South Platte</td>
<td>Non-Adopter</td>
</tr>
<tr>
<td>Glenwood Springs</td>
<td>Colorado</td>
<td>Non-Adopter</td>
</tr>
<tr>
<td>Palisade</td>
<td>Colorado</td>
<td>Non-Adopter</td>
</tr>
</tbody>
</table>

4.1.2 Data Collection

Qualitative data are attractive to researchers for multiple reasons: “they are rich, full, earthy, holistic, ‘real’; their face validity seems unimpeachable; they preserve the chronological flow where that is important, and suffer minimally from retrospective distortion” (Miles, 1979, p. 590). These attributes of qualitative data, along with the importance of understanding the nuances of the complex policy process within communities in Colorado led to the choice of qualitative data such as interviews, documents, and mass media data, for this research design. Within each community and statewide, interviews were conducted and document analysis was used to help
understand the process through which the community went to make the decision whether to apply for RICD rights. Data collection included compilations of all relevant legal documentation and political documentation of the water rights picture in each community, including the legal application for a recreational water right and all subsequent court documents. These data were collected using legal database searches and were also largely obtained from the Colorado Water Conservation Board, which records and makes these documents available to the public. In several communities documents provided by water attorneys also provided supplemental information related to the legal process and legal issues of the case.

Legislative documentation gathered from the Colorado General Assembly’s public information database was also a significant component of the dataset for this research project. Documentation of the legislative history, intent, and record of each piece of recreational water rights legislation formed the basis of the dataset used to analyze the process of policy change and the role that groups and individuals played in the process of statewide legislative policy change. Data on individual and stakeholder testimony before legislative committee hearings were also obtained using this public database.

Archival media documents were collected to analyze the role that local and statewide media played in the process of policy change. For three reasons, newspapers formed the basis of the mass media dataset for this research. First, local newspapers carried the majority of news coverage related to recreational water rights, based on
interview subject testimony. Second, because television news often follows newspaper coverage in content, newspapers are considered to be the primary source of original reporting related to recreational water rights. Similarly, because the issue of water rights is a complex matter of law and policy, newspapers are the primary medium in which articles related to water law appear. Finally, no local television markets exist in RICD adopter communities1, and therefore mass media content analysis of television news coverage will not provide any variation among RICD communities.

Two general sources of media coverage were accessed for this research. First, articles were gathered from the Denver Post and Rocky Mountain News as the primary statewide newspapers. Since these newspapers have the potential to reach the entire state, comprehensive archival searches were conducted for both news and editorial content during the period prior to Golden’s water rights application (which marks the start of this process of policy change) through 2007. Because Golden applied for its recreational water right in 1998, archival research dates to 1997 in order to include any possible coverage of the issue prior to this seminal case.

Second, the local newspaper within each adopter and non-adopter community was searched for any news or editorial content beginning one year prior to the water right application (or in the case of non-adopters, as far back as possible within the 1997-2007 timeframe given technical restrictions of local archives). Because there are three

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1 Television markets in Colorado are based in Denver, Colorado Springs, and Grand Junction.
instances where two separate case study communities share a newspaper\textsuperscript{2}, archival coverage gathered for both communities dates back to one year prior to the first application. Databases such as Lexis-Nexis, EBSCO Host, and Access World News were used to gather media archives from the primary newspapers across Colorado. Direct access to other local newspaper databases through electronically searchable newspaper websites provided a secondary source of archival content. Finally, in three cases, in-person archival searches of local library back copies of newspapers or newsroom archives were required. In total, news and editorial content from 17\textsuperscript{3} newspapers across the state was included in the media dataset for this research study.

Demographic statistics for Colorado as well as the adopter and non-adopter communities are used in this research study to help describe the differences and similarities among communities. These data were accessed using the Colorado Department of Demography’s public database of 2000 census data for all Colorado municipalities and counties. These data are compared with Colorado averages, also obtained through this database of statewide census data.

Finally, interviews were conducted with the decision makers who made the decision whether to apply for recreational water rights in each community, political actors that were involved in the decision processes, and stakeholder groups that

\textsuperscript{2} Vail and Avon share a newspaper as well as Breckenridge and Silverthorne. Golden is also served by the two statewide dailies in Denver.

\textsuperscript{3} Newspapers included in this study are: Denver Post, Rocky Mountain News, Longmont Times-Call, Pueblo Chieftain, Fort Collins Coloradoan, Mountain Mail, Summit Daily, Vail Daily, Vail Trail, Durango Herald, Gunnison Times, Steamboat Pilot, Lyons Recorder, Carbondale Valley Journal, Boulder Daily Camera, Grand Junction Sentinel, and Glenwood Post Independent.
promoted or opposed the policy locally and statewide. Interviews were also conducted with water experts in Colorado to provide data for analysis of the statewide political and legal processes related to recreational water rights.

4.1.2.1 Interview Protocol

The use of a qualitative interview protocol is “especially good at describing social and political processes, that is, how and why things change” (Rubin & Rubin, 2005, p. 3), which makes it a highly appropriate data collection tool to use for this research study. This project involved case study research including an interview protocol with two panels of respondents (Weiss, 1994). First, a panel of knowledgeable informants, or experts, was selected. These individuals provided information related to the statewide process of legislative and legal policy change as well as the groups and individuals who were involved in that process. These interview subjects also provided information about the historic and policy relevance of this new water right in the context of prior appropriation in Colorado. Second, a sample of representatives was selected. These individuals are those who participated in the process of RICD application within their communities. This panel included local decision makers, politicians, lawyers, and stakeholders such as environmental and recreation groups, agriculture-based interests, and water developers and suppliers.

Interview subjects were asked to participate in an in-depth interview on the topic of recreational water rights in their community or in Colorado generally, depending on
their role in RICD policy decisions. The interview protocol included a list of potential
questions and possible subject areas. This organic, or qualitative interviewing, sacrifices
uniformity for a much fuller development of information. While we lose the ability to
quantify the interview data, we gain coherence, depth, and density of data (Weiss, 1994,
p. 3). The goal in this type of interview is often to let the subject lead the interview to
interesting destinations while still maintaining a focus on main questions and subjects.

Interview subjects were selected based on their employment with agencies
administering Colorado water rights, involvement in organizations participating in the
political debate over recreational in-channel diversions, participation within RICD
communities, or referral by other interview subjects. Two methods were employed to
select the panels of participants for this study. First, initial research on the topic of
recreational water rights identified many of the groups, agencies, and individuals who
were involved in the policy debate or have spoken publicly about the issue of
recreational water rights. The goal of this data collection was to interview as many of
those subjects as possible in order to present a complete picture of stakeholder interests
and policy positions. Second, at each interview, the subject was asked to refer the
researcher to other appropriate interview subjects. This “snowball” sampling method
can be especially effective in instances where research is being conducted in a
disciplinary or community setting where referral contacts are helpful in gaining access
to potential interview subjects.
For this research, interviews were conducted until a complete narrative of the policy process was ascertained and all significant individuals involved in the recreational flow decision making process were interviewed. A specific sample size of interview subjects was not the goal of this research, but rather developing an understanding of the complete policy process. This method of sampling was used to strive toward theoretical saturation, which is when “the researcher finds that no new data are being unearthed. Any new data would only add, in a minor way, to the many variations of major patterns” (Strauss & Corbin, 1998, p. 292). Through this ‘purposeful sampling’ method (Seidman, 2006), maximum variation in interview subjects was attained.

This interview protocol involved in-depth interviews with 75 subjects across the state of Colorado and within RICD adopter and non-adopter communities. Because “interviews gain credibility when… [subjects] are experienced and have first-hand knowledge about the research problem,” this subject selection included the individuals within each case study community that had personal experience with the RICD application and decision process. This, of course, means that in cases where the RICD decision was made in the relatively distant past, subjects may have moved, or be unavailable to participate in the research. Within each community, interview subject numbers varied based on the individual processes and people involved in the decision to apply for recreational water rights. As the reader will discover in chapter five, some communities’ RICD decision process was highly insular, with only two to four
participants, while other communities saw involvement from many more actors.

Statewide, interviews were conducted with at least one member of each stakeholder group that was identified through interviewing and other data collection. Subjects in this interview protocol had the option of using a pseudonym instead of their own name. Four subjects selected this option and their pseudonym has been used in this report and all analyses of the data.

The two goals of this interview design were to ensure thoroughness and accuracy, as defined by Rubin and Rubin (2005). Thoroughness is accomplished by selecting interview subjects with disparate views about the RICD policy generally and about specific cases. It also required conducting follow-up questions in several instances to ensure that the data gathered were complete. Accuracy is achieved by carefully deciding how to record, transcribe, and report the data that were collected. These data were recorded using a digital recording device, which allowed for automatic computer download. The researcher then transcribed each interview in its entirety and exactly how it was recorded, including pauses and ‘filler’ words. Quotations have been reported here in the exact context in which they were spoken and the only words removed using ellipses are those filler words such as ‘um,’ ‘ah,’ and similar words. The only exception to this rule is when a quotation has previously been used and is then subsequently used in a summary table. Some of these quotations have been reduced in length for the purposes of brevity and clarity.
The type of interview design used can broadly be called a ‘topical interview,’ where the goal “is to work out a coherent explanation by piecing together what different people have said, while recognizing that each person might have his or her own construction of events (Rubin & Rubin, 2005, p. 11). This goal of understanding the complex picture of events within each community is why, as described above, subjects from multiple perspectives were interviewed in each community. As methodologists suggest with any survey or interview, less sensitive questions were asked initially, with more politically charged questions asked later in the interview after a rapport had been established with the subject. A sample list of research questions is included in Appendix E, both for general water rights and RICD questions as well as community specific questions. These research questions served as a guidepost instead of a sequential or mandatory list of questions, similar to an interview guide (Weiss, 1994). While there was important information to gather in each interview, beyond the few necessary general subjects of coverage, these interviews allowed subjects to lead the interview to interesting destinations. As suggested by many scholars of qualitative methods, the information gathered during these interviews informed subsequent interviews, both in terms of the logistics of conducting interviews as well as the important interview topics (Glaser & Strauss, 1967; Miles & Huberman, 1994; Weiss, 1994). Each interview lasted between 45 and 75 minutes.

To manage the volumes of qualitative data that result from in-depth interviews with 75 subjects, analysis was conducted using NVivo software. Complete lists of
interview subjects are included in Appendices B and C. Appendix B lists those subjects whose responses informed the background research on RICD water rights, general issues and concepts related to RICDs, and the statewide policy process and legal process in the RICD case. Appendix C lists those interview subjects whose interviews informed the community case studies presented in chapter five, as well as the community specific information presented in chapters six and seven. For purposes of this dissertation write-up, each interview subject was assigned a code, which is used each time a quotation from that subject is used in this write-up. The subject coding key is included in Appendix D. The alphabetical code describing the subject’s group (elected official, local government employee, water attorney, etc.) along with a number comprise the interview subject code. For example, local elected officials are coded as EL. These subjects are assigned codes EL-01 through EL-07.

4.2 Data Analysis and Cross-Case Comparison

This case study research attempts to answer the research questions stated herein related to the process of policy change among Colorado communities. Qualitative analysis, when done well, “can identify mechanisms, going beyond sheer association. It is unrelentingly local, and deals well with the complex network of events and processes in a situation” (Miles & Huberman, 1994, p. 147). Analyses are based on ongoing, iterative review of extant literature and interview data, documents, and media data. This section describes the use of coding, both for data such as interviews as well as mass media data.
Based on this coding scheme, a detailed description of the case analyses and cross-case comparison will be outlined.

4.2.1 Qualitative Data Coding

By analyzing the data gathered through interviews and document content analysis of mass media data, legal applications and court decisions, and local government decisions using systematic coding and analysis, it is possible to understand the relationships of the policy actors in the RICD case and develop an understanding of policy change at the community level. Seidman (2006) describes coding of qualitative data as organizing words or phrases from interview transcripts into categories which help in the comparison among cases. “The idea of coding is to link what the respondent says in his or her interview to the concepts and categories that will appear in the report” (Weiss, 1994, p. 154). Coding “forces the researcher to make judgments about the meanings of contiguous blocks of text” in an effort to systematically break down the volumes of data gathered from interviews into manageable chunks useful for analysis (Denzin & Lincoln, 2000, p. 780).

While not a theory building exercise, this research uses the coding procedures suggested in grounded theory to elicit comparisons and detect patterns among the data (Strauss & Corbin, 1998). Open coding is used to determine basic concepts and to break down text into its component parts. This is done through a line-by-line analysis of texts. Axial coding is then conducted, constructing concepts from the component parts that
were differentiated in the open coding stage. Finally, in selective coding patterns emerge from data by integrating and refining these categories and their meanings. The goal of this coding is to reduce the amount of text to that which is relevant to the research questions asked in the study. Having broken down the text into these most relevant components, the researcher begins to notice patterns in the data. This analysis of the data is what illuminates the patterns and the true understanding of the processes at work in the complex case setting. From first noticing patterns, the researcher then sorts through data to understand overarching themes that emerge from the coded data (Auerbach & Silverstein, 2003). These coding processes are conducted to provide analytic tools for handling masses of raw data; promote consideration of alternative meanings of phenomena; be systematic and creative at the same time; and identify, develop, and relate the concepts that that emerge from the data (Strauss & Corbin, 1998).

These coding and analysis procedures were employed in this study with the help of NVivo software. NVivo does not analyze or code the data for the researcher, but is a tool used to organize and order data for patterns among data to be explicated clearly. To code data in NVivo, text of interviews, media sources, and legal and political documents were entered into the software program. These data were then organized and coded in a line-by-line method that links statements made to interview subject names and conceptual categories.

Codes were created for organizing raw data according to conceptual elements from literature as well as emerging categories from the data (Weston et al., 2001). This
use of literature to form the broad categorical codes to initiate data coding helps to narrow the range of possible data categories from an infinite number to a manageable few. It also allows the researcher to maintain a focus on the concepts that drove the statement of research questions. For example, the literature that informed this research study clearly indicated that both mass media coverage of the RICD issue within communities as well as the presence of policy entrepreneurs may be important to the research study and to building a model of policy change.

It is important in qualitative research to remain open to emergent categories or themes in the data (Strauss & Corbin, 1998; Weston et al., 2001). Because of this, the data drove specific codes and categories as coding was conducted. For example, interview subjects referred to experts such as water lawyers as the initiators of policy discussions in many cases and therefore subcategories related to expert policy entrepreneurs were created. Similarly, interview subjects often referred to their perceptions of media coverage balance and quality. This was a frequent enough topic of discussion that codes for media balance, quality, and quantity were created. In this manner, literature helped to form many of the basic codes used in this data analysis but interview data and document research led to the creation of more specific codes upon which to base the data analysis. The code book used in this research is included in Appendix A.

Analysis of data should begin as data are collected in qualitative research method (Strauss & Corbin, 1998; Weiss, 1994). This immediate analysis allows for a more responsive research design and the incorporation of new ideas as the research
study and interviewing process progresses. This analytic method allows for an “ongoing interpretation of data and emerging conceptual categories” (Suddaby, 2006, p. 634) which makes the research more responsive to the reality of the social situation being studied.

4.2.2 Mass Media Coding

Using mass media data to inform this study presents a specific challenge. Researchers who use mass media data often code the data in a slightly different manner than other qualitative researchers. By using word counts and coding based on specific categories of language frames, this research turns the qualitative data into quantitative data for the purposes of understanding the aggregate level of mass media bias and potential influence on local policy decisions. In doing this, the research “engenders deeper interpretations of the meanings in the original corpus of qualitative data” (Denzin & Lincoln, 2000, p. 778).

Specific information on the coding of media frames is included in chapter seven, as part of the analysis of media influence on policy decisions. The important concepts to articulate here include the types of codes used and the type of analysis conducted using those coded sets of data. First, each individual newspaper article obtained from the 17 newspapers listed above for the time period from 1997 through 2007 was coded by hand. Each paragraph in each article was coded as “positive,” “negative,” or “neutral,” depending on the treatment of the RICD issue. Positive messages were those that would
lead a reader to understand the RICD in the local community (or statewide) as being a benefit to the community, the economy, or the environment. Paragraphs that focused on the potential benefits associated with an RICD water right were coded as positive. Negative mentions of RICD issues were those that emphasized the costs, opposition, drawbacks, or potential problems associated with the RICD water right. Those paragraphs that were simply factual in nature were coded as neutral. Similarly, each article was coded for the number of quotations used from individuals associated with specific sides of the RICD debate. As will be described in chapters five and seven, there was minimal neutral coverage in local newspapers. This is due to the fact that it is the general practice of reporters to report the various “sides” of a story. Neutral content was only that content which stated a fact, such as “as last night’s city council meeting, X was decided.” Because the majority of news coverage relates the varying perspectives on a given story, most content was coded as either positive or negative.

Second, the total number of quotations and paragraphs that were positive, negative, or neutral with regard to RICDs were tallied for each article. The aggregate numbers for all newspaper articles within each community were then tallied, along with the general subject of the article (local RICD, statewide legislation, local whitewater park, other RICDs). These categories of articles then allowed for a systematic analysis of all articles related to RICDs in each community as well as those articles just related to the local RICD application or decision in each community. These findings are presented in detail in chapter seven, but are also briefly mentioned in each of the case studies.
presented in chapter five to provide specific contextual information as part of each case analysis. These mass media data and the associated analysis serve two purposes. First, they help answer the research questions related to mass media influence that were asked in chapter one. Second, they add to the complex information presented in each case study and in the cross-case analysis to help us understand the complex process of policy change in RICD communities in Colorado.

4.2.3 Case Analyses

The analytic tools of categorization (data reduction through coding), abstraction (collapsing data into important categories), comparison (among cases), and dimensionalization (integrating these categories by discovering patterns in the data) (Spiggle, 1994) were used to analyze the data to answer the research questions asked in this study. By breaking down the data into their basic concepts and frames, it is possible to detect patterns in the data and determine why individual communities adopt RICD rights and the processes, institutions, and influences in that decision process. It is further possible to compare individual cases to recognize patterns to answer research questions, develop a model of policy change, and create hypotheses for further testing. In this study, codes were created correspondingly across communities which allowed for a comparison across all communities categorically. This categorical comparison makes it possible to establish links among communities and processes and to develop an
understanding of policy change within and across communities. It also makes it straightforward to develop single-case narratives related to RICD water rights.

Two important analytical processes are used in this research study beyond those outlined in the preceding sections. First, a within-case analysis involving a detailed case summary for each community was conducted (Eisenhardt, 1989). These case analyses are primarily descriptive in nature but “they are central to the generation of insight” because they aid in the management of huge volumes of data (p. 540). The goal of these case narratives is to explain the complex policy process within a single community (Miles & Huberman, 1994). These stories draw on the data that was systematically categorized using the coding procedures outlined above to create a narrative of the policy process within each RICD community as well as the details of that process. Data display methods such as tables and charts (Miles & Huberman, 1984, 1994) were used to illustrate the most important points of each case, as they relate to the research questions asked in chapter one as well as any data-driven categories that may be important to research findings.

Second, a cross-case search for patterns is conducted based on the within-case analyses. Using a mixed strategy approach, as described by Miles and Huberman (1994), each case study was written up using a narrative and tabular format, using a standard set of variables. These cases were then “stacked” by creating meta-matrices, which permits a systematic comparison across cases. The cross-case analysis method is used in this research study to determine common patterns and linkages across
communities in order to form the basis of research findings (Bourgeois III & Eisenhardt, 1988; Eisenhardt, 1989). This second stage of data analysis in qualitative research is especially important as it relates to pattern spotting and data displays (Miles & Huberman, 1984). Miles and Huberman argue that by using data reduction techniques like coding, it is possible to then display qualitative data in such a way as to make it understandable and accessible. This is vital to developing an understanding of the common patterns of policy influence among RICD communities. Tables, graphs, and charts play a central role in helping to develop this broad understanding of the commonalities among cases. These tables and figures are used in chapters five through eight to simplify and explain the findings and patterns discovered in the qualitative data.

To ensure that findings and research claims are empirically valid, several tools are used in this research, based upon Miles and Huberman’s methodology (1994). First, as outlined above, a detailed understanding of each individual case was developed. Second, idle aggregation was avoided, so as to avoid combining data together without first understanding the nuances of each case. This prevented erroneous research findings based only on aggregate data, rather than aggregate data checked against case-specific data. Third, throughout the analysis the specifics of each case were preserved and considered when assessing each variable or research finding. Fourth, a combination of variable-oriented and case-oriented strategies was used, by developing in-depth cases of each community as well as common understandings of the broader policy process.
Finally, this analysis importantly avoided forcing cases into specific categories or findings. By always testing each finding against each case study, it was possible to ensure that findings were not erroneous or forced.

The findings from this research study explain how policy change happens within local communities in Colorado as it relates to recreational in-channel water rights. They also may illuminate the processes of policy change in local environmental policy decisions more broadly. This chapter has detailed the methods used to collect and analyze the data presented in the following chapters with the goal of making this research study as transparent as possible and avoiding the pitfalls associated with qualitative research that is often accused of being methodologically muddy (Lillis, 1999). The following chapters present case studies and cross-case analysis, followed by a model of policy change in RICD communities.
5. Recreational Water Rights in Colorado Communities

The preceding chapters have established a theoretical and historical background upon which the following chapters build. Chapter one established the research questions and theoretical underpinnings of this research on community-level policy change. Subsequently, chapters two and three provided overviews of the historical, legislative, and legal background of the case of water rights in Colorado and specifically the recent development of recreational in-channel water rights. Finally, methods for this research study were outlined. Beginning with this chapter, the specific research questions outlined at the start of this dissertation are analyzed to build a model of community-level policy change in environmental policy.

This chapter provides case analyses of each of the twelve Colorado communities that have applied for recreational water rights for a whitewater course as well as six communities that were selected as non-adopter communities. A cross-case analysis is then provided in order to outline the commonalities and differences among these communities. This chapter provides the background upon which chapters six and seven build to answer specific research questions regarding the roles that individuals, groups, and information play in the process of policy change.

The case studies provided in this chapter, and upon which the subsequent chapters are constructed, use the specific methods outlined in chapter four. The information gathered and presented in these case studies is based upon interview data,
mass media coverage of the community processes, legal documentation of that process, and other documentation where appropriate. For example, some communities provide city council minutes online while others do not. Interview subjects were asked about how the recreational water rights process unfolded in their community, the individuals or groups involved, and the many details of those processes. A list of sample interview questions is included in Appendix E. Additional interview subjects were then interviewed in each community until the point at which answers to these questions were consistent and the researcher was able to confidently determine that there were no significant points of view left out of the interview data. In each community not only were community leaders and those involved in the process interviewed, but also any outspoken critics of the process, where applicable, were interviewed. In this manner, the data collected for these case studies are based upon multiple interviews from multiple viewpoints. Interview data will be cited in this chapter, as well as chapter six and seven, using the following system: each interview subject was coded using a number and their categorical affiliation. A complete list of interview subject codes is included in Appendix D. Mass media data cited in this chapter were collected and analyzed using the methods outlined in chapter four, which will further be explained in chapter seven.
5.1 Adopters

In this section, each RICD community is described along with the process that the community went through in deciding to apply for recreational water rights. Each community is addressed chronologically according to the date of the community’s water right application. The important process elements that are covered in each case include 1) how the idea of applying for the RICD water right arose in the community, 2) who initiated the process of filing for the water right, 3) reasons that the community applied for the water right, 4) whether there were supporters and opponents within the community regarding the water right application, 5) important water issues within the basin where the community is located that affected the water right application, 6) the nature of the relationship the community had with the Colorado Water Conservation Board and the State Engineer’s Office while applying for the water right (although this will be covered in greater detail in chapter six), 7) the costs and issues associated with the legal process of applying for the water right, 8) the nature of local media coverage of the water right issue (covered in more detail in chapter seven), and 9) an overview of the process of building the whitewater park within the community. A demographic overview of all of these communities is provided in the cross-case analysis section at the end of this chapter. The map in figure seven shows the location of each community that has applied for a recreational water right for its whitewater kayak course. Although there are 12 RICD cases, there are 13 communities on the map because Chaffee County’s
RICD application encompassed both Salida and Buena Vista. Of these 12 RICD communities, three are located along Colorado’s Front Range metropolitan corridor and five are located near major ski resorts. These communities are located in six of Colorado’s seven major river basins that are described in chapter two.

Figure 8: RICD Communities in Colorado

5.1.1 Golden

Golden, Colorado built its Clear Creek Whitewater Park in 1997 to help revitalize the sagging downtown economy. This community is located against the foothills of Colorado’s Front Range, 15 miles west of Denver. While it has become a suburb of Denver for many commuters and residents, it is one of the few suburbs that retains a
unique downtown and identifiable community according to interview subjects. Clear Creek runs through Golden’s downtown and the City owns the most senior non-irrigation water rights on the river, which it uses for its domestic water supply. The river is in the South Platte River basin and is primarily used by municipal entities, including several suburbs to the northwest of Denver. Clear Creek is a highly overappropriated river with a history of contentious water rights cases.

Local kayakers and canoeists from the Clear Creek Paddlers club had approached the City in the late 1990s asking for the whitewater facility to be built in order to provide an amenity for the community as well as a training facility for boating enthusiasts. These boaters were helped through the process by Gary Lacy, the designer of the Clear Creek Whitewater Park and an area boater. The impetus behind the construction of a boating course is described as entirely citizen generated.

“"The kayakers came and said this is an enormous resource; we want to build these facilities to enhance the resource.” [WA-10]

“They sold it to the parks board first.” [LG-09]

“We had the whitewater community coming into our council and saying this is a good thing, that that you’ll bring a lot of people to town.” [LG-09]

The course consists of seven original structures and seven structures that were built in subsequent years. The city of Golden was one of the first Colorado communities to build a complete whitewater facility with the associated park improvements. The course stretches through downtown Golden and includes bank terracing and walking trails.
During the first year of operation, in 1998, the city realized immediate economic results. Due to the level of use the course experienced from local boaters as well as tourists and competitions, the City realized that the amenity was not only important to the boaters, but also to the city’s economy and residents. In this first year of use, the course was used almost year-round.

“We would get done with a drop structure and the big trackhoe would be moving downstream to work on the next one and there’d be boaters in the hole above them- and that’s in November and December… You have boaters here at sunrise and you have boaters here at sunset.” [LG-09]

“Golden was going through quite a transformation overall.” [RE-01]

“The kayak course really caused an entire rejuvenation of downtown Golden.” [WA-10]
Additionally, it has been used as a training facility for competitions and has hosted national competitions.

In 1998, after realizing the economic impact of the course, a city staff member brought up the possibility of the water that supports the whitewater course eventually being diverted by other upstream uses. The City then approached its water attorney, Glenn Porzak, about the possibility of filing for a water right to protect the course. Based on the precedent set in *City of Thornton v. City of Fort Collins* outlined in chapter three, Porzak determined that there was a legal foundation for the recreational water right application.

“We sat down with our water attorneys… they did the research and said, ‘yeah, we think it meets all the tests for a decreed water right.’ So we opted to file.” [LG-09]

“…largest single motivation is the economic good to our community.” [LG-09]

In December 1998, the City of Golden filed for a recreational water right for 1000 cubic feet per second (cfs) on Clear Creek during peak runoff months in May, June, and July (with lower volume flows during the rest of the year) to provide water for the whitewater course. The following table outlines the reasons that people within the city of Golden or associated with the City’s water right application listed as important to the decision to file for the water right.
Table 8: Reasons for Water Right Application in Golden

<table>
<thead>
<tr>
<th>Reason</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect Kayak Course/Protect Investment</td>
<td>7</td>
<td>[losing the water] would just destroy the value of that investment [LG-09]</td>
</tr>
<tr>
<td>Economic Benefits of Kayak Course</td>
<td>8</td>
<td>largest single motivation is the economic good to our community [LG-09]</td>
</tr>
<tr>
<td>Provide Recreational Amenity</td>
<td>1</td>
<td>meet a local demand for a high quality recreational experience [WA-07]</td>
</tr>
<tr>
<td>Community Identity</td>
<td>3</td>
<td>Really does help us maintain ourselves as a community [LG-09]</td>
</tr>
</tbody>
</table>

Within the Golden community, there was a great deal of support for the idea of building a whitewater park. There was also support from the City Council and boaters for applying for the water right, but there was not significant involvement from any individuals or constituent groups in this part of the process.

“They wanted the course, they wanted to go boating. They had the course, they were boating... securing the future water, that’s something that isn’t really that real to them.” [LG-09]

“Water rights for people that even deal with them are pretty obscure. They were happy... they were out on the river paddling.” [LG-09]

Within the local community, there was also no organized or vocal opposition to the water right application.
The City of Golden’s legal application met with significant resistance from entities outside of the community, however. The volume of water that Golden had requested in its water right application is the primary reason that water experts across Colorado list for the level of opposition to the filing. Supporters of the water right application, however, argue that since the course was designed to perform optimally at 1000 cfs, anything less would not have provided the recreational opportunity that the city desired, which was a world-class kayaking experience able to attract competitions and expert boaters to the area.

“You can boat the river at lower flows... you can also ski down a barely inclined hill. It just isn’t the same.” [LG-09]

“That’s when the thing is really going to have its highest and best use.” [WA-10]

The table below summarizes the concerns regarding the volume of water requested by Golden and the sentiments that people within the water community in Colorado mentioned in regard to Golden’s water right.
Table 9: Summary of Statements Regarding Golden's Water Right Volume

<table>
<thead>
<tr>
<th>Characterization of Golden’s Water Right</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large, but necessary to support the course</td>
<td>6</td>
<td>How can you justify a lower number? [WA-10]</td>
</tr>
<tr>
<td>Selfish</td>
<td>2</td>
<td>They’re a bunch of pigs. [CW-02]</td>
</tr>
<tr>
<td>Too Large</td>
<td>5</td>
<td>Golden went in for the whole hydrograph. [CO-05]</td>
</tr>
<tr>
<td>Controls the stream</td>
<td>1</td>
<td>A filing that large would probably in essence control the future of that stream. [CW-03]</td>
</tr>
<tr>
<td>Size triggered legislative action</td>
<td>2</td>
<td>Senate Bill 216 was in response to Golden’s case. [ER-03]</td>
</tr>
</tbody>
</table>

Communities upstream of Golden negotiated with the City and eventually settled out of the case in exchange for some protection of their interests through water rights subordinations and by Golden providing them with additional water supplies in some cases. The State Engineer and the Colorado Water Conservation Board, however, did not. These two entities fought the water right in water court and appealed the water court decision granting the water right to the Colorado Supreme Court, arguing that the water right limited upstream development, future exchange potential on Clear Creek, and that the volume being requested was significantly more than the city needed. These state agencies are described as being opposed to the idea of the water right. Those involved in Golden’s side of the case characterized the opposition in the following terms:
“They were just against these things for political reasons.” [WA-10]

“We were willing to compromise for maybe a little lower, but when they never budged at 30 [cfs], we said… ‘Let’s go for it.’” [WA-10]

“They wanted to end the notion that this is a legitimate water right.” [LG-09]

Golden, being the first community to file for a large recreational in-channel water right, had to prove that the water was being put to beneficial use. As described in chapter three, the community presented evidence of annual economic impact totaling $1.4 to $2 million per year from the course.

Golden’s case took four and a half years to work its way through the water court system. Golden’s water right was granted after the Colorado Supreme Court’s spilt decision affirming the water court’s decree on May 19, 2003. The City of Golden spent approximately $160,000 on legal fees associated with the water right, including engineering and witness fees. The kayak course, in comparison, cost $170,000 for the initial construction.

Throughout the water right application process and subsequent trials, the media coverage was generally positive. Of 10 articles and 15 opinion pieces that ran in Golden’s local newspapers directly related to Golden’s case, nearly 54% of paragraph content was supportive of Golden’s water right application. Additionally, six of the seven editorials about Golden’s case were supportive of the application. None of this

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1The media figures given in these case studies are based upon a content analysis of all media coverage in local newspapers and as explained in chapters four and seven.
media coverage preceded the water right application. Golden has received continual
publicity from the whitewater park, even after its case was settled in 2003, largely due to
its location directly adjacent to the Denver media market.

“Every time this issue, or whitewatering, comes up, our course gets some
publicity… ours is the easiest course to come take a picture by and we’re
the easiest people to come interview and the boaters here are the easiest
to find.” [LG-09]

Golden’s case provided the legal precedent for subsequent recreational in-channel water
right applications. It also provided the policy precedent upon which other communities
based their decisions to file for water rights for their kayak courses.

5.1.2 Vail

Vail, Colorado built a whitewater kayak course on Gore Creek in 2000 to provide
an additional recreational amenity and attract tourists after ski season had ended. Vail
is a recreation-based community, largely dominated by the ski resort and adjacent
recreational facilities. The town of Vail is located 97 miles west of Denver on Colorado’s
Western Slope, in the Colorado River basin. Gore Creek runs through Vail’s town center
and is considered one of the primary natural amenities in the community. Vail’s
municipal water supply is not diverted from Gore Creek. The town uses water in local
aquifers for all municipal water supplies. All water rights for use in the town of Vail are
owned by the Eagle River Water and Sanitation District.

The Vail Tourism Bureau was attempting to attract a younger tourist
demographic to its community, especially during the off-season months in the late
spring and early summer when the ski resort is closed and prior to golf season beginning. An employee of the tourism bureau approached the Vail Town Council in 2000 with the idea of building a whitewater kayak course on Gore Creek, which runs through the heart of Vail Village— the primary business and pedestrian area in town. An annual whitewater festival had been held in Vail, but the new course would bring additional competitors and spectators according to proponents. The Town of Vail is described as being very receptive to new and innovative recreation ideas due to the fact that the town’s economy is entirely reliant on this form of economic development.

“It allowed us to create a stadium for kayaking.” [LR-03]

“I guess we… jump both feet in and see what happens.” [LG-20]

“You can position Vail as a whitewater Mecca.” [LR-03]

The town, therefore, constructed the Vail Whitewater Park in the fall of 2000.

The Whitewater Park includes three structures and an attractive venue for competition spectators. The original whitewater festival has since grown significantly into the Teva Mountain Games, the largest outdoor adventure festival in the country. The annual event brings the world’s top kayak competitors to Vail along with thousands of spectators for a five day period in early June, when local businesses need revenue the most. The festival has grown from a singularly whitewater event to include mountain biking, rock climbing, and other outdoor adventure competitions. Due to the ‘center court’ atmosphere of the Vail Whitewater Park, located in the heart of town, athletes
who normally compete in remote locations come to Vail to enjoy the crowds, the cash
prizes, and the media attention that the festival garners.

“Between the third Sunday in April [when ski season ends] and the 21st of
June [when golf season begins], there isn’t anything to do here as far as
the business community is concerned.” [LW-06]

“There’s people coming from all over to... watch these guys.” [LR-03]

Figure 10: Vail Whitewater Park

The construction of the course coincided with Golden’s water court trial
preparation. Glenn Porzak, the water attorney for both Vail and Golden, suggested to
the Eagle River Water and Sanitation District that obtaining a water right for the newly
built course would be helpful to protect and maintain flows through the course in the
future.

“We realized that once we were about ready to make that kind of a
capital commitment, our counsel, Glenn Porzak, suggested we get a water
right… would be a good commitment in years and years and generations to come.” [LW-06]

“Glenn is a tremendous visionary and… he’s been given a tremendous amount of free-rein and he’s got a Midas touch.” [LW-06]

The district filed the water right application on behalf of the town in December of 2000. Those involved state that it was an important investment in the future of Vail’s economy. The following table illustrates the reasons that individuals involved in Vail’s decision to file the water right and in the legal case cite for the water right application.

### Table 10: Reasons for Water Right Application in Vail

<table>
<thead>
<tr>
<th>Reason</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Benefits of Kayak Course</td>
<td>8</td>
<td>They hope… brings other economic benefits to their community. [WA-07]</td>
</tr>
<tr>
<td>Provide Recreational Amenity</td>
<td>2</td>
<td>What we’re trying to do at our core was increase recreation within communities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[LR-03]</td>
</tr>
<tr>
<td>Transbasin Diversion Protection</td>
<td>1</td>
<td>Denver has designs on diverting water upstream of Vail. [WA-10]</td>
</tr>
<tr>
<td>Protect the River</td>
<td>2</td>
<td>Gore Creek is such an integral part of the whole town. [WA-10]</td>
</tr>
</tbody>
</table>

The citizens and decision makers within Vail were highly supportive of the decision to file for the recreational water right, but again were not specifically involved in the process to file for the water right.

“The only issue that’s ever been raised is the cost, but most people are behind the idea that this is recreation and it’s what we do.” [LG-02]
There was no noticeable opposition to the water right application within the Vail community.

Vail requested 400 cfs during peak flow months of May, June, and July, which was less than Golden’s request but on a much smaller stream. This high volume request again led to a highly contentious legal process between Vail and the State Engineer and the Colorado Water Conservation Board. Vail participants say that they offered to negotiate with the State of Colorado, unsuccessfully.

“We were willing to back down a little bit on the flows and hours, but when they rejected that, we went... all the way to the Supreme Court.” [LW-06]

“There wasn’t a whole lot to give there.” [WA-10]

“There wasn’t a whole lot to give there.” [WA-10]

“People don’t come to Colorado to climb our small mountains... people don’t come to kayak courses to float the minimum wave. They come for the biggest and the best.” [WA-10]

Three of the four non-state objectors to the case negotiated out of the case before it went to trial. None of these objectors were municipalities located in the river basin. Three water users from outside the basin, Colorado Springs, Aurora, and Northern Colorado Water Conservancy District, all had water interests in the basin. The fourth objector, Trout Unlimited, objected to ensure that the whitewater course and water levels did not harm the fishery. Each of these objectors, except the Northern District, had their concerns met through negotiations. Northern District stayed in the case through trial, but did not participate. Vail presented evidence that its whitewater park generated $1.8 million in revenue for the community annually, attempting to prove beneficial use of the
The State of Colorado argued that the course would limit future exchanges and upstream water storage above Vail and that the volume requested was more than needed for the purpose.

Vail’s water right was decreed by the water court at trial, but was appealed to the Colorado Supreme Court by the state agencies involved in the case. Vail’s case was consolidated with Breckenridge’s case due to the fact that the communities filed at the same time, the same legal issues were present, and they shared the same legal counsel. Vail’s water right was approved after the Colorado Supreme Court’s split decision on May 19, 2003.

The Town of Vail and the Eagle River Water and Sanitation District shared the costs associated with the legal process, amounting to over $300,800. In contrast, the construction of the Vail Whitewater Park cost $150,000. Vail has since invested additional funds in the park to include inflatable bladders that help to increase the water velocity through the course and to provide a more exciting and predictable venue for competitions. Subjects describe the legal costs as being worth the investment, despite the large sum. They also state the perception that Golden’s prior case helped them through the legal process.

“It’s a reasonable amount.” [LW-06]

“Who knows what Golden spent breaking the ice for us.” [LW-06]

“They cut all the teeth. They spent the major dollars taking their course all the way to the Colorado Supreme Court and then Vail and
Breckenridge rode their coattails trying to duplicate what it was that Golden did.” [LW-06]

Media coverage of the Vail water right application and legal case was very supportive locally. Additionally, there has been a large amount of coverage of the whitewater course in conjunction with the Teva Mountain Games. As in Golden, none of the media coverage related to the water right application was printed until after the application had been filed. The coverage in the two local newspapers was highly positive, with over 72% of content supportive of the water right application.

“We’re a community that likes to see V-A-I-L in print.” [LW-06]

“Vail as a whole got a ton of press for just being cutting-edge.” [LR-03]

Despite the costs associated with the legal case, those interviewed state that because of the importance of tourism to Vail’s economy and the positive media coverage the town has received from the course, the investment was worth the cost.

5.1.3 Breckenridge

Breckenridge, Colorado constructed its whitewater course in the spring of 2001. Breckenridge’s economy, like Vail’s, is largely reliant on the ski resort and local recreation and tourism. Breckenridge is located 80 miles west of Denver on the Blue River, which is in the Colorado River basin. While Breckenridge owns the most senior rights on the Upper Blue River, there are significant environmental issues associated with former mining and dredging operations on the river as well as competition for water associated with Denver’s use of the Blue River to fill Dillon Reservoir,
immediately downstream of Breckenridge. Since the 1980s, the town has been working to restore the Blue River through town and to increase the river’s appeal as a recreational and environmental amenity.

In 2000, a group of local boaters approached the town’s open space committee and then Town Council with the idea of building a kayak course on the Blue River at the entrance to town. Due to the river restoration benefits of the project as well as the potential for increased tourism from the course, the town approved the plan and proceeded with construction of the eight initial structures. Seven additional structures were later built to complete the course.

Figure 11: Breckenridge Whitewater Park
“The town through the years has been restoring the river back to some semblance of its former self.” [LG-08]

“Primarily it was a river restoration effort and then secondarily… it was a recreational amenity.” [LG-01]

“It was kind of the gateway to town, so just seeing colorful kayaks active on the river was just another way of kind of sprucing up the town.” [LG-01]

“It actually creates a better environment for fish.” [LG-08]

Due to perpetually low flows on the Blue River in most months, the course is primarily used by beginners, but can occasionally attract high caliber kayakers when flows are high during spring runoff.

“Our flows are really low.” [LG-01]

“Our really is popular for just a few weeks during the year as a boating facility.” [LG-01]

The project also includes walking trails and river restoration amenities.

In Breckenridge, as in Golden and Vail, Glenn Porzak had been the town’s legal counsel for water issues. When the town decided to proceed with construction of the course, Porzak suggested filing for a water right in conjunction with the capital construction project.

“The water rights definitely didn’t come up initially… it became an issue with Golden and with Vail and we basically were brought into the case on the coattails of that case.” [LG-01]

“There was an acknowledgement that in Colorado, the only way you can have a kayak course is to have a water right that goes with the kayak course.” [LG-08]
Town Council and the local community were supportive of the water rights application process.

“The community as a whole is just very pro-recreation and as long as it doesn’t do damage to the environment.” [LG-08]

Again in Breckenridge, there was no noticeable or vocal opposition to the water right application from within the community. Breckenridge submitted its application for a recreational water right in December of 2000.

Breckenridge applied for a water right for 500 cfs during June and lower flows from April through October. This high volume on a small river again raised concerns from the State of Colorado’s water resource agencies. The only other objectors to the case, Trout Unlimited and Colorado Springs, negotiated resolutions to their concerns and stipulated out of the case prior to trial.

As in Vail, the town attempted to negotiate with the State, but was not successful.

“We even had a negotiating session with the CWCB where it was Vail and us in the same room talking to the CWCB, which went nowhere.” [LG-08]

At trial, Breckenridge provided evidence of a potential annual economic benefit of $1.4 million from the course. The State, again, argued that the volume of flows was more than necessary to maintain recreational opportunities, that the water right would limit future exchanges and upstream storage potential, and that it would inhibit maximum utilization of Colorado’s water supply. Breckenridge’s water right was granted by the
The Town of Breckenridge spent a total of $185,000 on the legal costs associated with obtaining its water right. In contrast, the construction of the kayak course on the Blue River totaled $300,000. Because the course is not used as much as other courses, there has been some questioning of the value of these investments to the community, but overall the community sees it as a positive investment.
“It was kind of the cost of doing business.” [LG-08]

“The one reticent council member was the one that questioned its real true economic potential.” [LG-08]

Media coverage of the water right application and legal case in Breckenridge was highly positive, with over 74% of content being supportive of the water right application. The two editorials written in the local newspaper were both also supportive of the water right application. Again, this coverage did not take place until after the water right application had been filed by Breckenridge. These first cases in Golden, Vail, and Breckenridge, helped to set the precedent by which later cases were judged, both politically and legally.

5.1.4 Longmont

Longmont, Colorado is located almost 40 miles northwest of Denver in the South Platte River basin. In 2000, Longmont was undergoing a periodic update of its community greenway master plan. As part of that process, community public meetings were held to solicit ideas for inclusion in the master plan. During this process, the idea of building a kayak course on the St. Vrain River was brought up on several occasions.

“The idea for a kayak course had been expressed through the public input process.” [LG-13]

“It came up enough times through that public process that we looked into it.” [LG-06]
As part of the master planning process, city staff had asked whitewater park designer Gary Lacy to sit on the master plan committee because they anticipated that the idea of building a kayak course may be suggested.

“He [Gary Lacy] kind of inspired the vision for the course.” [LG-06]

City staff supported the inclusion of the course in the master plan update and the City plans to build the course in 2008 and 2009 on a stretch of river where a low-head dam that is in need of repair is located.

The City of Longmont does not expect a significant tourism use of the kayak course, but does expect that it will be a popular local recreational amenity. There may be the opportunity to host competitions in high runoff years.

Figure 12: Future Location of Longmont Whitewater Course

“It will help us provide an amenity to the citizens.” [LG-13]
“We expect it to be primarily a recreational use that will be used by the community itself.” [LG-06]

The City has been improving the St. Vrain corridor through an extensive greenway project and trails system since the 1980s. Many community projects are focused on improving river habitat and recreation opportunities.

“It’s just yet another thing that will compliment everything else that is wonderful about our St. Vrain Greenway project.” [LG-06]

“We really are on the leading edge of communities that are actively trying to provide good spaces for their community.” [LG-06]

“Longmont is kind of cutting-edge in a lot of respects... we have the ability to design and build really cool parks.” [LG-06]

Because Longmont is focused on providing creative recreational amenities for residents and improving the river corridor, the City considered the kayak course concept to be a logical possibility.

Longmont is downstream of most other diverters on the St. Vrain. The City has significant senior water rights for its municipal supply purposes. It was one of the first communities on the Front Range to require annexations to dedicate senior irrigation rights from the land to the City’s water portfolio. This policy helps to ensure sustainable growth as well as inhibit ‘buy and dry’ scenarios where municipalities purchase water from agricultural land and leave the land without water supplies. The city also has a capture and pump-back system under construction so that it can recapture and reuse water within its diversion system. The St. Vrain is a small river and does not see high
volume flows except in occasional wet years. These low flows have caused concern regarding habitat needs along the greenway corridor.

While Longmont parks staff members were considering the inclusion of a kayak course project in the City’s master plan update, Senate Bill 216 and the early recreational water rights cases were unfolding. Longmont’s water attorney suggested that the City consider filing for a conditional water right for the future course.

“Anybody that was involved in water knew what was going on.” [LW-11]

“I think the impetus for that… came from our water attorney.” [LW-11]

“My view as an attorney, which I stated publicly, is that cities should take advantage of that [statute].” [WA-09]

“My sense was, why not take advantage of it and secure whatever water right was available.” [WA-09]

City staff members in the Public Utilities Department had known about the Fort Collins case in the 1990s and had long supported the idea of filing for a recreational water right. Longmont filed its water right application in December of 2001 and was the first case under Senate Bill 216 to be filed. The City of Longmont originally requested flows up to 1020 cfs in June.

There was support for the idea of applying for a water right from the City Council and city staff. There was not, however, significant public knowledge about the issue. There was, therefore, no public opposition to the idea of the water right within the community.
“There wasn’t a lot of discussion about the RICD filing.” [LG-13]

“You typically don’t have a public discussion about a water right filing because you tell everybody we’re going to file… there would have been just a rush to the courthouse.” [LG-13]

The table below illustrates the reasoning behind the water right application, according to individuals involved in the decision to file for the water right and those involved in the legal case.

**Table 12: Reasons for Water Right Application in Longmont**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect Kayak Course/</td>
<td>3</td>
<td>We certainly don’t want to invest that kind of community funds to an asset that isn’t</td>
</tr>
<tr>
<td>Protect Investment</td>
<td></td>
<td>protected. [LG-13]</td>
</tr>
<tr>
<td>Control of the River</td>
<td>1</td>
<td>It gave us some control. [LW-11]</td>
</tr>
<tr>
<td>Provide Recreational</td>
<td>2</td>
<td>It will help us provide an amenity to the citizens. [LG-13]</td>
</tr>
<tr>
<td>Amenity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protect River</td>
<td>1</td>
<td>Protects water, keeping water in the river. [LG-06]</td>
</tr>
</tbody>
</table>

While Longmont’s application was the first under Senate Bill 216’s statutory requirements, Longmont decided not to proceed with the CWCB hearing process and legal case until it had observed other cases go through that same process. In 2004, Longmont held its CWCB hearing after negotiating for reduced flow rates with the board and other objectors to the case. Longmont was willing to significantly reduce the
requested flows to a maximum of 350 cfs in June. The board recommended approval in Longmont’s case, which was the first such approval recommendation.

“The first one that was a non-controversial application.” [CW-01]

“They [CWCB] were looking for a project that they could work out a reasonable compromise.” [LG-06]

“We realized that if we were going to make this an agreement, a mutual agreement, that we had to bring our request down to something that would also be palatable to the board.” [LG-06]

“There was also a desire on the CWCB’s part to try and have a successful version of one of these.” [WA-09]

This CWCB hearing approval led the way for a decree without a water court trial.

Longmont spent almost $50,000 on legal fees associated with its water right application and plans to spend approximately $486,000 to build the kayak course. The City’s water attorneys state that Longmont has traditionally favored negotiation in water rights cases. The City has historically avoided costly water court battles unless the water right in question is central to the City’s mission.

“We were not at all interested in paying huge court costs to take this to court.” [LG-06]

“Longmont has always tried to avoid expensive and prolonged water court battles.” [WA-09]

“Had the city been faced with having to spend those kinds of funds [like Golden], I don’t know if they would have had the will to go after it.” [WA-09]

In this case, the water right was considered to be one tool for maintaining flows on the St. Vrain, while the pump-back project and the City’s own flow regime from its
upstream reservoirs will provide the balance of the water to support the course and the river improvements.

While within the city government there was significant support for the idea to file for the water right, the local newspaper published only two articles about Longmont’s water right application. Those two articles were largely supportive of the water right, with over 80% content in favor of the water right. As in the other cases mentioned, all of the media coverage in Longmont was published after the decision to file for the water right had been made. In fact, there was no coverage of Longmont’s application within the first two years after the application was filed. Articles were published once negotiations and the CWCB hearing process began.

5.1.5 Pueblo

Pueblo, Colorado is located 115 miles south of Denver in the Arkansas River basin. The Arkansas River historically flowed through Pueblo’s downtown, but after a 1921 flood, the Army Corps of Engineers rerouted the river and channelized it just beyond the city’s current downtown. Pueblo, along with other entities such as the Corps of Engineers, has been working to improve the river corridor for fishing, habitat, and recreation through the city and upstream of the city. As part of this effort to restore the river, the City of Pueblo undertook the Arkansas River Corridor Legacy Project with the Corps of Engineers. Part of this project called for improved fish passage around low-head dams along the Arkansas River through Pueblo. These fish passage structures, in
many cases, are constructed similar to whitewater park structures, so the City seized on
the opportunity for dual use. In addition to the recreation and habitat improvements,
the city hoped to bring economic revitalization to its depressed downtown economy
that has suffered since the closure of rust-belt type industries in the 1980s.

“In an ongoing effort of economic development, the city has tried to…
create more amenities to attract people to the city.” [LW-08]

“We had a local paddler club in town that were advocating boating and
doing some sort of a boating course.” [LG-12]

Dating back to the 1970s, ideas for boating course projects had been proposed and
considered by city staff.

While the Legacy Project was in the planning phases, Senate Bill 216 was passed
by the Colorado General Assembly. Pueblo’s water attorney notified the City of the new
opportunity to apply for water rights and suggested that the City do so if its fish passage
structures could be considered a whitewater course as well.

“The idea came… through the attorneys.” [LG-12]

“They ended up contacting our office when they heard about the
Arkansas River Legacy Project and said, ‘do you guys have anything
related to kayak courses?’” [LG-12]

“I think we probably would have made a filing anyhow, so it was just
fortuitous that the legislature was acting at the same time.” [WA-02]

---

2 The city had also completed the Historic Arkansas Riverwalk Project which restored a section of the
historic Arkansas River channel and created a riverwalk in the middle of downtown, with the goal of
brining retail shops and restaurants to the downtown area.
While the primary Legacy Project focus remained habitat improvements along a large section of river, the City undertook the task of making its fish passage structures compatible with boating.

“We coordinated the design of the fish ladder to be compatible… as a fish ladder and as a whitewater drop structure.” [LG-12]

A secondary benefit of the structures is that they removed the hazards associated with low-head dams along the stretch of river through Pueblo.

“It’s a combination of getting rid of the hazard and creating… a whitewater park.” [RE-01]

As depicted in the photo below, the Pueblo Whitewater Park, which opened in 2005, is significantly different from many others. The section of the river that flows through Pueblo, which the Army Corps of Engineers channelized after the 1921 flood, boasts the world’s largest mural on the adjacent levy.

Figure 13: Arkansas River Legacy Whitewater Park, Pueblo
This urban whitewater park is markedly different from those in the high mountain streams such as in Vail and Breckenridge. As illustrated at the end of this chapter in the cross-case analysis of community demographics, Pueblo is a much larger community than other RICD communities. The Arkansas River through Pueblo is highly urbanized and a large levy lines the whitewater park. While many communities’ whitewater parks are located in downtowns, the much more highly urbanized downtown in Pueblo makes the look, feel, and construction of this course much different than other courses.

Over the past two decades, the lower Arkansas River has changed dramatically. Several large purchases of water rights from irrigators downstream of Pueblo have taken place and have meant significant exchanges of water to a reservoir upstream of Pueblo. This has led to a significant reduction in flows through the city and a concern over future depletions of water in the Arkansas.

“Water in the Arkansas River is being transported out of the Arkansas Valley for the benefit of other areas.” [LG-13]

Among the City’s concerns was that this reduction in flows could become significant enough to reduce water quality levels at the City’s wastewater treatment plant site, which would require significant investments in technology upgrades to adapt to lower dilution flow levels.

Due to the investment the City had put into the Legacy Project and the water issues present in the Arkansas River basin at the time, the City decided to ensure that the fish passage structures would be compatible as boating structures and filed for a
recreational water right in December of 2001. The original RICD application requested flows of 100 cfs from November through March and 500 cfs the rest of the year. The table below illustrates the reasons, according to those involved in the decision to file the application and in the legal case, why Pueblo decided to file for an RICD.

Table 13: Reasons for Water Right Application in Pueblo

<table>
<thead>
<tr>
<th>Reason</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect Kayak Course/Protect Investment</td>
<td>9</td>
<td>It was important that the city not put money into a project… without some protection of water in the project. [LG-07]</td>
</tr>
<tr>
<td>Economic Benefits of Kayak Course</td>
<td>2</td>
<td>In an ongoing effort of economic development, the city has tried to… create more amenities to attract people to the city. [LW-08]</td>
</tr>
<tr>
<td>Protect River/Instream Flows</td>
<td>3</td>
<td>There was a big concern about maintaining flows in the river. [LG-12]</td>
</tr>
<tr>
<td>Prevent Exchanges/Transbasin Diversions</td>
<td>2</td>
<td>Pueblo is just more than happy to keep Colorado Springs from ever taking anymore water. [WP-02]</td>
</tr>
<tr>
<td>Dilution Flows for Wastewater Treatment Plant</td>
<td>6</td>
<td>Even if it has another useful beneficial effect like diluting your wastewater flows… that doesn’t undermine the benefit of it as a kayak course. [WA-03]</td>
</tr>
</tbody>
</table>

Within the Pueblo community, boaters were highly supportive of the water right application, as was the City Council, local citizens, and The Pueblo Chieftain- the local newspaper.
“Everybody could understand long-term what the value of that would be.” [LG-12]

“There was a lot of support in the community.” [WA-02]

Flows on the Arkansas River and concerns over depletions of those flows are important topics to the local community and the local the newspaper, The Pueblo Chieftain, covers the issue continuously in both news and editorial content.

“The Chieftain takes a very, very strong position.” [WA-02]

“The editorial board strongly favored the RICD because it makes it more difficult for Colorado Springs to make exchanges.” [LW-08]

The first news coverage of the RICD application was published after the city council decision to apply for the RICD, but before the application was filed in November 2001. Over the ensuing five years between application and decree, a total of 36 stories specifically about Pueblo’s legal case appeared in the Chieftain. Over 68% of the content of these stories was supportive of the RICD application. Additionally, five supportive editorials were published during this period. Two editorials opposing Pueblo’s Intergovernmental Agreement discussed below were also published.

Within the Pueblo community, opposition to the RICD application came from two sources. First, the Pueblo Board of Water Works was initially opposed to the application. This city entity owns and manages Pueblo’s water rights. The City had not been involved in water rights cases prior to the RICD and only held water rights for the irrigation of municipal parks. The Board of Water Works was initially unsure whether the City, under the municipal charter, was permitted to file for water rights. Their
primary concern, however, was ensuring that the RICD would not injure the municipal water rights held by the board. Secondly, local irrigators were concerned that the RICD would preclude their ability to sell their water rights to municipal buyers by making exchanges of water through Pueblo more difficult.

Due to the highly contentious nature of the Arkansas River and the many potential diverters wanting to eventually exchange water from downstream of Pueblo and store it upstream of Pueblo for transport to Colorado Springs and the southern suburbs of Denver (Aurora primarily), there were 20 statements of opposition filed in Pueblo’s case. Extensive negotiations with each of the parties resulted in stipulated agreements with 15 of the parties and one withdrawn statement of opposition.

We sort of had to pull them down one by one. [WA-02]

The remaining objectors included Colorado Springs, Fountain, Aurora, and the Southeastern Colorado Water Conservancy District, with whom Pueblo negotiated and entered into two successive intergovernmental agreements (IGA). These IGAs ensured support from these entities for Pueblo’s RICD and subordinated many senior water rights to ensure adequate flows through Pueblo. In exchange, Pueblo agreed to withdraw its opposition to two pending water projects that these entities were planning.

“It was a negotiated resolution that took a long time to negotiate.” [WA-03]

“They... got those big water users to agree to subordinate their senior rights to the same levels of minimum flows, so they not only got a junior water right, they basically got a senior water right by negotiation.” [WA-02]
“[If] the city could get a decree for their water right, we could get… hopefully the city’s support on enlarging Pueblo Reservoir.” [LW-08]

Pueblo also agreed to ramp its flow regime slowly over the course of the year, instead of calling for 100 cfs from November through March and 500 cfs the rest of the year, to provide for easier management of the RICD. Pueblo’s RICD water right was decreed in April 2006.

After the extensive multi-party negotiations that Pueblo undertook, the City had to then negotiate with the CWCB.

“We spent the rest of the time, about a year, negotiating with the state.” [WA-02]

The CWCB was, however, described as obstructionist and adversarial in its negotiations with the City.

“The degree of opposition, particularly from the state water conservation board, was not apparent at the time of filing.” [WA-02]

“They attempted to be an obstacle.” [LG-12]

The board itself has internal prejudices against such water rights. [LG-07]

Pueblo eventually agreed to withdraw its request for nighttime stream flows under the RICD application in exchange for the CWCB’s approval of its application. The CWCB staff then agreed to recommend that the board appropriate an instream flow right for nighttime flow purposes in order to maintain adequate habitat and dilution flows through the city. In November 2006, however, the CWCB declined to appropriate these instream flows. The board did recommend approval of the RICD application, but

183
supporters of the RICD worry that there is still a significant risk to the Arkansas River due to the absence of minimum nighttime flows.

The City of Pueblo spent a total of $800,000 in legal fees associated with negotiating the RICD and the two IGAs. Roughly $400,000 of that is estimated to be directly related to RICD expenditures. The Legacy Project, in total, cost over $2 million dollars of city funds, grants, and Corps of Engineers funding. An estimated $300,000 of municipal funds were used to build the project.

“The cost for the project was relatively minimal, but the cost of protecting it with appropriate water rights... was substantial.” [LG-07]

“There was always a tug-of-war between moving forward and litigating versus settling.” [LG-07]

The city of Pueblo was the first and only community to secure a recreational in-channel water right on a major urban river in Colorado.

5.1.6 Gunnison

Gunnison, Colorado is located in the Gunnison River basin on Colorado’s Western Slope, 200 miles southwest of Denver. Between 1999 and 2000, Gunnison County decided to build a whitewater course, after many years of suggestions for such a project from the boating community3.

“It was totally generated from citizens in the community.” [LG-05]

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3 The idea was proposed as early as 1992 by local boaters and the outdoor recreation program at Western State College in Gunnison.
“The proponents of the course had gone to the county, asking the county to come up with the money to build the course and this happened years before the statute passed authorizing these types of water rights.” [LW-01]

“It was a group of recreationalists that had looked at a certain stretch of the Gunnison River and thought it would make a great whitewater park.” [LG-05]

The county wanted to promote tourism in the community as well as provide a local recreational amenity for the highly recreation-oriented community.

“There’s a big local population that uses the course during the week.” [WA-03]

The local community and boaters were heavily involved in the process to get the whitewater course constructed.

Figure 14: Gunnison River Whitewater Course
Upstream property owners were originally concerned about potential design issues that they worried would lead to winter icing and flooding. These concerns never proved significant and the course consisting of five structures on ¼ mile of the Gunnison River was constructed by Gunnison County. The course was eventually completed in 2003 after several significant setbacks involving contractual and land ownership issues.

The community of Gunnison, as well as the Upper Gunnison Water Conservancy District, is highly involved in water issues in Colorado. The Gunnison River basin is one of the targets of transmountain diversion projects for Front Range water needs.

“The Gunnison River is viewed as the last undeveloped substantial source of water supply on the Western Slope and its close enough to the [continental] divide that there are a lot of folks who look at projects that would take water out above this RICD.” [LW-01]

“There are major, major threats right now to the Gunnison basin.” [ER-03]

Additionally, the basin is subject to complex water rights requirements from downstream irrigators as well as the operation of the Blue Mesa Reservoirs which store water to meet Colorado’s compact requirements under the Colorado River Compact.

Based on the district’s membership in the Colorado Water Congress, a statewide water lobbying organization, the district was aware of the opportunity for recreational water rights on Colorado rivers. Additionally, the County Manager was aware of the issue of RICDs and the opportunity to obtain a water right for the proposed whitewater park. The County approached the district to discuss the possibility of the district applying for a water right for the course.
“The County approached the district about it.” [LG-05]

“The whitewater park came along as a discussion and then the instream flow water right discussion kind of flowed into that to be able to ensure that the park would be useable.” [LG-05]

“The plan was to go forward based on the general precedent of the Golden case, but the actual application wasn’t articulated until after the statute was passed.” [LW-04]

The manager of the district, who is now a state legislator, had been advocating for the district to take a more active role in recreational issues in the Gunnison basin and expand its role from that of a traditional water district, focused largely on irrigation water rights and storage development.

In the Gunnison community, there was no organized opposition to the idea of filing for a RICD. The district held public meetings and solicited input from boaters regarding the possible flow volume that would be requested.

“We spent lots of time in... public hearings, public meetings.” [LW-02]

Despite the fact that the district board largely consisted of irrigators and municipal interests, the board supported the application and undertook the legal process associated with the whitewater course project.

“The ag people took a step out front and... they were the ones that even put the motion on the table to file.” [LW-01]

“Our community as a whole was very, very supportive, which included the agricultural community.” [LW-02]

While the community was supportive of the water right application, citizens were not involved in the participating or lobbying on behalf of the RICD application.
“There were remarkably few kayakers… who showed up at these meetings.” [LW-04]

Participation was limited to a handful of outspoken recreationalists and boaters who took the lead of advocating for the RICD at district meetings. The district filed its RICD application in March of 2002, requesting flows up to 1500 cfs in June.

The local newspaper in Gunnison covered the legal process somewhat closely, publishing nine articles and one editorial on the subject. The editorial was strongly in favor of the RICD water right application and the news content was overwhelmingly supportive of the application, with 87% of content coded as positive. This coverage did not begin until the fall of 2001 when the decision to file the RICD application had been made by the district.

The table below illustrates the reasons, according to individuals involved in the decision process and the legal case, why the district decided to file for the RICD water right.
Table 14: Reasons for Water Right Application in Gunnison

<table>
<thead>
<tr>
<th>Reason</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect Kayak Course/Protect Investment</td>
<td>10</td>
<td>If they were going to make this investment, they’d like to know there was going to be water there. [WA-03]</td>
</tr>
<tr>
<td>Economic Benefits of Kayak Course</td>
<td>8</td>
<td>When you’re a tourist based economy, these are your competitors and if they have amenities that you don’t have, then you’ve lost some ability to be able to attract people. [LG-05]</td>
</tr>
<tr>
<td>Protect River</td>
<td>1</td>
<td>Trying to protect against further dewatering of the stream. [CO-04]</td>
</tr>
<tr>
<td>Prevent Transbasin Diversion</td>
<td>9</td>
<td>There has been a long history in Gunnison of fighting against transmountain diversion and so … anything that we could have in our toolbox to protect the watershed, the community is willing to do. [LG-05]</td>
</tr>
</tbody>
</table>

Due to the high flows requested for the RICD as well as limits the RICD would place on transmountain diversion projects, maximum utilization issues, and compact entitlement issues under the Colorado River Compact, the State of Colorado aggressively opposed the application.

“In a great big river like the Gunnison River, if you had a tiny little amount of water for the kayak course, it wouldn’t be a very attractive tourist option.” [WA-03]

“They claimed all of the water in the stream.” [CW-02]

“It was... probably half the hydrograph. We thought it should be less.” [CO-05]
“The big issue… was this notion that the real reason Gunnison was doing this was not because they wanted a water right, but because they wanted to try to stop transmountain diversions out of the Gunnison River.” [WA-03]

Of the ten original objectors to the RICD application, eight either stipulated out of the case or withdrew their objections.

“The stipulations with the individual parties mainly had provisions in there to address their particular… water rights and make sure that they were not injured.” [WA-03]

After the CWCB recommended denial of the RICD application in its hearing process, the State Engineer and the Colorado Water Conservation Board remained in the case and litigated it through trial and water court. The state agencies subsequently appealed the water court decision granting the water right to the Colorado Supreme Court and were described consistently as politically opposed to RICDs and obstructionist to Gunnison’s RICD application.

“It was a nightmare.” [LW-04]

“The CWCB was and is very aggressively opposed to recreational in-channel diversion water rights and they made every attempt at every level to block this.” [LW-04]

“There was a very adversarial relationship.” [LW-01]

In December 2004, Gunnison’s case was heard by the Colorado Supreme Court under the statutory guidelines of Senate Bill 216. Since the legislature had by this point established the ability of Colorado communities to obtain water rights for recreational in-channel purposes, the court was asked to decide on the merits of the case under these
guidelines. The court determined that the CWCB had overstepped its authority granted under the legislation but that the water court had also not fully considered the necessary criteria prior to granting the water right. This decision was issued in March of 2005 and the parties to the case then negotiated a settlement rather than re-litigate the case in water court.

“Rather than have another hearing before the water conservation board... we ended up with a settlement in that case.” [WA-03]

“At the end of the day everybody got together and settled the case.” [WA-03]

Under the negotiated settlement, the Gunnison RICD request was reduced to 1200 cfs during peak flows. The decree for Gunnison’s RICD was finalized in January 2006, nearly four years after application filing.

Subsequent to the decree for the RICD, the district entered a change of water right application in water court in May 2007. This change of water right application allows for minimal upstream development within the basin to ensure that the RICD does not prohibit development and to ensure that it complies with a long-negotiated agreement between the federal government, the Colorado River Water Conservation District, and the Upper Gunnison Water Conservancy District regarding the management of flows on the Upper Gunnison River in conjunction with operation of the Blue Mesa Reservoirs.
The Upper Gunnison Water Conservancy District invested $600,000 in litigating the RICD case. Gunnison County also invested $250,000 in the construction of the whitewater course.

“We had no idea that the costs would be so high… we felt strongly that the community wanted the water right to protect the water park and they were behind the water park and supported it.” [LW-02]

“Once you file a water right application, you need to be prepared to defend it all the way to the Colorado Supreme Court, and that’s what happened.” [LW-01]

The legal precedent set by the Gunnison case had widespread repercussions. The Gunnison case was the first written opinion on RICD water rights from the Colorado Supreme Court and established that there were still significant areas of uncertainty in the law as written. This led the state legislature to consider amending legislation on two separate occasions in 2005 and 2006.

5.1.7 Steamboat Springs

Steamboat Springs, Colorado built its first whitewater structure in 2001 and a second one in 2003 based on requests from local boaters. Steamboat Springs is a largely tourism dependent community, located 150 miles northwest of Denver in the Yampa River basin, that is focused around the ski resort in the winter and the Yampa River’s recreational amenities in the summer. It is not, however, like other ski resort communities in Colorado.
“Steamboat is one of the unique western towns where gunfights occurred and Ute Indians lived here on our riverbanks and... wild buffalo roamed free.” [LR-04]

“Steamboat may not have been the end of the world, but you could see it from here.” [EL-01]

The whitewater structures are adjacent to Steamboat’s downtown shopping and dining district on the mainstem of the Yampa River.

“It’s not unusual to see 3000 cfs running through there and the hole will be completely full of people.” [EL-01]

“The two holes... really make for one of the best venues in Colorado, if not the country or the world for kayaking.” [LR-04]

![Figure 15: Steamboat Springs Boating Park](image)

Private and non-profit donations largely contributed to the construction costs associated with the boating park.
Several community members including recreationalists and community leaders researched the possibility of obtaining a water right for the boating park once it had been built. Although no formal group or organization existed in Steamboat Springs, these activists comprised the core supporters for the construction of the whitewater park and application for an RICD.

“Sort of an activist group of people that were interested in it and I think the rest of the people were probably ambivalent.” [LW-09]

“The lead proponent of that was a council member.” [LW-05]

“I [council member] was probably the most vocal proponent of this.” [EL-01]

This council member read an article related to Golden’s legal case, which mentioned Glenn Porzak’s name and then contacted Porzak for advice on the issue. Steamboat Springs’ water counsel had previously mentioned the opportunity for obtaining in-channel water rights, but according to subjects was not supportive of the idea. The Steamboat Springs City Council invited Glenn Porzak and a local water attorney opposed to RICD water rights to present their opinions regarding a possible RICD application during the summer of 2003. Based on these presentations, the City Council decided to proceed with an application, but decided not to retain water counsel for the purpose.

“At lot of this happened before we got an attorney involved and so it was really grassroots.” [LG-17]
In October 2003, the same advocates who had originally proposed the idea asked the City Council to consider hiring Porzak for the RICD application. The City Council subsequently did so, and has since retained the Porzak firm for all water rights matters.

“We switched to Glenn because we felt that the other water attorneys that we had been using had a conflict of interest.” [EL-01]

In December of 2003, Steamboat Springs filed its RICD application requesting 1700 cfs at peak flows.

Within the Steamboat Springs community, recreation enthusiasts and environmentalists are described as being strongly in favor of the RICD application. The City Council was also strongly supportive. Steamboat Springs, however, still retains a significant agricultural sector. Local irrigators and rural residents viewed the RICD application as a power grab by the city.

“There’s a perception that the city is sort of a wealthier, more elite group of people… more concerned with things that are seen by people in the county as frivolous.” [LR-04]

“The city and a recreation water right personify a change in what’s going on up here.” [EL-01]

“Steamboat was the second most difficult because of the fact that the state was very effective in whipping up the opposition of some of the local ranchers.” [WA-10]

The Upper Yampa Water Conservancy District, the local water district, and its vocal board members also viewed it as a potential power grab and hindrance to future upstream development of water.

“The opposition was definitely fierce here in this community.” [LR-04]
“We thought they could do with a lot less [volume].” [LW-09]

The Steamboat Springs newspaper covered the RICD application several months prior to the filing. The paper provided substantial coverage from that point forward. Twenty-three articles directly related to Steamboat’s RICD application and case were published, along with nine opinion letters. Six of these opinion letters were supportive of the RICD application and over 56% of news content was supportive of the RICD.

“That paper’s so liberal that they’ll go with the city and the enviros… and the kayakers without listening.” [ES-02]

“I don’t remember them taking much of an editorial position on this.” [EL-01]

The table below illustrates the reasons given by individuals within the Steamboat Springs community for the RICD application filing.
Table 15: Reasons for Water Right Application in Steamboat Springs

<table>
<thead>
<tr>
<th>Reason</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect Kayak Course/</td>
<td>7</td>
<td>To protect the investment that we’ve made, not only… in the river, but the investment in the local economy. [EL-01]</td>
</tr>
<tr>
<td>Protect Investment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Benefits of Kayak</td>
<td>11</td>
<td>We have an economy… that’s driven by it and local tourism. [LR-04]</td>
</tr>
<tr>
<td>Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide Recreational Amenity</td>
<td>6</td>
<td>To maintain the recreational uses that were historic and ongoing. [LG-17]</td>
</tr>
<tr>
<td>Protect River</td>
<td>9</td>
<td>This is important to protect the river’s character. [EL-01]</td>
</tr>
<tr>
<td>Prevent Transbasin Diversion</td>
<td>7</td>
<td>There were corollary reasons… like it would help in staving off challenges from a transmountain diversion. [LG-17]</td>
</tr>
<tr>
<td>Control the River</td>
<td>2</td>
<td>The city wanted control… of development upstream. [ES-02]</td>
</tr>
</tbody>
</table>

The Yampa has historically been underappropriated, which means that diverters are able to take as much water as they need without administration of water rights as in most of Colorado. A significant concern was raised by local ranchers and the water district that the RICD would push the Yampa River upstream of Steamboat Springs into overappropriation and administration, which would entail mandated costs for local water users in order to install headgates and adjudicate water rights.
“We’ve been living in a paradise here in the Yampa Valley with lots of water.” [LR-04]

“If the river’s a free river, you can take whatever you want. You don’t need a water right at all.” [LW-09]

The possibility of transmountain diversions out of the Yampa is a concern for basin residents due to the remaining availability of water in the basin.

“That’s where everybody’s got their eyes on for future transmountain diversions.” [WA-10]

Others argue that this is not a major concern because of the wilderness areas that a potential transmountain diversion would have to cross and the corollary environmental impact statements that would be required for such a project. The Yampa River retains its natural hydrograph, unlike most Colorado rivers.

The legal case in Steamboat Springs proved to be particularly divisive and hard fought. Twenty-one statements of opposition were filed in the case, largely representing the interests of small upstream communities and local agricultural interests. Sixteen of those objectors agreed to stipulated agreements prior to trial, three did not participate, and the CWCB and the State Engineer litigated the case through water court.

“Steamboat didn’t really engage potential opposers.” [LW-09]

“We [Steamboat Springs] offered to negotiate from day one. They weren’t interested in negotiating. They [opposers] were interested in litigating.” [EL-01]
The primary legal issues of concern to the State included the transmountain diversion potential, the high volume of requested flows, and future upstream development of water.

After the CWCB recommended denial of the RICD application based on its public hearing, Steamboat Springs’ RICD case proceeded to water court in October of 2005. Again in this case, interview subjects describe the CWCB as obstructionist and opposed to RICD water rights.

“It was nothing but a political roadblock.” [EL-01]

“We were bumping up against political will.” [EL-01]

“They [CWCB] were a hindrance.” [LR-04]

After the State lost in water court, it did not appeal to the Colorado Supreme Court. Rather, the City and the CWCB negotiated for peak flows of 1400 cfs in lieu of an appeal. After the Steamboat Springs case, the state agencies did not fight any subsequent cases in water court.

“That’s when they threw in the towel.” [WA-10]

“We were so successful in district court that they have not since challenged a recreation water right.” [EL-01]

The cost of litigation to Steamboat Springs totaled $750,000, while the City only spent $42,400 on constructing one of the two holes (the second hole was donated by Friends of the Yampa, a local community group).

“There was definitely some sticker shock as far as the community was concerned.” [LR-04]
“We ended up spending a lot of money on this because of the aggressive opposition mounted by the state.” [LG-17]

The resolution of the Steamboat Springs case marked the end of significant opposition to RICD cases on the part of the CWCB.

5.1.8 Silverthorne

Silverthorne, Colorado is located almost 70 miles west of Denver, neighboring four of Colorado’s major ski resorts. The town, however, does not directly benefit from revenue from any of these ski resorts and so has tried to develop alternative sources of revenue from retail outlet stores as well as non-ski related recreational amenities.

“In the ‘80s and ‘90s Silverthorne set about to create a community for itself... so they began to focus on other forms of recreation.” [WA-11]

The Blue River, downstream of Dillon Reservoir which is Denver’s major municipal water supply, flows through Silverthorne and into the Colorado River basin.

Silverthorne was established as a construction camp for workers on the Dillon Reservoir project and then the Eisenhower Tunnel on Interstate 70. The town has attempted to create an identity for itself based largely on the Blue River flowing through town. The Blue River hosts Gold Medal trout fishing and significant river enhancement projects have been undertaken to improve the fishery habitat.

“We want to create a riverfront.” [LG-03]

“Silverthorne for a long time has been trying to do improvements to the Blue River.” [LG-18]
“We kind of see it as our main street.” [LG-18]

To provide an amenity for other user groups and to attempt to attract tourists, the Town of Silverthorne staff decided to include a whitewater park in its next phase of river enhancements.

“It just seemed to make sense to Silverthorne that that’s another recreational opportunity which in itself translates to an economic generator.” [LG-03]

“It just seemed like another logical user of the river that we hadn’t addressed.” [LG-18]

The Whitewater Park will consist of three structures and will be constructed in 2008. Silverthorne waited until obtaining a water right decree before beginning construction plans for its course.

Because Silverthorne is located immediately downstream from a major reservoir, flows in the river are a constant concern for the town. The town describes itself as the caretaker of the lower Blue River and works to continually improve the resource.

“The key for Silverthorne in everything we do related to the river… is to preserve the Blue River and enhance it.” [LG-18]

“We just are very diligently trying to protect the river in everything we do.” [LG-18]

The Blue River below Dillon Reservoir is highly overappropriated, so this task is often difficult.

“There’s not a whole lot of water available for new uses.” [WA-11]

“Lake Dillon is part of the Denver water supply system… they control the flows in the Blue River.” [LG-03]
Once the plan for a whitewater park was presented to Town Council and approved, city staff discussed the idea with legal counsel. A collective knowledge of RICD water rights between legal counsel and town staff resulted in discussions about a potential RICD application.

![Figure 16: Future Location of Blue River Whitewater Course, Silverthorne](image)

“We were aware that state law allowed for recreational in-channel diversions and we had sort of kicked around the idea for a number of years about whether to do it or not.” [LG-03]

“It was being talked about at a staff level, but we hadn’t done any designs or anything. We were just kind of brainstorming with the attorney and we presented it to council to see if they wanted us to pursue it.” [LG-18]

“It probably came as much from our water rights attorneys’ suggestions as a way to achieve what we were trying to achieve, which was a boating experience, without pushing the limits on the water right.” [LG-18]
Water counsel recommended filing an RICD application to ensure flows for the course. Staff and council were highly supportive of the idea. Silverthorne filed an application for water rights to maintain minimum boating flows of 100 cfs from May through September and 600 cfs for three holiday weekends a year (Memorial Day, Independence Day, and Labor Day) in December of 2004.

The following table provides a description of the reasons given by those involved in the decision and legal processes for the RICD application.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect Kayak Course/</td>
<td>3</td>
<td>They wanted a recreational flow to be sure that that flow out of the dam during those limited periods of time was protected. [WA-11]</td>
</tr>
<tr>
<td>Protect Investment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Benefits of</td>
<td>4</td>
<td>We have to make our decisions in part based on getting people to come here, stay here, eat here, recreate here. [LG-18]</td>
</tr>
<tr>
<td>Kayak Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide Recreational</td>
<td>1</td>
<td>It was an attempt to get really three weekends of kayak activity during the summer. [LG-03]</td>
</tr>
<tr>
<td>Amenity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protect the River</td>
<td>4</td>
<td>The key for Silverthorne in everything we do related to the river, whether it’s for fishing or boating or whatever is to preserve the Blue River and enhance it. [LG-18]</td>
</tr>
</tbody>
</table>
Within the Silverthorne community, there was largely support for the idea of the RICD water right. Local anglers, however, were somewhat opposed to the general idea of the Whitewater Park, fearing a competition of use of the river resource.

“They didn’t necessarily want to share the river.” [LG-03]

“There were no groups... once the word got out of what we were doing... the boating community was pretty positive about it.” [LG-18]

While the local newspaper in Silverthorne had covered the Breckenridge case substantially (just upstream from Silverthorne on the Blue River), only seven articles on Silverthorne’s case were published, all of them appearing after Silverthorne filed its RICD application. Over 66% of the news content in these articles was supportive of the RICD application.

During Silverthorne’s July 2005 CWCB hearing, unprecedented support for Silverthorne’s creative RICD application was voiced by the board.

“The Silverthorne application as being what they would like to see compared to what has happened on other rivers and other communities.” [WA-11]

The CWCB recommended approval of the application and did not oppose the RICD. Nine other objectors, including the Colorado River Water Conservation District and the Denver Water Board, opposed the application and did not negotiate an agreement until immediately prior to the scheduled water court trial in August of 2007. Issues dealt with in negotiations had to do with the operation of Dillon Reservoir and future development
and diversions out of the Blue River. Silverthorne’s RICD water right was decreed in
October 2007 for the requested flow levels.

Silverthorne budgeted $50,000 for legal costs associated with a possible trial and
$450,000 for construction of its whitewater course scheduled for 2008.

“Our interest is in allowing the community to put the money into the
facilities and not spend it on fighting.” [WA-11]

Silverthorne’s application, requesting flows only during peak holiday weekends, was a
new tactic used by an RICD community. Several of the elements of Silverthorne’s
application were considered during legislative negotiations for Senate Bill 37 in 2006,
including limits on the town’s ability to call its water right.

5.1.9 Chaffee County

Salida and Buena Vista, Colorado are located in Chaffee County, roughly 120
miles southwest of Denver in the Upper Arkansas Valley on the mainstem of the
Arkansas River. Salida hosts the longest running annual whitewater festival in the
country- Fib Ark, which takes place in June. Chaffee County also boasts the most rafted
stretch of river in the nation, the upper reaches of the Arkansas River.

“We’re the number one whitewater destination in the country.” [LR-02]

Whitewater rafting infuses tens of millions of dollars into local economies annually
(Colorado River Outfitters Association, 2006). This stretch of river through Chaffee
County, being the most rafted river in the United States, is home to numerous
whitewater outfitters and attracts many visitors.
The Upper Arkansas River basin deals with several unique water issues with regard to maintaining flows in the river. First, the basin is a receiving basin for the Frying-Pan Arkansas transmountain diversion project and therefore a significant amount of non-native water flows through the basin to be stored elsewhere. Second, as populations increase in Colorado Springs and Denver’s southern suburbs such as Aurora, diversions of water upstream of Chaffee County’s communities are increasingly proposed which could potentially reduce the flows in the Arkansas River through Chaffee County. These powerful water rights owners control much of the water that flows through Chaffee County and therefore the county is subject to political pressures and external influences to a large degree.

“Water owners still have the ability to completely upend this river.” [LR-01]

Finally, and most importantly for recreation purposes, a voluntary flow agreement exists between the major water owners on the river that maintains flows in the river for rafting season and for the local trout fishery.

“It’s way more valuable than what you could probably hope for with an RICD.” [LR-01]

“It allows the rafting community to operate and it allows the fishermen to still fish.” [WA-01]

“Those [water owners] are serious players and if they pull the plug on that program, it could be a real detriment to our county economy.” [EL-03]

This agreement, however, is voluntary and renewable annually.
“If it was a permanent flow management program, I doubt that Chaffee County would have even been looking at this.” [EL-03]

“The voluntary flow program is like a political tool for those people.” [LR-02]

“The reason the voluntary flow works is because people aren’t held hostage.” [LW-07]

Based on this reliance on whitewater boating, the City of Salida and the Town of Buena Vista have both built kayak courses on the Arkansas River, with the projects being largely initiated by local boaters.

“There was no public access to the river in town.” [EL-05]

“We hosted the national championships last year because we have one of the best waves in the state.” [LR-02]

“A true community grassroots type project… when they started there was no conversation about the RICD at all.” [LR-02]

Salida’s course was constructed in 2003, paid for by fundraising efforts of the Arkansas River Trust, a local non-profit.
Figure 17: Salida Boating Park, Chaffee County

Figure 18: Buena Vista Boating Park, Chaffee County
Buena Vista is continuing construction of its kayak course and is relying on donations from various entities for construction costs. Both courses will consist of two whitewater structures once complete, as well as walking trails and river enhancements.

Both Salida and Buena Vista are small communities and therefore unable to consider investing the funds into a legal water right process. Until construction of the Salida course was complete, the idea of an RICD application was not discussed. In 2004, however, a founder of the Arkansas River Trust and designer of the Salida Boating Park (who works for Gary Lacy’s whitewater engineering firm), initiated discussion about a potential RICD application based on the economic revitalization the Boating Park had spurred.

“The rejuvenation is definitely because of the whitewater park.” [LR-02]

“The initial proponents of it were the Arkansas River Trust.” [LR-01]

Working with other members of the Arkansas River Trust and county commissioners, proponents of the idea invited members of the Porzak law firm to discuss the idea and advise them how to proceed.

The idea to file an RICD application was then presented to the Chaffee County Commissioners. At the insistence of a local boating community leader, meetings were held with potential objectors to the case prior to filing the RICD application.

“Communication and relationships in this basin are the key to preserving flows and not legal wrangling.” [LR-01]

“It was totally different… than any other community that’s ever done it.” [LR-02]
“We did gather all of the players together in a big meeting and talked with them, told them what we were trying to accomplish and our concerns and I think they appreciated that.” [EL-03]

“Against everybody’s wishes, the county went ahead and filed.” [LR-01]

While the county had not previously been involved in water rights issues, the commissioners expressed support for the idea.

“The water issues got left to the water so-called experts because the rest of the people wouldn’t understand.” [EL-02]

“If the county isn’t paying attention to water rights, then I think they’re not providing much of a service to their constituents.” [EL-03]

Chaffee County decided to undertake the application process because neither community was individually able to do so. Additionally, the larger benefits of protecting flows throughout the county were attractive to community leaders. Between the two boating courses lies the most important stretch of river to the county’s whitewater rafting industry. Although it is not legally protected by the RICD, it is technically protected because there are no intervening diversions between the two courses that deplete the water significantly. The county filed its RICD application in December of 2004 for both boating parks, requesting flows of 1800 cfs during May and June and lower flows the rest of the year, and retained the Porzak firm as counsel. Within the Chaffee County community, citizens in Salida and Buena Vista as well as elected officials were supportive of the RICD application. The boating community and County Commissioners were also in support of the RICD. As in the case of Steamboat
Springs, however, the rural population differs significantly from the municipal population. Local ranchers and irrigators, as well as the Upper Arkansas Water Conservancy District, the local water district, were highly opposed to the application.

“That kind of rancher, older generation of opposition was pretty squawky for a while.” [LR-02]

“That county versus the water district is a power struggle.” [LR-02]

Initially, rafting outfitters were also opposed to the application, fearing that it might damage the voluntary flow program upon which they rely for their livelihood.

“The rafting community at the outset was a little concerned that that could threaten that agreement.” [EL-02]

“The outfitters were more concerned with the flow program.” [WA-01]

The rafting outfitters eventually became neutral and at times supported the idea.

The table below lists the reasons that individuals involved in the RICD process mentioned for the RICD application filing.
Table 17: Reasons for Water Right Application in Chaffee County

<table>
<thead>
<tr>
<th>Reason</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect Kayak Course/</td>
<td>1</td>
<td>It started becoming obvious to me that… if we were going to… try to protect flows through these parks, that we had to do it… now. [LR-02]</td>
</tr>
<tr>
<td>Protect Investment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Benefits of Kayak</td>
<td>19</td>
<td>That economic value was the driving force. [LR-02]</td>
</tr>
<tr>
<td>Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide Recreational Amenity</td>
<td>12</td>
<td>Their intentions are strictly to meet a local demand for a high quality recreational experience. [WA-07]</td>
</tr>
<tr>
<td>Protect the River</td>
<td>5</td>
<td>To protect the water in the valley. [EL-02]</td>
</tr>
<tr>
<td>Prevent Transbasin Diversions</td>
<td>5</td>
<td>To prevent these guys from being able to exchange and develop water in the future. [LW-07]</td>
</tr>
<tr>
<td>Have a Seat at the Table</td>
<td>5</td>
<td>We should have a seat at the table when water decisions are made. [LR-02]</td>
</tr>
</tbody>
</table>

Because Chaffee County held public meetings with potential objectors to the RICD, media coverage on the issue began prior to the application filing date. Over the course of the nearly two years that the case was pending, 30 articles were published on the Chaffee County case, as well as four editorials. Over 58% of news article content was supportive of the RICD water right, while 40% of editorials were supportive of the filing.
After the county filed its RICD application, it had its hearing before the CWCB. The board suggested that the county negotiate with objectors to the case and then return for a second hearing, which it did. Extensive negotiations with 17 objectors ensued, resulting in negotiated agreements with all parties to the case. These objectors primarily included municipal water owners and water conservancy districts that held water right interests in the Upper Arkansas. Almost a year after its initial CWCB hearing in May of 2005, the county appeared again before the CWCB in March of 2006. At this hearing, the CWCB recommended approval of the RICD water right based upon the extensive negotiated agreements and resulting memorandum of understanding among the parties to the case. Participants in the process in Chaffee County describe the CWCB as remaining opposed to RICDs, but respectful of the local negotiations that took place.

“They were respectful of the work that was going on here, the communication.” [LR-01]

“The Chaffee County case is a real good example of how that board is evolving on this issue.” [WA-01]

Significant legal issues presented in this case included the overappropriation of the river and the argument that there was no further capacity for upstream exchanges, which would make the RICD meaningless.

“In an overappropriated system like the Arkansas, there is no upstream water to call by the RICD.” [LW-07]

The operation of senior exchanges also required significant negotiations. Finally, the status of the voluntary flow program was important to negotiations, with the State
attempting to leverage the flow program in exchange for RICD concessions.

Negotiations resulted in a five year voluntary flow agreement rather than a year-to-year agreement. In exchange for support, Chaffee County conceded to reduce its flow demands, allowing for drought recovery years and variable flows depending on drought scenarios.

“In its initial form, it may have prevented some future exchanges… there’s so many carve-outs now that I think it doesn’t even do that.” [LR-01]

“We have the biggest one.” [EL-02]

Chaffee County spent approximately $250,000 on legal fees associated with the RICD application. In contrast, the Salida Boating Park cost approximately $400,000, while the Buena Vista Boating Park is still being constructed.

“It was a small price to pay for the protection it’s going to give… Chaffee County.” [EL-02]

“We thought the RICD was a good investment.” [EL-03]

The result of the extensive multi-party negotiations was a negotiated RICD with peak flows in average years of 1800 cfs, the largest RICD water right in Colorado.

5.1.10 Avon

Avon, Colorado, 106 miles west of Denver on Colorado’s Western Slope, built its whitewater course on the Eagle River, in the Colorado River basin, in 2006. Avon’s local economy is largely focused on recreation and tourism related to Beaver Creek ski resort and corollary amenities. Local boaters had approached the town, requesting a
whitewater recreation project. Avon coincidentally had intentions to improve the urban river habitat through town with a river corridor improvement project and river recreation amenities. In response to local interests, town council members proposed the project idea.

“Here we have an urbanized river corridor... and so what we’re doing is... a positive.” [EL-06]

“We probably wouldn’t have done it if it wasn’t such a good spot.” [EL-06]

“Avon wanted this to be as natural as possible.” [EL-06]

The whitewater course includes three structures customized to various skill levels.

Figure 19: Avon Whitewater Course
Avon, located 10 miles west of Vail, is a highly recreation focused community. Town Council members collectively understood the opportunity to acquire recreational water rights and two members of council proposed the idea once the whitewater course project had been initiated.

“They are very up to speed on water rights and RICDs.” [WA-08]

“The idea actually came from one of the council members.” [LG-22]

“It’s so well known as an option or a tool that… how could it not come up?” [EL-06]

The Town Council subsequently approached their water counsel to initiate an RICD application. Within the local community, council members, town staff, and local citizens had voiced support for the RICD application.

“There’s just a lot of support in the community for a kayaking course.” [WA-08]

“People in the town are water recreation oriented.” [EL-06]

There was no organized opposition to the water right filing within the community. The Town of Avon decided to file for the RICD water right in December 2005 to purposely avoid the risk of pending legislative changes during the 2006 legislative session. The RICD application requested flows up to 1400 cfs in May, June, and July.

“That’s the minimum amount of water that we need to make it do what we want it to do, which is to create these kind of waves that allow kayakers to do aerial moves.” [WA-08]

“That was the lowest number based on the hydraulic analysis that it would really function.” [WA-08]
The table below details the reasons why the Town of Avon, according to participants in the process, made the decision to file for the RICD water right.

**Table 18: Reasons for Water Right Application in Avon**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect Kayak Course/ Protect Investment</td>
<td>8</td>
<td>If we were going to make an investment in the actual physical construction… getting a water right to ensure that your investment continues to work is just a good strategy. [EL-06]</td>
</tr>
<tr>
<td>Economic Benefits of Kayak Course</td>
<td>5</td>
<td>It’s good for locals; it’s good for visitors; it’s good for the general economy. [EL-06]</td>
</tr>
<tr>
<td>Provide Recreational Amenity</td>
<td>3</td>
<td>We’re all pretty resort, recreation driven up here, so I think most people see this as a huge asset or benefit to the region. [LG-15]</td>
</tr>
<tr>
<td>Protect the River</td>
<td>3</td>
<td>It’s not just for the purpose of the kayak course, but we’d like to see water in the river. [LG-22]</td>
</tr>
<tr>
<td>Prevent Transbasin Diversions</td>
<td>1</td>
<td>It’s what happens in the future and that’s where the transbasin diversions come in. [WA-08]</td>
</tr>
<tr>
<td>Have a Seat at the Table</td>
<td>1</td>
<td>A place at the table. [WA-08]</td>
</tr>
</tbody>
</table>

While there is some discussion about potential transmountain diversion potential out of the headwaters of the Eagle River, the local water concerns are primarily focused on upstream development.
Avon shares a daily newspaper with Vail, so coverage of RICD water rights issues was consistent starting in 2002. Twenty articles related directly to Avon’s whitewater course were published, but no articles directly related to Avon’s RICD application were published.

Less than one year after Avon’s application filing, the town held its CWCB hearing, during which the board recommended approval of the RICD water right. Participants in the legal process in Avon’s case describe the CWCB as supportive of the water right and the whitewater project. Some participants attribute this positive relationship to the tactics that Avon used in working with the CWCB, while others stated that the hard-fought cases that preceded Avon’s paved the way for easier relations with the CWCB.

“They have been supportive because we have been responsive.” [WA-08]

“It seemed like a very good process.” [LG-15]

“We started out working with them right up front.” [LG-22]

“I told Glenn Porzak that I appreciated him wearing them down.” [WA-08]

Thirteen statements of opposition were filed to Avon’s RICD application, primarily by municipalities and developments upstream of Avon (or that hold water rights upstream of Avon). The town was able to negotiate with each objector to the case in order to avoid trial. The primary concerns of objectors included individual water rights injury matters and allowances for future development of water rights.
“They want to make sure that our RICD is not used to prevent them from doing future exchanges.” [WA-08]

“The others are pretty much the same, that we don’t affect their ability to utilize their existing water rights.” [LG-22]

Avon’s water right is expected to be decreed in April of 2008 for 1400 cfs. The Town is waiting for the water court to officially approve the agreement to which all parties have agreed.

The Town of Avon budgeted $208,000 for the legal costs associated with the RICD filing. In contrast, the town spent $560,000 on constructing the whitewater course. While the water right was viewed as an important protective measure for Avon’s future, the town did not approach the legal application in the same manner that many other towns had.

“We always knew that if it went badly or was going badly, we could always drop out and withdraw.” [EL-06]

Avon’s RICD case illustrates the changing nature of the process of RICD water right applications in Colorado. Communities have generally faced less opposition from state agencies in recent cases than in the early RICD cases. Additionally, legal and statutory precedent appears to have become much clearer and is therefore less prone to controversy, especially with the Supreme Court decision in the Gunnison case in 2005 and the passage of Senate Bill 37 in 2006.
5.1.11 Durango

Durango, Colorado is located in the state’s southwestern corner, 337 miles from Denver. The city is located in the Dolores/San Miguel basin, on the Animas River. The city is surrounded by rural communities and traditional water users, but is a highly recreation-oriented community, relying on various forms of tourism, including use of the river.

“Tourism is a third of our economy.” [EL-07]

“We have a fairly strong rafting segment to our local economy.” [LG-16]

The Animas River has abundant flows, but infrastructure to store and divert water has historically challenged water users. Some argue that due to the underappropriated nature of the river, transmountain diversion projects could threaten the basin in the future.

“It’s not inconceivable that somebody would at some point in the future… contemplate a transbasin diversion.” [LG-16]

Others argue that the basin is too remote for Front Range interests to seriously consider a major diversion project.

“It’s just not close enough to where the demand is and there’s far more water in other rivers… that would be a lot easier to take to the Front Range.” [ES-01]

Satisfying compact obligations with New Mexico, the Southern Ute Indians, and meeting competing demands from irrigators, municipalities, and an increasing recreation economy are issues that this basin is currently dealing with.
In 1990, Durango built one of the early whitewater courses in Colorado.

“Beginning 15 years ago or so it became a pretty popular place for people to kayak and canoe and tube.” [LG-16]

“The way kayaking actually started on the river was just using the natural configuration of the river.” [LG-16]

Local boaters formed a task force to help the City maintain the informal kayak course and focus on issues related to the Animas River. In 2004, this task force requested that the City of Durango consider an RICD application to protect flows in the Animas River.

The City water commission had also discussed the idea of obtaining an RICD.

“I think some people… involved in river recreation wanted to make sure that with the new development and new demands for water that there would always be water available in the river. Those folks urged through our various boards and commissions.” [LG-16]

“They had expressed an interest in… protecting the flows in the river for recreation and so we began to explore and talk about it.” [LG-19]

Knowledge of RICD water rights emerged in Durango after the City’s water attorney notified city staff about Senate Bill 216 and the new allowance for recreational in-channel water rights in 2001.

“Back in 2001… [our water attorney] called me to let me know that there was new legislation passed that allowed for communities to seek water rights for recreational purposes.” [LG-21]

There was also a collective knowledge on the topic of RICD water rights by this point in time.

Based on these staff-level conversations, the idea was presented to City Council. The council then contacted the City’s water attorney to discuss the idea. Additionally,
the City and the Southwestern Colorado Water Conservation District, contacted the
CWCB and invited them to come to Durango to present on the topic of RICD water
rights.

“Almost two years before the City filed, Southwest and the City jointly
sponsored a workshop because we didn’t know anything about RICDs…
we spent the next year and a half trying to work out some of these
issues.” [LW-03]

In July 2005, the City of Durango held a study session on the topic of RICDs and
subsequently approved the application for an RICD water right. The City waited until
February 2006 to file its RICD application in order to give upstream water users in the
basin an opportunity to file on unadjudicated water rights that they had been
historically using.

“We did some outreach… and let them know why we were filing for the
RICD… that gave people more time to file and get their water rights.”
[LG-19]

The City, however, wanted to file before Senate Bill 37 took effect in June 2006.

“They wanted to file before the new legislation… it was mostly the
uncertainty.” [WA-06]

The City filed an RICD application requesting flows up to 1400 cfs in June, varying
throughout the remainder of the year.

The structures in Smelter Rapids, the existing course, are not the permanent
features required under Senate Bill 216.

“One of the requirements is to have structures that are different from
what we have now, because we just have pretty much a pile of rocks.”
[LG-19]
The City of Durango, therefore, plans to construct five permanent whitewater structures in place of its current course as early as 2009 and was waiting for approval of its water right before proceeding with infrastructure development. Local boaters were highly supportive of the whitewater course project.

“You do have a fairly active kayaking community and... really just want to see some improvements.” [ES-01]

Support for the RICD application is relatively consistent in the city of Durango, but like the cases of Steamboat Springs and Chaffee County, surrounding rural communities and residents were opposed to the application.

“We had pretty good involvement because people... like the river and it’s very important to the community.” [LG-19]

“There are some people that are opposed to the water right for one reason or another.” [LG-21]

“Water’s for agriculture. It’s not a recreational thing.” [LG-16]

“It’s heavy-handed and it’s unnecessary and... the application that the City filed went way beyond what we needed.” [EL-07]

Additionally, the state senator from Durango’s district is opposed to the idea of filing for an RICD due what he calls an unnecessary restriction on upstream development. One city council member was also reluctant to support the RICD application because she believed that the application requested more than the city needed for recreational uses.
Table 19: Reasons for Water Right Application in Durango

<table>
<thead>
<tr>
<th>Reason</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect Kayak Course/ Protect Investment</td>
<td>4</td>
<td>The City did not want to invest large sums of money into a water park feature that may not be useful in the future. [LG-21]</td>
</tr>
<tr>
<td>Economic Benefits of Kayak Course</td>
<td>7</td>
<td>The council and the community recognized the importance of the river and the health of the river to our economy. [LG-19]</td>
</tr>
<tr>
<td>Protect the River</td>
<td>6</td>
<td>They want to file on the whole river to protect it. [ES-01]</td>
</tr>
<tr>
<td>Prevent Transbasin Diversions</td>
<td>1</td>
<td>It’s not inconceivable that somebody would at some point in the future… contemplate a transbasin diversion. [LG-16]</td>
</tr>
</tbody>
</table>

The table above illustrates the reasons, according to those involved in the RICD process in Durango, why the City filed for an RICD water right.

Media coverage within the local community was consistent and substantial. Because the City held an open study session and invited the CWCB to present on RICD water rights, the idea of applying for an RICD was public knowledge prior to the application filing. The first news articles on the subject appeared in the newspaper in June of 2004, a year and eight months prior to the RICD filing. Editorials were also published during this intervening time period and included four editorials supportive of the application. News article content was significantly less supportive than in other
communities, with less than 40% of paragraph content coded as supportive of the RICD application.

There was a significant amount of philosophical opposition to the Durango RICD application, as well as legal opposition to the case. Forty-six statements of opposition were filed to Durango’s RICD application. These objectors included upstream communities and development interests as well as local agricultural water users. Significant legal issues that had to be dealt with include potential compact impairment issues; since the city is only 21 miles upstream of the New Mexico Stateline, the CWCB was concerned that the RICD would prevent Colorado from being able to fully utilize its compact entitlements. Additionally, future upstream in-basin development is important to neighboring water users and allowances for future development had to be negotiated in this case. Finally, the State and neighboring water users were concerned that the volume of flow requested by the City of Durango will push the Animas River into administration (overappropriation). While the requested 1400 cfs in June was granted, restrictions were negotiated that protect upstream users.

“The flow rates are too high according to the objectors… the other big concern is upstream future uses and how to allow for some level.” [WA-06]

“They filed basically on the whole river.” [ES-01]

“This RICD is a humongous water right… it’s just about as big a change in water rights as you can get.” [LW-03]

“Essentially precludes any further use in Colorado and delivers it to New Mexico.” [LW-03]
“We aren’t going to impact the compact.” [LG-19]

Water experts in the state argued that this was the first test case of the CWCB’s compact impairment argument that it has been employing since Golden’s trial, although it did not appear to make a difference in the resolution of the case.

“If there’s one thing that could actually preclude them from getting a water right it would probably be that.” [LW-03]

Despite the fact that the CWCB recommended denial of Durango’s RICD request, participants in Durango’s RICD case described the CWCB as willing to negotiate, contrary to the depiction of the agency in earlier RICD cases.

“They’re trying to look at the big picture of water in Colorado and we’re looking at the big picture of water in the City of Durango.” [LG-19]

“They opposed our RICD, but trying to come up with a compromise.” [LG-19]

“We have a working relationship with the CWCB and we haven’t gotten to the point where we don’t.” [WA-06]

Durango budgeted $300,000 for trial and legal fees for the RICD application, but did not have to spend this entire amount due to the fact that the City negotiated with objectors prior to trial. In contrast, the City budgeted at least $600,000 for its whitewater course improvements, which will be completed in 2008-2009.

“The city council has always wanted us to try to negotiate a settlement of this water right and... to try to avoid a trial, a costly non-productive trial.” [LG-21]
This case was predicted by many interview subjects to be a landmark case because of the compact impairment issue, but the case was resolved without trial or appeal. The resolution of Durango’s case without a trial in water court demonstrates further the changing nature of RICD water rights in Colorado.

5.1.12 Carbondale

Carbondale, Colorado is a recreation-oriented community on the Roaring Fork River, downstream of Aspen, 170 miles west of Denver in the Colorado River basin. Recreation, tourism, and resort issues related to both water use and economic development are important considerations in Carbondale’s community planning process.

“This valley is not dominated by cattle ranching interests anymore. It is dominated by recreational resort uses.” [WA-04]

The Town’s former manager, who is now a planning consultant, organized a group of community members to lobby the town to build a large-scale park project including whitewater features.

“I met with some interested folks in Carbondale about trying to get a project organized.” [LR-05]

“I went to Carbondale with a kind of proposal... they finally decided to put some money up for some studies.” [LR-05]

“He’s [former manager] the one who brought it to the forefront and planted the seed.” [LG-14]
This proposed park project is located at the gateway to the town, at the intersection of major roads. The Gateway Park concept was eventually accepted by the Town for inclusion as a future park project based on the potential tourism revenue benefits it could bring to Carbondale.

“The economic aspect… became a fairly strong theme during the discussions.” [LR-05]

“The offshoot of all those dollars would trickle down through the local economy.” [LG-14]

Figure 20: Gateway Park, Carbondale

The design and inclusion of whitewater park features in the larger park plan is still somewhat uncertain.
Early in the Gateway Park project discussion the idea of an RICD application was included.

“The specific question of the RICD was considered more of a technical detail.” [EL-04]

The RICD idea came out of a collective understanding of the water right opportunity among community decision makers, as well as the Town’s water attorney’s knowledge of the option of acquiring an RICD.

“I think it was a collective understanding.” [WA-04]

“None of us people who practice water law in Colorado hadn’t at least generally heard of… the Golden case… and the litigation that occurred.” [WA-04]

“Fairly early on in the process that concept of RICD was there.” [LR-05]

The Town filed its RICD application in May 2006 to avoid new statutory requirements under Senate Bill 37.

“There was a legislative change pending.” [WA-04]

“They wanted to have their foot in the door before that took effect, so that kind of got them motivated.” [LR-05]

“Better to be the last town to come through under an existing system than the first down under a new system.” [WA-04]

The RICD application requests flows up to 1600 cfs in June, varying through the rest of the year.

Reasons for Carbondale’s RICD application, according to participants in the process, are listed in the table below.
Table 20: Reasons for Water Right Application in Carbondale

<table>
<thead>
<tr>
<th>Reason</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect Kayak Course/</td>
<td>4</td>
<td>They wanted to ensure that there’s an adequate essentially permanent supply of water for the whitewater park. [LR-05]</td>
</tr>
<tr>
<td>Protect Investment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Benefits of Kayak Course</td>
<td>5</td>
<td>The offshoot of all those dollars would trickle down through the local economy. [LG-14]</td>
</tr>
<tr>
<td>Prevent Transbasin Diversions</td>
<td>2</td>
<td>If you want to do a transmountain diversion, it becomes much more difficult. [LR-05]</td>
</tr>
</tbody>
</table>

Within the town of Carbondale there is considerable support for the Gateway Park project and the idea of the RICD filing. Town Trustees and local boaters were also supportive of the idea.

“There was very strong community-wide support.” [LR-05]

There was no organized or vocal opposition within the community to the RICD application, but there was initial opposition from anglers to the proposed whitewater course.

“Just as soon not share the river… have it for their private fishing hole.” [RE-01]

“They see a conflict of space.” [LG-14]

Despite general support for the RICD application, there has not been public involvement in the process.
“It’s sort of one of those water rights things which seems to be abstract and boring.” [LR-05]

There has been minimal local media coverage of the RICD application. The three articles that have been published include one related solely to the Gateway Park project. Of the articles published, almost 88% of news content was supportive of the RICD application. One article was published a month prior to the Town’s RICD application filing, but after the Town’s decision to file an RICD application had already been made.

Carbondale’s legal application is in the preliminary phases of negotiation. The Town has not been through the CWCB hearing process or negotiations with objectors to the case. Objectors include the State and several local water rights owners. While all legal objections are seriously considered in negotiations, Carbondale does not face significant or unusual opposition to its RICD application.

“We have a very finite, small, manageable level of objection.” [WA-04]

“My overall goal is consensus and avoiding the pitfalls of litigation.” [WA-04]

To that end, talks have been held with the CWCB to address issues early in the process and expedite future negotiations. The CWCB has been described by participants as willing to negotiate with the Town of Carbondale.

“Carbondale... has taken a more cooperative and proactive approach to date.” [WA-04]

“I reached out to them early and they reached back.” [WA-04]

“We’ve been entirely straightforward and transparent with the CWCB.” [EL-04]
Based on preliminary designs, the whitewater course, when constructed, will include six structures. Since it is part of the larger Gateway Park project, walking trails and other recreational amenities will be built alongside the whitewater course. Funding for other recreational projects is consuming community funding for recreational infrastructure planning currently, but Carbondale plans to design and construct the project as funds come available.

The Town has budgeted $70,000 for the legal expenses associated with the RICD application. In contrast, the Town could spend between $500,000 and $1 million on the Gateway Park project, including the whitewater features.

### 5.2 Non- Adopters

The cases of non-adopters of recreational water rights are detailed below. These cases, as described in chapter four, were chosen from a list of all Colorado communities that have built a whitewater kayak course or have definite plans to do so (one of the statutory requirements for obtaining a recreational water right in Colorado)\(^4\). The communities that had applied for a recreational water right for their course were included in the list of adopters, above. These case studies were conducted much like the case studies above; however, since the process of applying for the water right was absent, the data collected were much less in-depth than in the adopter cases.

\(^4\) The list of all adopters and non-adopters numbered 18 communities, so all communities that have built a whitewater course (or plan to do so) but have not applied for an RICD are included as non-adopters.
The following case study summaries outline 1) the process the community went through to build the whitewater kayak course, 2) the reasons the community built the course, 3) whether there was discussion within the community to apply for a recreational water right for the course, 4) the reasons the community decided not to apply for the recreational water right, and 5) whether there was local media coverage of the issue. Of these six non-adopter communities, four are located along Colorado’s Front Range corridor. This is significantly different from the RICD community universe in which only three of twelve are located on the Front Range. The map below shows the location of these non-adopter communities.

Figure 21: RICD Non-Adopter Communities in Colorado
5.2.1 Denver

Denver constructed a whitewater course on the South Platte River, adjacent to downtown. The course was primarily built as a flood control mechanism, erosion control tool, and to also provide a recreational amenity for Denver residents. There has been no discussion within the City of Denver’s staff, Denver Water Board (that owns and manages Denver’s water rights and supply), or significant community groups about the possibility of applying for an RICD water right for the course.

There has been significant coverage in Denver media on the issue of RICD water rights in Colorado, but none on the subject of a possible RICD for Denver’s course. Sixty-five articles on various legal cases across Colorado and the several legislative changes were published in Denver’s two daily newspapers. The idea of an RICD application, however, has not been discussed in the print media.

The primary reasons that the City of Denver and Denver Water Board have not undertaken to file for an RICD on the South Platte River for the whitewater course include the fact that Denver Water does not consider itself in the recreation business. Additionally, recreational water rights are not necessary because flows on the South Platte River are controlled by downstream irrigation water users, so some amount of water is generally flowing through Denver.

“There is also an agreement in place to maintain minimum flows on this stretch of river.” [LG-23]

The senior water right on the river for much of the year is at or downstream of the Burlington Ditch headgate and so it’s already calling water down the river through this stretch.” [LG-23]
“Through the Mayor’s South Platte River Commission, an agreement was reached with Denver Water to always maintain 130 cfs in the river for recreational purposes.” [LG-24]

Finally, the whitewater course is not a central feature to Denver’s economy or recreation planning.

“When there is water, there is water. When there isn’t, that’s the way it goes.” [LG-24]

For these reasons, the City states that an RICD water right is unnecessary and undesirable in Denver.

5.2.2 Boulder

Gary Lacy built a kayak course in Boulder, Colorado in the 1980s to provide a recreational amenity for the residents of Boulder. The course is located adjacent to walking trails that are central to the Boulder community. This recreation oriented community uses amenities such as these regularly. The course is located on Boulder Creek, which does not have high flows for much of the year. Despite this fact, the idea of filing for an RICD water right has not been brought up in the Boulder community or among the city staff. Throughout the course of the RICD legal battles in Colorado, only one article was published in the Boulder newspaper on the subject of RICDs generally.

City of Boulder staff members describe the idea of an RICD as unnecessary in Boulder due to the local water picture.

“The city is the major diverter from the upper portions of the creek in order to meet municipal water supply needs.” [LG-25]
“Once the city’s reservoirs in the upper basin are filled in the spring... the streamflow is pretty much uncontrolled... this is sufficient for use at the kayak park.” [LG-25]

“Many of the most senior water rights on the creek are located downstream of the kayak park, so the water is called through to satisfy these rights.” [LG-25]

“There are a limited number of diversions upstream from the mouth of the canyon and a limited potential to develop any new upstream diversions.” [LG-25]

Despite the fact that Boulder is a recreation-oriented community and invests significant city funds into innovative projects, the RICD water right is considered unnecessary in this instance due to the local water rights picture.

5.2.3 Fort Collins

Fort Collins has not yet built its kayak course, but plans to do so as soon as funding has been raised by a local boating group for the project. In Fort Collins, local boaters approached the City and asked about the possibility of building the course. While the City did not have funding for such a project, the City agreed to manage and construct the course if the group could fundraise to pay for the project.

“They were willing to fundraise to build it... we think its nice just to have a diversity of recreational facilities.” [LG-11]

“If they provide the funding, we’ll do the planning... then we’ll operate it as a City facility.” [LG-11]

The City and local boaters consider the course to have potential economic benefits and state that it will provide a local recreational amenity for residents of Fort Collins.
“At least perceived economic development advantages.” [LG-11]

“If it’s a nice enough course, kayakers… will come from outside of the city.” [LG-11]

The project has been supported by city staff, but community support has not been solicited or gauged as part of the project. Three articles have been published in the local newspaper about the whitewater course and the potential for an RICD application. The content of these articles has been 64% supportive of the idea.

The idea of applying for an RICD water right, however, has not been discussed among city staff or local boaters. The reasons proposed for this fact are related to the role that the course will play in the community as well as the local water picture.

“We didn’t see it as an issue.” [LG-11]

Since the water right is not central to the operation of the whitewater course and there is sufficient flow in the Cache Le Poudre River\(^5\) for the level of kayaking that will take place in Fort Collins, the RICD is not necessary. Additionally, there is significant water storage and diversion upstream of the course and an RICD water right application may entail significant political and legal battles.

### 5.2.4 Lyons

Lyons, Colorado is located on the St. Vrain River upstream of Longmont. The Town constructed a whitewater course and river corridor improvement to provide an...\(^5\)Like in other communities, this is largely due to downstream senior users, but in Fort Collins’ case, the downstream senior users include the City of Greeley as well as irrigators. Recall from chapter three that Fort Collins also owns a small recreational water right of 55 cfs from its early legal case.
economic stimulus and improve river access and use. The facilities now generate significant economic benefits for the small community, drawing visitors from neighboring communities such as Longmont and Boulder.

“Lyons has a really nice kayak course... they really promote the tourism aspect.” [LG-06]

“[Before the course] the river was pretty inaccessible and unsafe.” [LG-04]

The Town built the course primarily with grant funding, providing $30,000 of town money as matching funds.

In Lyons, there was discussion about the possibility of an RICD water right in conjunction with the town’s new river facilities. The Town decided, however, that such a legal process would be more of a detriment to the project than a benefit. Due to the potential legal costs, sufficient flows in the St. Vrain, and the local water rights picture, the RICD was viewed as unnecessary and potentially damaging.

“It’s very costly to apply for recreational water rights... at the time would have hindered our project.” [LG-04]

“Our flows have always been pretty decent for our features.” [LG-04]

“There’s just really not much of a prospect that there could be any [diversions] up above there.” [LG-13]

“It’s located upstream of virtually all of the diversions in the St. Vrain basin.” [LW-10]

Additionally, Longmont’s primary water supply reservoir is located upstream of Lyons and Longmont’s water treatment facility is located downstream of Lyons, so all water being used for Longmont’s municipal water supply will flow through Lyons on its way...
to the Longmont intake. While the local newspapers have published several articles related to the whitewater park and river improvements, none of those articles have mentioned recreational water rights.

5.2.5 Glenwood Springs

Glenwood Springs, a recreation-based town on the Colorado River west of Denver almost 160 miles, began construction of the first phase of its new whitewater course in December 2007. The course is scheduled to be completed on April 15, 2008. Local boaters initially approached the City with the idea of the course after developing a conceptual plan and doing initial fundraising.

“There was a group of citizens, avid kayakers specifically, who were interested in building a whitewater park.” [LG-10]

“They came before the city council and they made their presentation and asked for the City’s help.” [LG-10]

The location that was initially proposed for the course was contested by the Glenwood Springs Hot Springs Pool and Lodge, which draws significant tourism to the local area. The Hot Springs’ concern was that by building in the proposed location, the construction could puncture the Leadville limestone aquifer that feeds the local hot springs. When the boaters selected a new location on the Colorado River, the Hot Springs supported the project and donated funds to help build the course.

The whitewater course is viewed as a potential economic stimulus for the community as well as a recreational amenity for Glenwood Springs’ highly recreation-
oriented residents. The local newspaper has published four articles related to the
whitewater course project and the issue of RICD water rights generally, but has not
published articles related to a Glenwood Springs RICD application. The idea of filing
for an RICD water right was discussed within the community and city staff, but
according to the city manager, nothing ever came of that discussion.

“There were a lot of individuals who were sort of bantering the idea
around, but it never got past that.” [LG-10]

Due to the change of location of the course, potential costs associated with the RICD
filing, and local water rights picture, the RICD is no longer a significant concern.
Because the senior water rights on the Colorado River are downstream of the
whitewater course and Colorado River Compact obligations would override any RICD
water right, the issue is less important than it might be on other rivers.

“The RICD isn’t critical for the success of that park.” [LG-10]

“The Whitewater Park is now downstream of the confluence of the
Roaring Fork and the Colorado, so we have flows from both rivers now
basically providing the basis for this park.” [LG-10]

“All these people are having to spend money to fight for these things…
let’s use the resources that we have to try to get something done rather
than fight.” [LG-10]

The whitewater course in Glenwood Springs will be the first course to be constructed on
the mainstem of the Colorado River.
5.2.6 Palisade

Palisade, Colorado is located on the Colorado River, downstream of Glenwood Springs. Its whitewater course project was cancelled in 2007, but it provides an additional non-adopter case example. Palisade is a small town without the revenue to invest in a major whitewater course project. The Bureau of Reclamation, however, was constructing a fish ladder for the endangered fish species of the Colorado River. Local boaters used this fish ladder project as a potential collaboration in order to also build a whitewater course. The town and local citizens viewed the opportunity to build a whitewater course as benefiting the local economy through increased tourism potential, as well as benefiting local recreationalists.

Local boaters raised $1 million, based on Bureau of Reclamation estimates of the cost of the course, to build the whitewater features. The Town of Palisade was supportive of the project and the fundraising efforts. The Bureau of Reclamation, however, notified the boaters that the actual cost of the whitewater features would total $2.9 million and they would only have 30 days to raise the remaining $1.9 million. While the Town of Palisade and the local boaters cannot participate in the project with the Bureau of Reclamation, they are researching alternative locations for the whitewater course.

The idea of applying for an RICD water right in conjunction with the whitewater features was discussed within the community of Palisade. The local newspaper published three articles on the subject of the whitewater course project, but none on the
issue of potentially applying for an RICD water right or other RICD legal cases. Due to
the potential costs associated with filing for an RICD water right on the highly
contentious Colorado River, the fact that there are sufficient flows in the Colorado due
to compact obligations, and the senior rights that call water past Palisade, the RICD
application was viewed as unnecessary to the whitewater park project.

5.3 Cross-Case Analysis

This section will provide a cross-case analysis of the important influences of
policy change within the RICD communities and the non-adopter communities. To
illustrate the differences among the case study communities, the following demographic
statistics are provided. Where median values are listed, the median is calculated as half-
way between the two middle values in the table where there are an even number of
cases listed. These descriptive statistics are not provided in order to provide predictions
of policy change patterns within communities, but rather to clearly delineate the
differences among the universe of RICD communities as well as the non-adopter
communities.

The following tables provide population data based on the 2000 U.S. Census for
Colorado communities. Table 21 compares the populations among adopter
communities. While the majority of the RICD communities are small, with populations
under 15,000 residents, Longmont and Pueblo are significantly larger than the rest.
Table 22 compares the populations among non-adopter communities. These
populations again vary widely, including three communities with populations under 10,000, two medium-sized cities, and Colorado’s state capital and major municipality—Denver.

Table 21: RICD Community Populations

<table>
<thead>
<tr>
<th>Community</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>4,301,261</td>
</tr>
<tr>
<td>Golden</td>
<td>17,159</td>
</tr>
<tr>
<td>Vail</td>
<td>4,531</td>
</tr>
<tr>
<td>Breckenridge</td>
<td>2,408</td>
</tr>
<tr>
<td>Longmont</td>
<td>71,093</td>
</tr>
<tr>
<td>Pueblo</td>
<td>102,121</td>
</tr>
<tr>
<td>Gunnison</td>
<td>5,409</td>
</tr>
<tr>
<td>Steamboat Springs</td>
<td>9,815</td>
</tr>
<tr>
<td>Silverthorne</td>
<td>3,169</td>
</tr>
<tr>
<td>Chaffee County</td>
<td>16,242</td>
</tr>
<tr>
<td>Avon</td>
<td>5,561</td>
</tr>
<tr>
<td>Durango</td>
<td>13,922</td>
</tr>
<tr>
<td>Carbondale</td>
<td>5,196</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>21,385</strong></td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td><strong>7,688</strong></td>
</tr>
<tr>
<td><strong>Std. Deviation</strong></td>
<td><strong>30,231</strong></td>
</tr>
</tbody>
</table>
Table 22: Non-Adopter Community Populations

<table>
<thead>
<tr>
<th>Community</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>4,301,261</td>
</tr>
<tr>
<td>Denver</td>
<td>554,636</td>
</tr>
<tr>
<td>Boulder</td>
<td>94,673</td>
</tr>
<tr>
<td>Fort Collins</td>
<td>118,652</td>
</tr>
<tr>
<td>Lyons</td>
<td>1,585</td>
</tr>
<tr>
<td>Glenwood Springs</td>
<td>7,736</td>
</tr>
<tr>
<td>Palisade</td>
<td>2,579</td>
</tr>
<tr>
<td>Mean</td>
<td>129,977</td>
</tr>
<tr>
<td>Median</td>
<td>51,205</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>195,520</td>
</tr>
</tbody>
</table>

The demographic characteristics of RICD community residents also vary significantly across the universe of adopters and in relation to Colorado averages.

Notably, Pueblo, Avon, Silverthorne, and Longmont have significantly fewer residents who describe themselves as white. Several of the ski resort communities also have significantly higher male populations than other Colorado communities- Vail, Breckenridge, and Avon in particular. As one might expect in resort communities, the average age in ski resort communities is lower than statewide averages, the median household income is higher, and there is a higher rate of college educated residents.
Table 23: RICD Community Individual Demographics

<table>
<thead>
<tr>
<th>Community</th>
<th>% White</th>
<th>% Male</th>
<th>% College Educated</th>
<th>Median Age</th>
<th>Median Household Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>90.3</td>
<td>50.31</td>
<td>39.68</td>
<td>34.3</td>
<td>50,105</td>
</tr>
<tr>
<td>Golden</td>
<td>90.7</td>
<td>54.6</td>
<td>46.3</td>
<td>32.8</td>
<td>49,115</td>
</tr>
<tr>
<td>Vail</td>
<td>94.1</td>
<td>58.4</td>
<td>60.9</td>
<td>31.9</td>
<td>56,680</td>
</tr>
<tr>
<td>Breckenridge</td>
<td>95.6</td>
<td>61.7</td>
<td>55.5</td>
<td>29.4</td>
<td>43,937</td>
</tr>
<tr>
<td>Longmont</td>
<td>84.8</td>
<td>49.5</td>
<td>31.3</td>
<td>34</td>
<td>51,174</td>
</tr>
<tr>
<td>Pueblo</td>
<td>76.2</td>
<td>48.4</td>
<td>16.8</td>
<td>36.5</td>
<td>29,650</td>
</tr>
<tr>
<td>Gunnison</td>
<td>93.5</td>
<td>54.6</td>
<td>38.5</td>
<td>23.7</td>
<td>25,768</td>
</tr>
<tr>
<td>Steamboat Springs</td>
<td>96.9</td>
<td>55.3</td>
<td>52.2</td>
<td>32.4</td>
<td>54,647</td>
</tr>
<tr>
<td>Silverthorne</td>
<td>82.2</td>
<td>56.6</td>
<td>33.7</td>
<td>30.3</td>
<td>58,839</td>
</tr>
<tr>
<td>Chaffee County</td>
<td>90.9</td>
<td>53.2</td>
<td>24.3</td>
<td>41.8</td>
<td>34,368</td>
</tr>
<tr>
<td>Avon</td>
<td>72.5</td>
<td>58.6</td>
<td>38.9</td>
<td>28.6</td>
<td>56,921</td>
</tr>
<tr>
<td>Durango</td>
<td>86.8</td>
<td>51</td>
<td>43</td>
<td>29.2</td>
<td>34,892</td>
</tr>
<tr>
<td>Carbondale</td>
<td>84.3</td>
<td>52.4</td>
<td>27.2</td>
<td>30.9</td>
<td>52,429</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>87.4</strong></td>
<td><strong>54.5</strong></td>
<td><strong>39.1</strong></td>
<td><strong>31.8</strong></td>
<td><strong>45,702</strong></td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td><strong>88.8</strong></td>
<td><strong>54.6</strong></td>
<td><strong>38.7</strong></td>
<td><strong>31.4</strong></td>
<td><strong>50,1045</strong></td>
</tr>
<tr>
<td><strong>Std. Deviation</strong></td>
<td><strong>7.4</strong></td>
<td><strong>3.8</strong></td>
<td><strong>12.7</strong></td>
<td><strong>4.3</strong></td>
<td><strong>11,140</strong></td>
</tr>
</tbody>
</table>

The following table illustrates the same demographic measures for residents of the non-adopter communities outlined in this study. The notable variations from statewide averages in this table include the significantly higher percentages of college educated residents in both Boulder and Fort Collins, which can be explained by the fact that both communities are home to major universities - the University of Colorado and Colorado State University. Palisade also has a much lower rate of college education, which can be explained by the fact that this community is located in a highly agricultural area with traditional economic drivers. The variation that the communities of Boulder, Fort Collins, and Palisade demonstrate according to average age can also be explained by these same factors. Denver, as the major urban community in Colorado,
shows a much lower percentage of white residents and a lower median household income.

Table 24: Non-Adopter Community Individual Demographics

<table>
<thead>
<tr>
<th>Community</th>
<th>% White</th>
<th>% Male</th>
<th>% College Educated</th>
<th>Median Age</th>
<th>Median Household Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>90.3</td>
<td>50.3</td>
<td>39.68</td>
<td>34.3</td>
<td>50,105</td>
</tr>
<tr>
<td>Denver</td>
<td>65.3</td>
<td>50.5</td>
<td>34.5</td>
<td>33.1</td>
<td>39,500</td>
</tr>
<tr>
<td>Boulder</td>
<td>88.3</td>
<td>51.6</td>
<td>66.9</td>
<td>29</td>
<td>44,748</td>
</tr>
<tr>
<td>Fort Collins</td>
<td>89.6</td>
<td>50.2</td>
<td>48.4</td>
<td>28.2</td>
<td>44,459</td>
</tr>
<tr>
<td>Lyons</td>
<td>92.5</td>
<td>50.3</td>
<td>37.1</td>
<td>37.5</td>
<td>50,764</td>
</tr>
<tr>
<td>Glenwood Springs</td>
<td>90.4</td>
<td>50.9</td>
<td>33.1</td>
<td>36.2</td>
<td>43,934</td>
</tr>
<tr>
<td>Palisade</td>
<td>93.9</td>
<td>46.8</td>
<td>19.2</td>
<td>39.5</td>
<td>27,739</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Median</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>% White</td>
<td>86.7</td>
<td>90</td>
<td>9.7</td>
</tr>
<tr>
<td>% Male</td>
<td>50.1</td>
<td>50.4</td>
<td>1.5</td>
</tr>
<tr>
<td>% College Educated</td>
<td>39.9</td>
<td>35.8</td>
<td>14.8</td>
</tr>
<tr>
<td>Median Age</td>
<td>33.9</td>
<td>34.7</td>
<td>4.2</td>
</tr>
<tr>
<td>Median Household Income</td>
<td>41,857</td>
<td>44,197</td>
<td>7,114</td>
</tr>
</tbody>
</table>

The table below lists four additional important demographic measures. The first two measures list the percentage of the residents in a community that lived in the same county in 1995 as they did in 2000 and the percentage of residents that live in a different state than they did in 1995. This statistic helps to understand which communities are more stable in terms of population immigration and emigration. As would be expected, the communities with high resort presence have a higher percentage of population migration than non-resort communities.
Table 25: RICD Community Demographics

<table>
<thead>
<tr>
<th>Community</th>
<th>% Live in Same County as 1995</th>
<th>% Live in Different State as 1995</th>
<th>% Employed in Service Sector</th>
<th>% Seasonal Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>44.1</td>
<td>28.8</td>
<td>13.89</td>
<td>XX</td>
</tr>
<tr>
<td>Golden</td>
<td>21.6</td>
<td>21.2</td>
<td>11.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Vail</td>
<td>22.9</td>
<td>28.6</td>
<td>24</td>
<td>53.6</td>
</tr>
<tr>
<td>Breckenridge</td>
<td>18.2</td>
<td>43.2</td>
<td>29.1</td>
<td>68.1</td>
</tr>
<tr>
<td>Longmont</td>
<td>29.7</td>
<td>17.5</td>
<td>13</td>
<td>0.3</td>
</tr>
<tr>
<td>Pueblo</td>
<td>30.4</td>
<td>7.5</td>
<td>19.3</td>
<td>2</td>
</tr>
<tr>
<td>Gunnison</td>
<td>20.9</td>
<td>22.6</td>
<td>22.2</td>
<td>2.4</td>
</tr>
<tr>
<td>Steamboat Springs</td>
<td>25.7</td>
<td>26.7</td>
<td>18.6</td>
<td>19</td>
</tr>
<tr>
<td>Silverthorne</td>
<td>18.2</td>
<td>27.4</td>
<td>15.3</td>
<td>23.3</td>
</tr>
<tr>
<td>Chaffee County</td>
<td>21.3</td>
<td>14.5</td>
<td>21.6</td>
<td>15.9</td>
</tr>
<tr>
<td>Avon</td>
<td>26</td>
<td>19</td>
<td>23.6</td>
<td>20.5</td>
</tr>
<tr>
<td>Durango</td>
<td>22</td>
<td>23.8</td>
<td>22.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Carbondale</td>
<td>23.2</td>
<td>20</td>
<td>19.4</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>23.3</strong></td>
<td><strong>22.7</strong></td>
<td><strong>20</strong></td>
<td><strong>17.4</strong></td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td><strong>22.5</strong></td>
<td><strong>21.9</strong></td>
<td><strong>20.5</strong></td>
<td><strong>9.2</strong></td>
</tr>
<tr>
<td><strong>Std. Deviation</strong></td>
<td><strong>3.8</strong></td>
<td><strong>8.4</strong></td>
<td><strong>4.7</strong></td>
<td><strong>21.4</strong></td>
</tr>
</tbody>
</table>

The percentage of residents employed in service sector jobs is included in this table to illustrate the difference in economic drivers within the case study communities. As expected, those communities with a significant resort and recreation presence also have higher rates of employment in service sector professions. This statistic was used instead of a measure of hotel and restaurant employment because within the case study communities, there were not reliably consistent measures for hotel and restaurant employment. Finally, the percentage of local housing that is only seasonally occupied is listed, with a predictable pattern showing the resort communities with high rates of seasonal housing compared with other communities. The table below illustrates the same community demographics for the non-adopter case communities.
Table 26: Non-Adopter Community Demographics

<table>
<thead>
<tr>
<th>Community</th>
<th>% Live in Same County as 1995</th>
<th>% Live in Different State as 1995</th>
<th>% Employed in Service Sector</th>
<th>% Seasonal Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>44.1</td>
<td>28.8</td>
<td>13.89</td>
<td>XX</td>
</tr>
<tr>
<td>Denver</td>
<td>24.3</td>
<td>13.9</td>
<td>15.2</td>
<td>0.6</td>
</tr>
<tr>
<td>Boulder</td>
<td>21.5</td>
<td>26.9</td>
<td>14.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Fort Collins</td>
<td>26.3</td>
<td>22.3</td>
<td>15.6</td>
<td>0.4</td>
</tr>
<tr>
<td>Lyons</td>
<td>26.3</td>
<td>16.3</td>
<td>13.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Glenwood Springs</td>
<td>26.3</td>
<td>14.2</td>
<td>14.9</td>
<td>2</td>
</tr>
<tr>
<td>Palisade</td>
<td>24.5</td>
<td>9.8</td>
<td>28.5</td>
<td>0.7</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>24.9</strong></td>
<td><strong>18.7</strong></td>
<td><strong>17.1</strong></td>
<td><strong>0.83</strong></td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td><strong>25.4</strong></td>
<td><strong>17.5</strong></td>
<td><strong>15.1</strong></td>
<td><strong>0.65</strong></td>
</tr>
<tr>
<td><strong>Std. Deviation</strong></td>
<td><strong>1.7</strong></td>
<td><strong>4.6</strong></td>
<td><strong>5.2</strong></td>
<td><strong>0.53</strong></td>
</tr>
</tbody>
</table>

With the exception of the two university communities, the non-adopter communities show consistently lower rates of migration than Colorado averages. With the exception of Palisade, these communities also do not vary widely from Colorado service sector employment averages. Finally, none of the non-adopter communities has a notable level of seasonal housing compared with the RICD communities above.

In each case that was outlined in this chapter, reasons were provided, based on interview data, for the community’s RICD application. In non-adopter communities, reasons were provided for the community’s decision not to file an RICD application. In addition to these reasons that communities provided for applying for recreational water rights, opponents provided reasons why those water rights should not have been granted. The table below provides the reasons against RICD water rights provided legal opponents and details the communities in which those arguments were applicable.
Table 27: Arguments Against RICDs in Case Study Communities

<table>
<thead>
<tr>
<th>Argument</th>
<th>Relevant RICD Applications</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact Impairment</td>
<td>Durango</td>
<td>The dangers of high RICD water rights are that we will over-deliver to downstream states water that is essentially Colorado’s to consumptively use pursuant to the different compacts. [CW-01]</td>
</tr>
<tr>
<td></td>
<td>Steamboat Springs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gunnison</td>
<td></td>
</tr>
<tr>
<td>Future Development/</td>
<td>Golden</td>
<td>It does tend to lock the rivers down and eliminate some flexibility of operation in some circumstances.</td>
</tr>
<tr>
<td>Growth Limits</td>
<td>Durango</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gunnison</td>
<td>[CO-04]</td>
</tr>
<tr>
<td></td>
<td>Steamboat Springs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pueblo</td>
<td></td>
</tr>
<tr>
<td>Volume</td>
<td>Golden</td>
<td>Part of the controversy too is the size of the water rights. They’re not small water rights.</td>
</tr>
<tr>
<td></td>
<td>Gunnison</td>
<td>[WA-01]</td>
</tr>
<tr>
<td></td>
<td>Steamboat Springs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Durango</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chaffee County</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Avon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vail</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Breckenridge</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Golden</td>
<td>I don’t think recreational in-channel diversions have a place on every stream in Colorado and there are places in Colorado that I think they fit better than in other places. [CW-03]</td>
</tr>
<tr>
<td></td>
<td>Durango</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Steamboat Springs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gunnison</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chaffee County</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pueblo</td>
<td></td>
</tr>
<tr>
<td>Reason</td>
<td>Times Mentioned</td>
<td>Significant Quotations</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Protect Kayak Course/Protect Investment</td>
<td>57</td>
<td>It was logical to protect the town’s investment in the course. [LG-01]</td>
</tr>
<tr>
<td>Economic Benefits of Kayak Course</td>
<td>79</td>
<td>The economic aspect… became a fairly strong theme during the discussions. [LR-05]</td>
</tr>
<tr>
<td>Provide Recreational Amenity</td>
<td>30</td>
<td>Their intentions are strictly to meet a local demand for a high quality recreational experience that they hope also brings other economic benefits to their community. [WA-07]</td>
</tr>
<tr>
<td>Community Identity</td>
<td>3</td>
<td>Really does help us maintain ourselves as a community. [LG-09]</td>
</tr>
<tr>
<td>Prevent Transbasin Diversions/Prevent Upstream Development</td>
<td>29</td>
<td>There were corollary reasons… like it would help in staving off challenges from a transmountain diversion. [LG-17]</td>
</tr>
<tr>
<td>Protect the River/Provide Instream Flows</td>
<td>34</td>
<td>There was a big concern about maintaining flows in the river. [LG-12]</td>
</tr>
<tr>
<td>Control the River</td>
<td>3</td>
<td>It gave us some control. [LW-11]</td>
</tr>
<tr>
<td>Dilution Flows</td>
<td>6</td>
<td>Even if it has another useful beneficial effect like diluting your wastewater flows… that doesn’t undermine the benefit of it as a kayak course. [WA-03]</td>
</tr>
<tr>
<td>Have a Seat at the Table</td>
<td>6</td>
<td>We should have a seat at the table when water decisions are made. [LR-02]</td>
</tr>
</tbody>
</table>
The table above focuses on the reasons that RICD water rights applications were filed across all RICD communities. Aggregate data show that the potential economic benefits of whitewater courses and the protection of those courses are the primary reasons for community applications for RICD water rights. Additionally important was the fact that the courses provide recreational amenities and that the RICD rights can help prevent transbasin diversion and protect instream flows in these communities.

Table 29: Reasons for Water Right Application in Golden, Vail, and Breckenridge

<table>
<thead>
<tr>
<th>Reason</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect Kayak Course/Protect Investment</td>
<td>1</td>
<td>It was logical to protect the town’s investment in the course. [LG-01]</td>
</tr>
<tr>
<td>Economic Benefits of Kayak Course</td>
<td>18</td>
<td>Largest single motivator is the economic good to our community. [LG-09]</td>
</tr>
<tr>
<td>Provide Recreational Amenity</td>
<td>6</td>
<td>Their intentions are strictly to meet a local demand for a high quality recreational experience that they hope also brings other economic benefits to their community. [WA-07]</td>
</tr>
<tr>
<td>Community Identity</td>
<td>3</td>
<td>Really does help us maintain ourselves as a community. [LG-09]</td>
</tr>
<tr>
<td>Prevent Transbasin Diversions/Prevent Upstream Development</td>
<td>2</td>
<td>Denver has designs on diverting water upstream of Vail. [WA-10]</td>
</tr>
<tr>
<td>Protect the River/Provide Instream Flows</td>
<td>2</td>
<td>Gore Creek is such an integral part of the whole town. [WA-10]</td>
</tr>
</tbody>
</table>
The tables above and below break this list of reasons down according to the early cases and the later cases. Early cases include Golden, Vail, and Breckenridge, while later cases are those that came after Gunnison. In the early cases, the potential and proven economic benefits of the whitewater courses were the primary reason behind the recreational water right application.

Table 30: Reasons for Water Right Application in Cases After Gunnison

<table>
<thead>
<tr>
<th>Reason</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect Kayak Course/Protect Investment</td>
<td>20</td>
<td>The City did not want to invest large sums of money into a water park feature that may not be useful in the future. [LG-21]</td>
</tr>
<tr>
<td>Economic Benefits of Kayak Course</td>
<td>40</td>
<td>The economic aspect... became a fairly strong theme during the discussions. [LR-05]</td>
</tr>
<tr>
<td>Provide Recreational Amenity</td>
<td>16</td>
<td>It was an attempt to get really three weekends of kayak activity during the summer. [LG-03]</td>
</tr>
<tr>
<td>Prevent Transbasin Diversions/Prevent Upstream Development</td>
<td>9</td>
<td>It’s not inconceivable that somebody would at some point in the future... contemplate a transbasin diversion. [LG-16]</td>
</tr>
<tr>
<td>Protect the River/Provide Instream Flows</td>
<td>18</td>
<td>It’s not just for the purpose of the kayak course, but we’d like to see water in the river. [LG-22]</td>
</tr>
<tr>
<td>Have a Seat at the Table</td>
<td>6</td>
<td>We should have a seat at the table when water decisions are made. [LR-02]</td>
</tr>
</tbody>
</table>
In the later cases, outlined above, the economic benefits of the whitewater course still prove important, but additionally important is the desire to protect the investment in the course, provide a recreational amenity in the community, and to protect instream flows through the community.

These tables tell a story of communities that view themselves as either economically or socially dependent on whitewater recreation and the river resource, as well as communities that perceive long-term or immediate threats to that resource. In early cases as well as later cases, the economic benefits of the courses were the most important reasons for applying for RICD water rights. Additionally, the aggregate data show that many communities want to provide recreational amenities to their citizens based on a social connection to the resource. Finally, these data also illustrate that many of these RICD communities view transmountain diversions, upstream development, or the maintenance of instream flows to be significant local threats and important reasons for undertaking the application for an RICD water right.

The following table compares the costs of constructing the whitewater courses across all RICD communities, the costs of obtaining the RICD water right, and the total costs of the two combined. The costs listed in this table are based upon figures provided by the community, or estimates provided by the community in cases where the legal case or course construction is not complete or not yet fully estimated. In one case, Steamboat Springs, the costs of the whitewater course include the costs associated with building only one of the two structures since a local group donated the other funding.
Additionally, in Chaffee County the whitewater course in Buena Vista is still under construction, so figures in this table are based only on the cost estimates associated with building the Salida course.

<table>
<thead>
<tr>
<th>Community Name</th>
<th>Kayak Course Costs</th>
<th>RICD Costs</th>
<th>Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden</td>
<td>$350,000</td>
<td>$160,000</td>
<td>$510,000</td>
</tr>
<tr>
<td>Vail</td>
<td>$150,000</td>
<td>$300,820</td>
<td>$450,820</td>
</tr>
<tr>
<td>Breckenridge</td>
<td>$300,000</td>
<td>$185,000</td>
<td>$485,000</td>
</tr>
<tr>
<td>Longmont</td>
<td>$486,000</td>
<td>$46,750</td>
<td>$532,750</td>
</tr>
<tr>
<td>Pueblo</td>
<td>$300,000</td>
<td>$400,000</td>
<td>$700,000</td>
</tr>
<tr>
<td>Gunnison</td>
<td>$250,000</td>
<td>$600,000</td>
<td>$850,000</td>
</tr>
<tr>
<td>Steamboat Springs</td>
<td>$42,400</td>
<td>$750,000</td>
<td>$792,400</td>
</tr>
<tr>
<td>Chaffee County</td>
<td>$500,000</td>
<td>$250,000</td>
<td>$750,000</td>
</tr>
<tr>
<td>Silverthorne</td>
<td>$450,000</td>
<td>$50,000</td>
<td>$500,000</td>
</tr>
<tr>
<td>Durango</td>
<td>$600,000</td>
<td>$300,000</td>
<td>$900,000</td>
</tr>
<tr>
<td>Avon</td>
<td>$560,000</td>
<td>$208,000</td>
<td>$768,000</td>
</tr>
<tr>
<td>Carbondale</td>
<td>$550,000</td>
<td>$70,000</td>
<td>$620,000</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>$378,200</strong></td>
<td><strong>$276,714</strong></td>
<td><strong>$654,914</strong></td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td><strong>$400,000</strong></td>
<td><strong>$229,000</strong></td>
<td><strong>$660,000</strong></td>
</tr>
</tbody>
</table>

Among non-adopter communities, four reasons contributing to the decision not to apply for a recreational water right were consistently noted. They were 1) the river upon which the whitewater course sits has ample flows to support the course for the intended recreational purpose, 2) the potential costs associated with the legal process are prohibitive, 3) local water rights scenarios mean that downstream senior water rights call water past the kayak course, and 4) the whitewater course project is not central to the community. The relevance of sufficient flows and local water rights to the decision not to apply for RICD water rights relates directly to the perceived threats to the
resource, as discussed related to the RICD communities, above. If sufficient flows exist, and local water rights and diversion do not pose a threat to the resource, then the community will not apply for an RICD. Similarly, the centrality of the project to the community relates directly to the factors outlined above. RICD communities are either socially or economically dependent on the resource. The communities that state that the project is not central to the community are, in essence, arguing that the community is not dependent upon the resource either socially or economically.

### Table 32: Reasons for Not Applying for Recreational Water Rights Among Non-Adopters

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number of Cases Applicable</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficient Flows in the River</td>
<td>6</td>
<td>We have flows from both rivers… providing the basis for this park. [LG-10]</td>
</tr>
<tr>
<td>Cost of RICD Legal Process</td>
<td>3</td>
<td>It’s very costly to apply for recreational water rights… at the time would have hindered our project. [LG-04]</td>
</tr>
<tr>
<td>Local Water Rights Picture</td>
<td>6</td>
<td>Many of the most senior water rights on the creek are located downstream… so the water is called through. [LG-25]</td>
</tr>
<tr>
<td>Project Not Central to Community</td>
<td>2</td>
<td>Denver Water is not in the recreation business. [LG-23]</td>
</tr>
</tbody>
</table>

The table above uses counts of applicable cases in the non-adopter sample instead of counts of mentions, as in the previous tables, because the case study data were less in-
depth for non-adopters presented in this chapter and the reader, therefore, will have less understanding of the nuances of the non-adopter communities.

5.4 Conclusion

This cross-case analysis illustrates the reasons why some Colorado communities have applied for RICD water rights while others that potentially could benefit from an RICD water right have chosen not to. The important factors include the dependence of the community on the resource (many communities have made their whitewater course the centerpiece of downtown redevelopment), the threats to that resource, as well as the costs associated with the RICD legal process. Communities will not invest the resources to apply for an RICD if large amounts water are already appropriated by downstream users or must be delivered to downstream states by interstate compact and if the community cannot afford such an investment. The costs associated with the legal process, however, could be deemed worth the investment if the community was dependent on the resource and there was a perceived threat to that resource. In order for a community to apply for an RICD water right, this case study analysis suggests that the community must demonstrate a dependence on the resource (either socially or economically) as well as perceive threats to that resource (including development and diversion threats or overappropriation of the river leading to instream flow threats).

Chapters six and seven build upon these case studies to answer specific research questions regarding the influence of groups, individuals, and information in the process
of policy change at the community-level. Chapter eight then applies these lessons and builds a model of the process of policy change within these communities.
6. The Role of Political Actors in Policy Change

In the process of policy change, both individuals and groups are presumed to be important influences. Theories usually begin with individuals or groups as the units of analysis. This chapter analyzes both of these influences in the process of policy change in recreational in-channel diversion policy in Colorado. This chapter provides overviews of the theories associated with individual and group involvement in the policy process. Research questions then are restated and analyzed in various group influence and individual influence contexts. Conclusions are then drawn based upon these analyses.

Theories of group and individual influence on policy change abound. Institutional rational choice theory focuses on “how institutions affect the incentives confronting individuals and their resultant behavior” (E. Ostrom, 1999, p. 36). These theories assume that this behavior is rational and motivated by self-interest. This chapter addresses several theoretical assumptions in relation to the case study data presented in chapter five in order to understand the role that self-interest and individuals play in the process of policy change.

Groups are also presumed by many scholars to widely influence the policy process. These groups can take the form of bounded interest groups within policy communities as in Kingdon’s model (2003), or coalitions of stakeholders across multiple levels of government and communities as in the Advocacy Coalition Framework
presented by Sabatier and Jenkins-Smith (1993). These groups are presumed to use some degree of internal coordinated action and communication to compete in the policy process to promote their preferred versions of policy change. They also are presented as significant influences on policy change across a multitude of policy arenas.

The sections in this chapter present relevant literature related to 1) stakeholder group influence in policymaking, 2) policy entrepreneurship and elite experts in the process of policy change, 3) the role of individual citizens in policy change decisions, and 4) the role of self-interest as it relates to political decisions made within a community. This chapter, therefore, addresses five of the research questions presented in chapter one- those that relate to the role that individuals and groups played in the process of policy change. Each section then analyzes the data gathered in case study communities to answer the research questions presented herein. Additionally, one section also utilizes data collected from interviews with statewide water policy experts and legislative hearings to analyze the roles that groups of stakeholders played in the legislative process.

6.1 Groups

This section analyzes data from the case studies presented in chapter five in order to answer the question: what was the role of stakeholder groups in the process of policy change in recreational water rights policy? To answer this question, analysis of data from RICD communities addresses the role that these groups played in local community
decisions. Additionally, because the statewide process of policy change appears to have influenced the timing, likelihood, and process through which some communities went in making their decisions to apply for RICDs, this section also analyzes the role that groups played in the legislative process of policy change in the Colorado General Assembly.

In advocating for a more comprehensive theory of the policy process to be developed, Sabatier (1991) argued that any theory of policy change must include a focus on policy communities, networks, and subsystems which include actors from within and outside government. Definitions of groups active within the policy process are often limited to those groups that are focused on lobbying for policy change based upon shared organizational interests as in the traditional interest group model. They have also been defined as voluntary organizations outside of the political system that engage in behavior designed to influence government policy or action (Andrews & Edwards, 2004), which leaves the media, agencies, and other non-interest group actors that may be internal or external to the political system assigned to other bounded categories of actors and presumes that there is no coordinated activity between these multiple categories of actors (Kingdon, 2003 for example).

While this research study does not employ a formal advocacy coalition framework method to research the process of policy change in Colorado communities, the definition of advocacy coalitions presents a superior definition for the purposes of this study. Advocacy coalitions are defined as those groups “composed of people from various organizations who share a set of normative and causal beliefs and who often act
in concert” (Sabatier, 1988, p. 133). These coalitions are comprised of actors from within and outside of government including elected officials, agencies, interest groups, journalists, and issue experts. The inclusion of these multiple actors is vital to understanding the complex role that groups play in policy change. These groups, through their influence and lobbying, “compete over whose policy objectives are translated into governmental policy” (Weible & Sabatier, 2005, p. 181).

The advantages of this definition of advocacy groups are primarily related to its ability to simplify “the hundreds of actors involved in policy change” and aggregate “most actors within a subsystem into a manageable number of belief-based coalitions” (Sabatier & Jenkins-Smith, 1993, p. 212). This focus on shared beliefs within advocacy groups is vital to understanding the nature of these groups. The actors within advocacy groups share core beliefs related to broad policy issues as well as specific policy subsystem issues. While these actors may differ over superficial beliefs related to policy tools and implementation, their core beliefs are consistent and lead to a cohesiveness within groups (Sabatier, 1988). Policy learning and change, according to this theory, results from a competition among cohesive groups of stakeholders as well as an exchange of ideas over a period of time wherein competing beliefs regarding policy issues are incorporated as secondary beliefs (perhaps as tools of policy implementation or strategy). Table six in chapter three established the existence in these RICD cases of belief-based advocacy groups and identifies the primary actors within those groups. This framework for understanding advocacy coalitions is relevant to the analysis of
stakeholder involvement below. Categories of local groups are outlined in this section as well.

Some scholars argue that this assumption of homogeneous policy preferences and priorities within groups of actors is a fallacy (Wolfe & Pulter, 2002). While certainly not all group members will have homogenous beliefs and policy preferences, it is important to establish a useful and effective heuristic for studying these groups and their influence. Due to the well-established and tested (see Weible & Sabatier, 2005 for example) relevancy of the Advocacy Coalition Framework, this definition is used in this study.

Stakeholder groups generally lobby legislators to 1) increase the size of their supportive coalitions in the legislature and 2) shape the content of legislation (Hojnacki & Kimball, 1998) as well as focus public or government attention on issues of importance to these groups (F. R. Baumgartner & Jones, 1993; Kingdon, 2003). Traditionally, the iron triangle theory of policymaking has been accepted, in which lobbyists or interest groups, bureaucratic agencies, and legislators on subcommittees retain virtual domination over the legislative process. This theory of policymaking is, however, too simplistic because an accurate view of policymaking involves not only these actors, but also the policy subsystems at work in government and the multiple actors involved in these subsystems (Sabatier, 1988; Weible & Sabatier, 2005).

Research has focused on the stages in the policy process where groups or coalitions can have the most influence over policy outcomes. Coalitions of policy
interests are thought to have the most influence in the agenda setting phase of policymaking where they can try to “bring greater attention, raise awareness, and create urgency around claims” (Andrews & Edwards, 2004, p. 493). Other research describes groups as one component of a complex system of policy actors,

powerful forces of change... not controlled or created by any single group or individual, but are the result of multiple interactions among groups seeking to propose new understandings of issues, political leaders seeking new issues on which to make their name, agencies seeking to expand their jurisdictions, and voters reacting to the whole process (F. R. Baumgartner & Jones, 1993, p. 237).

Regardless of the name given to these groups of actors, studies on the influence of actors such as interest groups, media, elected officials, agencies, and experts indicate that these actors exert an non-trivial degree of influence over policy outcomes, policy agendas, and policy decision making processes (F. R. Baumgartner & Jones, 1993; Kingdon, 2003; Sabatier & Jenkins-Smith, 1993).

Based on this definition of what this study will refer to as stakeholder groups, which involves actors within and outside of government that employ coordinated action to influence policy change in a particular policy subsystem\(^1\), it is important to understand the level of influence that these groups are presumed to have on the process of policy change. Research related to the influence of these groups has been limited due to the difficulty of defining influence as well as the need to account for rival theories in

\(^1\) A policy subsystem includes all of the actors within a policy venue (such as air pollution control, or in this case, recreational water rights policy) that are advocating for their policy interests to be translated into policy action (Sabatier, 1988).
any analysis of group influence on policy change (Andrews & Edwards, 2004). This analysis of group influence on policy change will rely on two measures for determining influence: the perception of individuals external to advocacy groups as well as individuals within advocacy groups of competing policy interests, and data from legislative hearings over multiple legislative attempts that indicate a growing level of influence among certain advocacy groups, or stakeholder groups. The second problem related to understanding stakeholder group influence is addressed in this research through a simultaneous analysis of individual and informational influences on policy change in order to acknowledge and account for rival theories of policy change.

Additionally, since as Andrews and Edwards state, most research on stakeholder group influence has been conducted in the context of large national organizations, this research will provide an analysis somewhat different from previous studies, relying on data from local and statewide advocacy groups.

Research has demonstrated that the methods used to survey stakeholder groups can influence the findings regarding stakeholder influence (Leach, 2002). Surveying the leader of a group can skew results in the direction of a highly successful and influential finding, surveying within a single stakeholder category can have a similar effect, while surveying only group members can result in a higher level of stated disagreement among stakeholders (Leach, 2002). This study attempts to account for these potential

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2 Although some of the actors within these advocacy groups are affiliated with large national organizations, such as Trout Unlimited.
biases by interviewing stakeholder group participants, leaders, and members of groups in competing advocacy coalitions and from varying viewpoints within those coalitions.

6.1.1 Stakeholder Involvement Locally

As discussed above, groups can have a great deal of influence over policy decisions. These groups can be relatively cohesive or unorganized, but demonstrate some level of coordinated action (Sabatier, 1988). In many theoretical and empirical studies, these groups play a crucial role in promoting policy change. Based on this assumption of significant group influence, this section analyzes community interview data to answer the above-mentioned question with regard to stakeholder group influence within community decision making processes. This section specifically discusses the involvement of groups within communities, not those stakeholder groups involved in legal cases related to RICD water rights. This is due to the fact that quite often, the objectors in water rights cases include other municipalities, state agencies, and water users outside of the local community that would not generally directly influence the process of policy change within local communities.

Scholars agree that there has historically been limited academic focus on the influence of interest groups within local governments (Abney & Lauth, 1985; Bardhan & Mookherjee, 2000). In local communities, “there is conflicting evidence regarding the degree of influence which interest groups exert on the formulation and implementation of public policies” (Abney & Lauth, 1985, p. 148). Some research indicates that local
governments, by nature of their institutional features (e.g. city manager systems rather than solely political systems), are resistant to interest group influence. Other writers (James Madison among them) would argue that “the lower the level of government, the greater is the extent of capture by vested interests” (Bardhan & Mookherjee, 2000, p. 135).

The literature indicates that the degree to which interest groups are able to influence local government decisions depends on several factors. In local governments, due to a higher level of voter ignorance and a greater cohesiveness among interest groups, there may be a heightened influence of these groups. On the other hand, electoral factors, such as the use of direct democratic tools within local communities, may mute the level of influence that interest groups have over the policy decisions that are made by local officials (Bardhan & Mookherjee, 2000). Within local governments, certain institutional structures such as mayor-council structures and non-partisan elections are presumed to lead to higher levels of interest group activity, but findings on such variables do not support these assumptions (Cooper, Nownes, & Roberts, 2005). Additionally, studies of local and national interest group influence consistently indicate that local policy processes are significantly different from national or statewide processes and that these differences may determine the level of interest group influence over policy decisions. It is, therefore important to study in a comparative context the role of stakeholder groups in local policy decisions. This research attempts to do that
through a comparison of Colorado communities and their decisions regarding RICD water rights.

Within RICD communities as well as non-adopter communities, the topic of group involvement in the process of policy change was frequently discussed by interview subjects.

“The kayakers came and said this is an enormous resource. We want to build these facilities to enhance the resource.” [WA-10]

Interview subjects were also directly asked about the involvement of groups and individuals in support of or in opposition to the RICD and the whitewater park project. The groups identified as involved in the local process of policy change by interview subjects fell into two categories: boating or recreational interests that promoted construction of whitewater recreation facilities and environmental interests focused on protecting the river and promoting RICD policy change. Additionally, in some cases there were groups identified as being opposed to the idea of RICD water rights and whitewater park construction. These groups generally fell into two categories: anglers or other river users interested in maintaining the status quo and property owners concerned about the potential affects of increased user activity or whitewater park engineering on their homes or potential injury to their water rights.

Political groups were only mentioned in interviews in one community: Chaffee County. This may be due to the fact that Colorado law requires all local government elections to be held in a non-partisan manner (Colorado Revised Statutes, sec. 31-10-
RICD water rights were not a political tool used to gain votes in RICD communities. It was not an issue that came up in any community’s elections and campaigning except in Chaffee County. In Chaffee County, however, as with all counties in Colorado, elections for county commissioners are partisan. Here also, the RICD issue was a highly important topic in the commissioners race in November 2006, with the Democratic candidate supporting the RICD application and the Republican candidate opposing it.

“This election… all about the RICD. I mean it was the issue.” [LR-02]

No interview subjects mentioned groups from outside the community that lobbied on behalf of RICD water rights within the community. This is also true of groups from other communities. No interview subjects mentioned lobbying assistance from other communities that had already applied for RICD water rights. As detailed in chapter seven, communities did obtain information from one another to assist in the RICD application and decision process, but no subjects mentioned groups playing a role in this process. The following table outlines the various stages and viewpoints of group involvement in RICD communities.
Table 33: Group Involvement in RICD Communities

<table>
<thead>
<tr>
<th>Community</th>
<th>Groups in Favor of Boating Course</th>
<th>Groups Opposed to Boating Course</th>
<th>Groups in Favor of RICD</th>
<th>Groups in Opposition to RICD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Vail</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Breckenridge</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Longmont</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Pueblo</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Gunnison</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Steamboat Springs</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Silverthorne</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Chafee County</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Avon</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Durango</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Carbondale</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Table 34: Group Involvement in Non-Adopter Communities

<table>
<thead>
<tr>
<th>Community</th>
<th>Groups in Favor of Boating Course</th>
<th>Groups Opposed to Boating Course</th>
<th>Groups in Favor of RICD</th>
<th>Groups in Opposition to RICD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boulder</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Denver</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Fort Collins</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Lyons</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Glenwood Springs</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Palisade</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

The table above outlines the level of group involvement across the same categories in non-adopter communities. Based on these summaries of case study data from chapter five, it is clear that while stakeholder group presence was evident in the RICD policy process in three RICD communities, it was not an integral part of the statewide local
policy process. The following data from interviews will elucidate this proposition further. Additionally, these tables show that group influence within communities was more widespread across both RICD communities as well as non-adopter communities in the process of advocating for whitewater park facilities.

The activities and influence of community groups was not directly related to policy change with regard to RICD water rights in the majority of RICD communities. The influence of these groups was primarily limited to policy change with regard to decisions to build the recreational amenities upon which RICD water rights are based.

“We had a local paddler club in town that were advocating boating and doing some sort of a boating course.” [LG-12]

“We were approached by a group of boaters.” [LG-01]

“The recreational community was very supportive of the whitewater park and were frustrated about the length of time that it took us to come together to actually do it.” [LG-05]

“The rec community demonstrated how much support there was for a whitewater park.” [LG-05]

“The boating community has been talking about it.” [EL-06]

“The angling community… they were adversaries in the early process.” [LR-05]

There were three exceptions to this rule. First, in Durango, a local river task force lobbied the City to apply for a recreational water right.

“They had expressed an interest in… protecting flows in the river for recreation and so we began to explore and talk about it.” [LG-19]
“I don’t know… other than the boating community if there was a… large public outcry for this.” [LG-21]

In Chaffee County, a similar river-oriented community non-profit advocated for the recreational water right after building the course in Salida.

“It was the Arkansas River Trust.” [LW-07]

“The initial proponents of it were the Arkansas River Trust.” [LR-01]

Finally, in Steamboat Springs, recreation community members advocated for the RICD application, but did not initiate the idea.

“The recreation and environmental community and the City was largely supportive of it.” [CW-01]

“Sort of an activist group of people that were interested in it and I think the rest of the people were probably ambivalent.” [LW-09]

In the majority of communities where stakeholder groups were involved in the process of policy change, these groups were significant to the decision to build the recreational infrastructure upon which the water right was based. The case studies presented in chapter five demonstrate significant stakeholder group involvement in 10 RICD communities. In seven of these communities the stakeholder groups were primarily or only involved in promoting the construction of whitewater parks.

The same is true within non-adopter communities. Within the six non-adopter communities studied, three clearly saw stakeholder group advocacy on behalf of the whitewater park plans. In none of these communities did stakeholder groups advocate applying for an RICD water right.
“There was a group of citizens, avid kayakers specifically, who were interested in building a whitewater park.” [LG-10]

“They approached us with... the desire to see if the City could come up with funding for it.” [LG-11]

These stakeholder groups, both in RICD communities and non-adopter communities, advocated directly for the community to provide an amenity that would benefit the group, but did not continue to argue for the more nebulous benefit of the water right. Due to this involvement in a limited segment of the policy process by stakeholders, these findings suggest a limited influence on the part of stakeholder groups if they self-select to only be involved in part of the policy process. Due to the evidence from three RICD cases where stakeholder groups were influential in supporting RICD water rights, it appears that stakeholder groups were able to influence RICD policy decisions, but they chose not to be involved in RICD policy decisions in most cases.

### 6.1.2 Stakeholder Involvement Statewide

Policy change with regard to recreational in-channel water rights in Colorado occurred simultaneously in multiple venues. As chapter three described, while communities were making their own decisions regarding water rights applications, the state legislature and state courts were also dealing with this emerging area of water rights law and policy. Due to the important role of the state legislature in this process of policy change statewide, this section will analyze the influence of stakeholder groups in legislative policy change.
6.1.2.1 Stakeholder Involvement in Legislative Policy Change

In Colorado’s General Assembly, three attempts at recreational in-channel diversion legislation were proposed, as detailed in chapter three. During these three legislative processes, interview subjects suggested that advocacy groups played an integral role in legislative initiatives as well as lobbying. This section analyzes what role these groups played in the Colorado General Assembly’s attempt to define, restrict, and create the recreational in-channel water right.

As noted above, the policy literature indicates that coalitions of policy actors can have the strongest influence over the agenda setting phase of policymaking. Coalitions, however, are also important in the selection or legislative stage of policymaking. Studies indicate that stakeholder groups are best able to influence legislative outcomes during the committee hearing and testimony stage of legislation (Hall & Wayman, 1990). Due to the nature of the committee process, which allows for testimony from various groups and individuals regarding legislation under consideration, and the fact that groups can effectively alter a policy to reflect their own policy goals, stakeholder group influence is the greatest during this phase of legislation (Austen-Smith, 1993; Hall & Wayman, 1990). This committee process provides an important opportunity for stakeholder involvement. Because stakeholder groups, lobbyists, and other interests cannot effectively influence legislation on the floor of the legislature to the degree that they can in committee, the committee hearing is the primary venue for formal
stakeholder involvement and influence in the legislative process. During the committee hearing process, legislators amend and alter the language of legislation before sending it to the floor for a vote. If stakeholder concern involves the language and the specifics of legislation, the committee hearing is the primary venue where these groups can wield influence over the specifics of legislation.

The question then becomes, how do stakeholders effectively influence the legislative process in these committee settings and while legislation is pending, specifically with regard to environmental policymaking? If, as Long and Arnold (1995) argue, environmental groups are taking increasingly adversarial stances in relation to governmental policymakers due to what they believe is a history of poor policy performance, then the answer to the question might involve forming adversarial relationships and policy conflict. Environmental stakeholder groups may increasingly adopt stances in opposition to other stakeholder groups and show unwillingness to compromise on policy goals. If, on the other hand, collaborative mechanisms such as multi-stakeholder environmental partnerships between business, government, and environmental NGOs to promote successful environmental management practices are effective in policymaking, then perhaps the picture is one of collaboration among competing interests (Poncelet, 2001). Still others would argue that it is a combination of the two forces that produces policy change in favor of interest group goals. Quirk (1989) states that policy outcomes are not only determined by “the relative success of opposing forces” but also by whether “those forces can agree to support policies designed to
produce *mutual* gains” (p. 905). Competitive coalition building is what Quirk labels cooperative behavior within groups of likeminded policy interests to defeat opposing stakeholder groups.

Effective governance and policy success is often found among long-standing groups of stakeholders (Putnam, 1993). These established groups can promote public policy success by helping to solve the collective action problems that are endemic in our political process (John, 2005). Uslaner (2004) describes this social capital as “the font of a communitarian spirit that makes us look out for our fellow citizens and to work with each other, rather than against each other” (p. 501). These long-standing networks of policy actors, however, are not guaranteed success simply due to their networks of communication and influence. “All disadvantaged actors are not small and defenseless… technical expertise, inside contacts, and legal skills may provide to be of no value where an emotional public media campaign is waged” (F. R. Baumgartner & Jones, 1993, p. 9). Presumably, media campaigns are not the only tools that disadvantaged advocacy groups can use to gain policy advantages.

Interview data from statewide water policy experts as well as participants in the legislative process were analyzed to understand the role that stakeholder groups played in the legislative process of RICD policy change in Colorado. Testimony and hearing minutes from meetings of the Colorado Senate Committee on Agriculture, Natural Resources, and Energy as well as the House Committee on Agriculture, Livestock, and Natural Resources (and in one case the Senate Committee on Public Policy and
Planning) were analyzed for content and coded for stakeholder involvement, testimony given, and the nature of the testimony given with regard to Colorado Senate Bills 216 (2001), 62 (2005), and 37 (2006).

Attempting to understand the influence that stakeholders have in the legislative process requires an understanding of the information legislators used in making their decision to accept or reject proposed legislation. This requires an examination of the witness testimony before legislative committees. These committees are the primary place where discussion between legislators and stakeholders takes place, at least in a formal setting. However, as the house sponsor of Senate Bill 37 in 2006, Representative Kathleen Curry, states, “the role of the lobbyists was absolutely critical for resolution of this situation… because it’s whoever has a presence in the building is the person that’s going to be there if you want to get a handful of people together and talk about the ramifications of a bill” (Curry, 2007). It is, therefore, clear that discussion over legislation also takes place outside of the formal committee hearing setting. The interview data from participants involved in the process of legislative policy change will capture some understanding of the influence that these informal discussions have in the process, but are not able to fully explain this informal negotiation process.

Committee testimony suggests that an evolution took place in stakeholder strategy with regard to legislation in the case of the RICD. This evolution that took place primarily involved the recreational and environmental groups that supported RICD water rights. In 2001, when legislation was first introduced to define, codify, and limit
recreational water rights, the issue of RICDs had not yet been talked about extensively outside of water policy circles. When the Colorado Water Conservation Board urged legislative intervention in reaction to court rulings affirming recreational water rights applications, RICD proponents were not prepared for a legislative battle because they were in the midst of three important legal battles at that time (Golden, Vail, and Breckenridge). In just over one month, RICD opponents were able to introduce and pass legislation restricting RICDs.

By the time Senate Bill 62 was introduced in 2005, attempting to cap and significantly limit recreational water rights, RICDs were a known quantity in water policy circles, with both previous legislation and legal precedent providing grounds for seven communities to file RICD applications between 2001 and 2005. Senate Bill 62 met with greater opposition. In just two and a half months, this legislation made its way through the legislature, eventually being defeated in the house.

When Senate Bill 37 was introduced in 2006, further attempting to define and shape recreational water rights, both opponents and supporters of RICD water rights were effectively entrenched. It took exactly four months for this legislation to be debated, amended, passed by the legislature, and signed into law. Despite the fact that recreational and environmental interests hold much less power in water rights policy than their opponents, they were able to maintain an equal playing field, compromising on some issues and gaining victories on other issues in Senate Bill 37. Table 35
illustrates participation by stakeholders who supported and opposed RICD water rights and the legislative results.

Opponents of RICD rights constituted 60 percent of committee hearing testimony given in 2001, while they only comprised 32 percent in 2005, and 42 percent in 2006.

Table 35: Legislative Participation and Legislative Outcomes

<table>
<thead>
<tr>
<th>Legislation</th>
<th>Number of Statements Provided to Legislature (% of total testimony)</th>
<th>Number of Stakeholders Represented</th>
<th>Legislative Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate Bill 01-216</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RICD Supporters</td>
<td>14 (40%)</td>
<td>13</td>
<td>Lost</td>
</tr>
<tr>
<td>RICD Opponents</td>
<td>21 (60%)</td>
<td>15</td>
<td>Won</td>
</tr>
<tr>
<td>Senate Bill 05-62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RICD Supporters</td>
<td>32 (68%)</td>
<td>29</td>
<td>Won</td>
</tr>
<tr>
<td>RICD Opponents</td>
<td>15 (32%)</td>
<td>12</td>
<td>Lost</td>
</tr>
<tr>
<td>Senate Bill 06-37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RICD Supporters</td>
<td>18 (58%)</td>
<td>14</td>
<td>No clear victory</td>
</tr>
<tr>
<td>RICD Opponents</td>
<td>13 (42%)</td>
<td>9</td>
<td>No clear victory</td>
</tr>
</tbody>
</table>

The piece of information that clearly stands out in these data is the increase in participation among supporters of RICD water rights after the passage of Senate Bill 216 in 2001. In subsequent legislation, these groups were heavily involved in the debate. At the same time, there was a decline in absolute levels of participation among stakeholders that opposed the RICD water right. Despite being a much less powerful group with regard to water policy in general, the recreational and environmental interests had effectively opposed legislation that would significantly restrict recreational water rights.
The next important question to answer is what the nature of this increased participation was.

Based on the evidence presented from committee testimony, it is clear that supporters of recreational water rights effectively produced significant increases in legislative participation after the passage of Senate Bill 216 in 2001. Evidence from interviews with RICD community decision makers and water policy experts in Colorado explains the nature of this participation and will help develop an understanding of why stakeholders that had once been relatively disenfranchised with regard to water policy debates (the environmental and recreation communities) were able to gain important legislative victories in 2005 and 2006.

Data from in-depth interviews are summarized in the table, below. When asked what groups or individuals were involved in legislation, interview subjects mentioned supporter groups and opposition groups in similar aggregate numbers (67 mentions compared with 70 mentions), suggesting that there was not a significant difference in perceived stakeholder participation among interview subjects. The supporter groups, however, were a more cohesive list of participant groups. Almost 85 percent of mentions of RICD supporters fell into four categories: recreational groups, environmental groups, RICD communities, and the Porzak, Browning and Bushong law firm (Glenn Porzak’s law firm).
Table 36: Stakeholder Participation in Legislation

<table>
<thead>
<tr>
<th>Stakeholder Group Name</th>
<th>Number of Mentions (% of subtotal)</th>
<th>Relevant Information Provided About Stakeholder by Interview Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pro-RICD</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RECREATIONAL GROUPS</td>
<td>10 (14.9%)</td>
<td>A strong alliance between... recreation and environmental communities. [CW-01]</td>
</tr>
<tr>
<td>ENVIRONMENTAL INTERESTS</td>
<td>10 (14.9%)</td>
<td>The environmental communities have been pretty supportive. [WA-07]</td>
</tr>
<tr>
<td>Sustainable Water Caucus</td>
<td>4 (5.9%)</td>
<td>The Sustainable Water Caucus, which is kind of a loosely knit group of conservation interests... and they’ve been active as well. [ER-01]</td>
</tr>
<tr>
<td>Colorado Environmental Coalition</td>
<td>4 (5.9%)</td>
<td>Group of conservation interests spearheaded by the Colorado Environmental Coalition... [ER-01]</td>
</tr>
<tr>
<td>Trout Unlimited</td>
<td>9 (13.4%)</td>
<td>Trout Unlimited has been a strong advocate for RICDs and for no limits. [CW-01]</td>
</tr>
<tr>
<td>RICD COMMUNITIES</td>
<td>8 (11.9%)</td>
<td>It’s just the local interests ‘cause they want to make sure if they want to have a kayak course they can. [CO-05]</td>
</tr>
<tr>
<td>Mountain towns/</td>
<td>4 (5.9%)</td>
<td>The mountain towns, the recreation towns were the most strongly in favor. [ER-04]</td>
</tr>
<tr>
<td>Northwest Colorado</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Council of Governments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAW FIRMS RICD</td>
<td>6 (8.9%)</td>
<td>Private law firms... they’ve hired. [ER-02]</td>
</tr>
<tr>
<td>COMMUNITIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Porzak, Browning and</td>
<td>12 (17.9%)</td>
<td>Probably the one that’s the most vocal is Glenn Porzak. [CO-05]</td>
</tr>
<tr>
<td>Bushong Law Firm/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glenn Porzak</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL MENTIONS</strong></td>
<td><strong>Subtotal 67</strong></td>
<td><strong>(Category = 49% of mentions)</strong></td>
</tr>
<tr>
<td><strong>Anti-RICD</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STATE OF COLORADO</td>
<td>3 (4.2%)</td>
<td>You’ve had the state agencies kind of pushing back. [ER-02]</td>
</tr>
<tr>
<td>Colorado Water</td>
<td>6 (8.6%)</td>
<td>CWCB... the most active. [CW-03]</td>
</tr>
<tr>
<td>Conservation Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Engineer’s Office</td>
<td>1 (1.4%)</td>
<td></td>
</tr>
</tbody>
</table>
Table 36: Stakeholder Participation in Legislation - Continued

<table>
<thead>
<tr>
<th>Stakeholder Category</th>
<th>Subtotal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRICULTURAL INTERESTS</td>
<td>5 (7.1%)</td>
<td>Agriculture has continued to be just almost across the board opposed. [WA-07]</td>
</tr>
<tr>
<td>Farm Bureau</td>
<td>7 (10%)</td>
<td></td>
</tr>
<tr>
<td>WATER PROVIDERS/DEVELOPERS</td>
<td>8 (11.4%)</td>
<td>Water users pushing to have restrictions put on recreational in-channel diversions. [ER-02]</td>
</tr>
<tr>
<td>Denver Water Board</td>
<td>6 (8.6%)</td>
<td>Denver Water... has been strongly opposed to these water rights. [ER-04]</td>
</tr>
<tr>
<td>Northern Colorado Water Conservancy District</td>
<td>6 (8.6%)</td>
<td>The Northern Colorado Water Conservancy District has been strongly opposed to these water rights. [ER-04]</td>
</tr>
<tr>
<td>Other Water Providers</td>
<td>8 (11.4%)</td>
<td></td>
</tr>
<tr>
<td>Upstream Communities from Golden</td>
<td>6 (8.6%)</td>
<td>They testified in favor of limiting it. [WP-02]</td>
</tr>
<tr>
<td>LEGISLATORS</td>
<td>1 (1.4%)</td>
<td>The major opposition was really from the legislators themselves. [ER-03]</td>
</tr>
<tr>
<td>Senator Isgar (SB 37 Sponsor)</td>
<td>1 (1.4%)</td>
<td></td>
</tr>
<tr>
<td>Tom Sharp (Drafted SB 62)</td>
<td>2 (2.9%)</td>
<td></td>
</tr>
<tr>
<td>Jack Taylor (SB 62 Sponsor)</td>
<td>3 (4.2%)</td>
<td></td>
</tr>
<tr>
<td>Colorado Water Congress</td>
<td>7 (10%)</td>
<td>The Colorado Water Congress played a critical role [LW-01]</td>
</tr>
<tr>
<td>TOTAL MENTIONS Subtotal</td>
<td>70 (Category = 51% of mentions)</td>
<td></td>
</tr>
</tbody>
</table>

Interview data suggest that the number of groups opposed to RICD water rights outnumbered groups in support of the water right, but this majority did not translate into policy success throughout the legislative debates.

When asked to describe the legislative process and the effectiveness of groups that were involved, interview subjects consistently pointed to the environmental community and law firms that represented RICD communities as the most effective...
groups supporting RICD water rights. The only group opposed to recreational water rights that was described as being effective in lobbying was the Colorado Water Congress, a policy and lobbying group that is traditionally comprised of “water buffaloes,” or traditional water users such as irrigators and water providers.

Table 37 shows that many interview subjects described the environmental groups as “working together” with the recreational community, developing “a broad coalition statewide” in support of recreational water rights, and “partnering with towns and cities” that had an interest in applying for RICD water rights. Several subjects pointed to a specific coalition of environmental groups, the Sustainable Water Caucus, as particularly effective in mobilizing participation among environmental and recreation interests. One of the most significant pieces of information provided by interview subjects is that the pro-RICD groups were often referred to as a coalition, caucus, or lobbying group. RICD opponents were not described in this fashion.

This evidence from interview subjects familiar with the RICD policy evolution and legislative process suggests that there was a coordinated and consistent campaign by pro-RICD stakeholders to gain influence in the legislative process.
Table 37: Stakeholder Effectiveness in Legislative Lobbying

<table>
<thead>
<tr>
<th>Stakeholder Group Name</th>
<th>Information Provided by Subjects on Group Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pro-RICD</strong></td>
<td></td>
</tr>
<tr>
<td>ENVIRONMENTAL COMMUNITY</td>
<td>I think Trout Unlimited specifically has been to a lot of these court cases and the legislation, have been wonderful in terms of working together with the recreation groups. [RE-01]</td>
</tr>
<tr>
<td>Trout Unlimited</td>
<td></td>
</tr>
<tr>
<td>Sustainable Water Caucus/Colorado Environmental Coalition</td>
<td>Colorado Environmental Coalition I would… give a huge gold star… in trying to protect rivers for recreation, environmental reasons. [RE-01]</td>
</tr>
<tr>
<td></td>
<td>The caucus developed a broad coalition statewide of environmental groups, recreational groups, outfitters, the whole spectrum of recreational users as well as… citizens. [ER-03]</td>
</tr>
<tr>
<td>Glenn Porzak/Porzak, Browning and Bushong Law Firm</td>
<td>The people that are probably the most effective in lobbying for RICDs is the Porzak law firm… they’ve been very effective… in anything to do with legislation associated with RICDs. [CW-03]</td>
</tr>
<tr>
<td></td>
<td>Glenn Porzak’s firm has been particularly active… because of the number of different clients that they have who are RICD applicants… they’ve been able to mount a concerted defense to legislative amendments. [WA-02]</td>
</tr>
<tr>
<td><strong>Anti-RICD</strong></td>
<td></td>
</tr>
<tr>
<td>Colorado Water Congress (3 “effective” mentions)</td>
<td>The water user group that’s most vocal and the most effective is the Colorado Water Congress. [ER-01]</td>
</tr>
<tr>
<td></td>
<td>There’s a statewide organization called the Colorado Water Congress that… is probably the preeminent statewide organization in terms of lobbying. [LW-05]</td>
</tr>
</tbody>
</table>
As illustrated in the table below, cooperative language was used four times as frequently to describe the stakeholders who supported recreational water rights in comparison to those groups that were opposed to RICDs.

Table 38: Cooperative Language Used to Describe Stakeholders

<table>
<thead>
<tr>
<th>Cooperative Terminology</th>
<th>Pro-RICD Stakeholders</th>
<th>Anti-RICD Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Coalition</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Caucus</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Conglomerate</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Alliance</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Cooperative</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Working Together</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Coordinated</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>20</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

The pro-RICD campaign was described by one subject as:

“a great cooperative effort, especially statewide.” [RE-01]

Another stated that:

“The coalition that was formed for Senate Bill 62 regrouped for Senate Bill 37, all the same players, people really advocating for the best policy possible.” [ER-03]

These formerly marginalized stakeholders gained a much greater degree of influence over RICD legislation through this collaboration and cooperation among stakeholders. The only group that was described as effective in legislative lobbying against the recreational water right, the Colorado Water Congress, was also the only anti-RICD group that was described as being an effective “statewide organization” of traditional water users. A lack of coordination and cooperation on the part of traditional water user
groups may account for their relative lack of success despite the greater influence they generally have in water rights legislation.

Reviewing the evidence gathered from committee testimony as well as from interview subjects, it is clear that some degree of collaboration was ongoing throughout the legislative process among pro-RICD stakeholders, consistent with the ACF model of coordination within coalitions. Committee testimony data point to an evolution that occurred in the RICD debate through the three phases of legislation, primarily among stakeholders supportive of RICD water rights. At the same time, all interview subjects described the two conflicting sides as being highly opposed to one another, indicating that there was no cooperation among competing policy interests.

Because, as the interview data demonstrate, the RICD supporters had learned to effectively collaborate and portray a united front, these stakeholders were able to develop a legitimate bargaining position in water rights policy that they had not previously enjoyed. While traditional water users still influence most water policy decisions in Colorado to a much greater extent than non-traditional users (environmental and recreation users specifically), these non-traditional user groups have developed legitimacy, coordinated campaigning strategies, and effective collaborative tactics. These tools have allowed them to develop a greater influence and lobbying position, at least with regard to water rights for non-traditional uses such as recreational boating.
The legislative process, therefore, seems to indicate that a collaborative pattern among RICD stakeholders was present, which accounts for the legislative influence these groups were able to develop. Internal collaboration among likeminded stakeholders, as well as external competition between policy opponents, drove the process forward and resulted in the current state of Colorado law regarding recreational water rights. Stakeholders opposed to RICDs outnumbered those who support the water right and have more extensive traditional networks of influence, but because the supporters were more organized and developed a collaborative working relationship, the policy outcome favored RICD supporters to a greater degree than it did opponents.

These findings support theoretical arguments regarding advocacy coalition behavior and the belief-based coalitions that form around policy issues. Rather than multiple interest group presence driving policy change in legislation, it was the presence of coalitions of actors across interest groups (local governments, issue experts, environmental interest groups, etc.) that effectively built an advocacy coalition to promote policy change. Additionally, the findings regarding the ineffectiveness of long-standing stakeholders may surprise social capital theorists, but it supports findings from punctuated equilibrium theory in which disenfranchised actors are able to increase their legitimacy and policy bargaining position through the use of specific policy tools.
6.1.2.2 State Agency Involvement in Statewide Policy

As Sabatier (1988), Kingdon (2003), and others argue, bureaucratic agencies can play an important role as stakeholders and as members of advocacy coalitions in support of policy change. Most theories of policy change acknowledge that government agencies play potentially as important a role as any policy actors in the process of policy change. Weber argued that,

In a modern state the actual rule is necessarily and unavoidably the bureaucracy, since power is exercised neither through parliamentary speeches nor monarchical enunciations but through the routines of administration (as cited in Hill, 1991, p. 261).

The idea that agencies play a central role in the policy process is so effectively ingrained in our collective psyche that the iron triangle theory, now described as too simplistic, has permeated scholarly research (Hamm, 1983). The argument has been made that these theories are actually simplistic “images of politics” that are not based upon theoretical development or empirical testing, but rather on our impressions of the political system (Hill, 1991). Additionally, these theories, when tested, have generally been tested in the context of the U.S. Congress and therefore have limited ability to describe the processes at work with regard to bureaucratic influence within state legislatures (Hamm, 1983).

Bureaucratic agencies, it is argued, pursue their self-interest as it relates to legislative policies (D. Arnold, 1979). Many of the bills that are debated in legislative bodies actually originate in agencies based upon the interests of those agencies. The presumed influence that bureaucratic agencies hold relates directly to the fact that as
public employees, agency lobbyists are considered insiders (Abney, 1988). Abney finds, however, that despite their status as insiders, these agencies enjoy varying degrees of lobbying success, as do other interest groups.

Most studies of bureaucratic influence relate directly back to Niskanen’s theory of bureaucracy in a representative government, according to Lemieux (2004). In this theory, agencies are presumed to continually attempt to increase the size of their jurisdictions and their budgets in order to increase the perks available to personnel. Because these agencies will fear budget decreases if they do not spend their allotted annual budgets, these agencies will produce services for higher prices than necessary, which leads to bureaucratic inefficiencies.

As described in chapter five, many RICD community interview subjects discussed the role that the Colorado Water Conservation Board and the State Engineer played in the legal and political process of policy change in Colorado. These subjects also described the CWCB as the primary state agency working against recreational water rights and the agency that promoted legislation designed to limit and restrict recreational in-channel water rights. Because this agency appears to have played a significant role in policy change, this section will analyze the nature of the role that the CWCB played in the process of policy change, as a significant stakeholder in the process, both within local communities’ legal cases and in the statewide legislative debates discussed above.
As the table below illustrates, among experts in water policy who were not specifically involved in RICD community cases, 62 percent of subjects state that the CWCB was either philosophically opposed to RICD water rights or was obstructionist in its tactics against such water rights. Over 37 percent of CWCB perceptions fell into categories describing the board as evolving on the issue or trying to navigate a difficult and poorly articulated legislative mandate.

**Table 39: Characterization of CWCB Among Water Experts in Colorado**

<table>
<thead>
<tr>
<th>Characterization</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophically Opposed</td>
<td>5</td>
<td>It’s a fact that they are anti-RICD. There’s no way around that really. [ER-04]</td>
</tr>
<tr>
<td>Obstructionist/Contentious/Obstacle</td>
<td>5</td>
<td>They’ve been adamantly against these projects, against these RICDs. [RE-01]</td>
</tr>
<tr>
<td>Evolving</td>
<td>2</td>
<td>The process is evolving somewhat because the water conservation board is taking… a somewhat less restrictive view. [WA-02]</td>
</tr>
<tr>
<td>Trying to Navigate a Difficult Statutory Role</td>
<td>3</td>
<td>They have been a board that is struggling to interpret an ambiguous law. [CW-01]</td>
</tr>
<tr>
<td>Reasonable</td>
<td>1</td>
<td>The CWCB generally speaking has been reasonable. [WP-02]</td>
</tr>
</tbody>
</table>

This perception of CWCB attitudes among statewide experts is not significantly different than aggregate perceptions among RICD community participants.
Table 40: Characterization of CWCB Among Case Study Communities

<table>
<thead>
<tr>
<th>Characterization</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Politically Opposed</td>
<td>6</td>
<td>They were just against these things for political reasons. [WA-10]</td>
</tr>
<tr>
<td>Philosophically Opposed</td>
<td>19</td>
<td>The board itself has internal prejudices against such water rights. [LG-07]</td>
</tr>
<tr>
<td>Unwilling to Negotiate/Backed out of Negotiation</td>
<td>5</td>
<td>They reneged on some promises. [LG-08]</td>
</tr>
<tr>
<td>Water Buffaloes/Focused on Front Range Needs</td>
<td>10</td>
<td>Headed and really populated by people who had much stronger allegiance to Front Range interest than any concept of Western Slope recreational water interests… it was an uphill battle. [WA-03]</td>
</tr>
<tr>
<td>Obstructionist/Contentious/Obstacle</td>
<td>28</td>
<td>The CWCB was and is very aggressively opposed to recreational in-channel diversion water rights and they made every attempt at every level to block this. [LW-04]</td>
</tr>
<tr>
<td>Willing to Work Together/Willing to Negotiate</td>
<td>25</td>
<td>They were looking for a project that they could work out a reasonable compromise. [LG-06]</td>
</tr>
<tr>
<td>Collegial/Respectful</td>
<td>6</td>
<td>I maintain an ongoing collegial relationship with the officials. [WA-04]</td>
</tr>
<tr>
<td>Evolving</td>
<td>1</td>
<td>The Chaffee County case is a real good example of how that board is evolving on this issue. [WA-01]</td>
</tr>
</tbody>
</table>
The table above presents data from interview subject responses across all RICD communities. Sixty-eight percent of these mentions characterize the CWCB as opposed to RICDs and unwilling to negotiate with RICD communities, while 32 percent of CWCB mentions fell into the category of willingness to negotiate. While this perception of the CWCB as obstructionist appears to be held among a majority of both community participants and statewide experts, the picture is somewhat more complicated than this.

As the following tables illustrate, the perceptions of CWCB attitudes depend significantly on timing of RICD application among community participants.

**Table 41: Characterization of CWCB by Early RICD Communities: Golden, Vail, and Breckenridge**

<table>
<thead>
<tr>
<th>Characterization</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Politically Opposed</td>
<td>4</td>
<td>They were just against these things for political reasons. [WA-10]</td>
</tr>
<tr>
<td>Philosophically Opposed</td>
<td>4</td>
<td>They didn’t like the whole notion. [LG-09]</td>
</tr>
<tr>
<td>Unwilling to Negotiate/Backed out of Negotiation</td>
<td>5</td>
<td>They reneged on some promises. [LG-08]</td>
</tr>
<tr>
<td>Water Buffaloes/Focused on Front Range Needs</td>
<td>4</td>
<td>They were primarily representing Front Range interests. [LG-08]</td>
</tr>
<tr>
<td>Obstructionist/Contentious/Obstacle</td>
<td>5</td>
<td>The veracity of the state coming after us surprises me. [LG-09]</td>
</tr>
</tbody>
</table>

The table above outlines the perceptions of CWCB attitudes by those individuals involved in the three early RICD cases: Golden, Vail, and Breckenridge. One hundred
percent of mentions regarding CWCB attitudes depicted the board as obstructionist and philosophically opposed to RICD water rights. The next table, below, shows the perceptions of CWCB attitudes among community participants within communities that undertook their RICD application process after the Gunnison Supreme Court decision had been issued.

Table 42: Characterization of CWCB Among Case Study Communities After Gunnison Decision

<table>
<thead>
<tr>
<th>Characterization</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophically Opposed</td>
<td>2</td>
<td>There are some objectors who are philosophically opposed to RICDs and the water conservation board fits in that category. [WA-06]</td>
</tr>
<tr>
<td>Water Buffaloes/Focused on Front Range Needs</td>
<td>1</td>
<td>The CWCB is part of the water buffalo club. [EL-02]</td>
</tr>
<tr>
<td>Obstructionist/Contentious/Obstacle</td>
<td>1</td>
<td>The CWCB is hostile and they think it’s a bad idea. [LR-02]</td>
</tr>
<tr>
<td>Willing to Work Together/Willing to Negotiate</td>
<td>17</td>
<td>We have a working relationship with the CWCB and we haven’t gotten to the point where we don’t. [WA-06]</td>
</tr>
<tr>
<td>Collegial/Respectful</td>
<td>4</td>
<td>They were respectful of the work that was going on here. [LR-01]</td>
</tr>
<tr>
<td>Evolving</td>
<td>1</td>
<td>The Chaffee County case is a real good example of how that board is evolving on this issue. [WA-01]</td>
</tr>
</tbody>
</table>
These opinions shown in the table above differ significantly from those opinions of people involved in earlier RICD cases. Only 15 percent of the mentions about CWCB attitudes by individuals involved in these later cases depict the board as obstructionist or opposed to the water right. These tables provide an overview of the perceptions regarding CWCB attitudes towards RICD water rights in the communities that applied for those water rights. These data depict an agency that is evolving with regard to its involvement in policy matters, based on the perceptions of individuals who have worked with the CWCB in the RICD legal cases and those familiar with the process. This analysis does not, however, address the level of involvement or level of influence that this agency has had with regard to policy change at a statewide level.

Interview subjects within the CWCB as well as among statewide water experts provide a more thorough understanding of the role that this board has played and the level of influence it has had on RICD policy change in Colorado. Along the lines of Niskanen’s theory of agencies attempting to expand their jurisdictions, interview subjects, in some cases, suggested that the CWCB wanted authority over RICD water rights.

“The CWCB had argued that these really are instream flow water rights, that they ought to… have authority to appropriate water for recreational uses.” [WA-07]

Interview subjects directly involved with the CWCB as staff, attorneys, or board members, describe the agency as having limited influence in the legislative process and attempting to navigate a difficult legislative role.
“The CWCB is just one bit player... there were many other people that were allowed to hire lobbyists to woo the legislators and we weren't allowed to do that so I don't think we carry that same kind of weight.” [CW-02]

“The board has learned new things as we go along, problems with the law as well as ways to interpret different phrases within the law.” [CO-01]

CWCB interview subjects also describe the board as attempting to ensure that the state’s water resources are managed appropriately.

“The board... was conscientiously trying to carry out what it saw its role to be.” [CW-03]

“They’re doing what they think is the right thing to do.” [CW-02]

“People would perceive the CWCB as probably being the most active in regard to... controlling the reasonableness of RICDs.” [CW-03]

As the State of Colorado’s water policy body, the CWCB was given the role of holding hearings in RICD cases and providing recommendations to the water court regarding those cases. This role has meant that the board was active in each of the RICD cases outlined in this study.

Interview subjects not affiliated with the CWCB argue that the board was highly influential, especially in the legislative process during Senate Bill 216.

“The Colorado Water Conservation Board brought a proposed bill to the General Assembly... asking for a number of statutory limitations to be imposed on these kind of applications.” [WA-07]

“It was real clear that the State was getting beat in the Golden case and there was a break in the trial... and they jumped into the state legislature during that time period and tried to outlaw these things.” [WA-10]
While the CWCB was successful in its initial efforts legislatively (specifically with regard to passing Senate Bill 216), the CWCB was not as successful in limiting RICDs in the legal process.

“\text{The State spent over a million dollars in legal and expert fees and staff time taking five of these cases to trial and four of them to Supreme Court rulings and they didn’t reduce a single RICD by one drop of water. We ended up getting the full decreed amount in each of the cases.}” [WA-10]

“In each instance it was the State taking the case to trial for policy reasons.” [WA-01]

“\text{Steamboat was kind of the last great hurrah for the State and they even admitted that.}” [WA-10]

The CWCB to date has taken five cases to trial, four cases to the Supreme Court, has recommended approval in four RICD cases in which the board required reduced flows for approval, and has only recommended outright approval in two cases. While the CWCB was not successful in limiting RICD applications, it could be argued that the board was successful in making the legal process more difficult for communities and increasing the costs and debate over RICD water rights.

Interestingly, likely due to the statewide perception that the board is highly opposed to RICD water rights, interview subjects in four RICD communities (Avon, Silverthorne, Chaffee County, and Longmont) state that theirs was the first application to receive a recommendation of approval from the board\(^3\).

\(^3\) Only Avon and Silverthorne’s applications were given outright recommendations of approval, while the others required reduced flows for CWCB approval.
“It’s probably the first one… that got the Colorado Water Conservation Board endorsement.” [EL-06]

“That’s the first time they’ve ever supported one.” [LG-03]

“The only RICD application that CWCB ever ultimately recommended approval of.” [LG-18]

“This is the only one they really came out and supported.” [EL-05]

“We’re the first community that hasn’t had to go to court.” [LR-02]

“The only one in history that the CWCB didn’t oppose.” [EL-03]

Longmont was actually the first community to receive a CWCB recommendation for approval of its RICD application.

While there is some disagreement on the level of influence the CWCB held and the effectiveness of the board in RICD matters, this influence and effectiveness depend on definitions of the two concepts. If we define influence and effectiveness as the ability to limit, dictate, or stymie policy goals the agency disagrees with, then the CWCB was highly ineffective and not influential. If we define these terms based on the level of agency concerns that were voiced and incorporated into the policy process, then the CWCB was much more influential and effective. It appears that the CWCB, as a state agency, was at least influential in effectively voicing concerns over RICDs during the debate in Colorado. The agency’s ability to draw on the resources of the Attorney General’s Office for legal representation allowed the agency to be integrally involved in legal matters. The influence that board members (who are all political appointees of the Governor of Colorado) and staff have within political circles also appears to lend the
agency a significant amount of credibility and influence over legislative policy considerations.

6.2 Individuals

While some theories of policy change focus on groups as the unit of analysis, others focus on individuals. As outlined at the beginning of this chapter, institutional rational choice theory is the most thoroughly developed set of theories that uses the individual actor as the unit of analysis (Sabatier, 1999; Schlager & Blomquist, 1996). While other theories use groups as the basic unit of analysis (Sabatier, 1988), these individual actor theories focus on the roles that individuals play in the policy process and how they cooperate to create collective choices (F. R. Baumgartner & Jones, 1993). It is clear, therefore, that acknowledging the importance of individual actors is vital to building a thorough model of policy change in local communities.

6.2.1 Policy Entrepreneurs

Policy entrepreneurs, for the purpose of this study, are defined as advocates for policy proposals who may be inside or outside of government, groups or individuals, but who share the defining characteristic of a willingness to invest their resources—time, energy, reputation, and sometimes money—in the hope of future return. That return might come to them in the form of policies of which they approve, satisfaction from participation, or even personal aggrandizement in the form of job security or career promotion (Kingdon, 2003, pp. 122-123).
These entrepreneurs, in essence, “change the direction and flow of politics” (Schneider & Teske, 1992, p. 737). Because this research study is not focused on presenting a model based on a single theoretical focus, the definition of entrepreneurs according to collective action tradition is purposely not used here. Taylor (1987) states that political entrepreneurs can help to solve collective action problems within groups by changing beliefs, incentives, or resources of individuals in order to promote cooperation to achieve collective ends. While these contributions are clearly important and consequential in relation to entrepreneurship, this study does not use a collective action framework. Clearly, much entrepreneurship in the public sector is focused on promoting cooperation and collective behavior (Schneider & Teske, 1992), but there are incentives and activities undertaken by entrepreneurs that are not fully explained by a model of the entrepreneur based exclusively on collective action assumptions.

While policy entrepreneurs can introduce innovation in public sector policies through “the generation, translation, and implementation of new ideas,” they cannot do so alone (Roberts & King, 1991, p. 147). A theory of the policy entrepreneur cannot assume that these actors alone can institute policy change. These actors influence the flow of policy, but do not control this flow, according to Roberts and King. Research has established that the presence of policy entrepreneurs in policy venues increases the likelihood of political consideration of policy choices (Mintrom, 1997). Mintrom argues that policy innovation, or the spread of new policy ideas, is related to policy entrepreneurship. Indeed, these political risk-takers “generate creative policy solutions,
redesign governmental programs, and implement new management approaches to revitalized the public sector” (P. J. King & Roberts, 1992, p. 173).

This policy entrepreneurship is often compared with private sector entrepreneurship in studies. These entrepreneurs in the public sector similarly discover or alert others to new possibilities for policy innovation, or they try to take advantage of new discoveries in order to create benefits for themselves (Schneider & Teske, 1992). Schneider and Teske argue that in local governments, these entrepreneurs push forth their desired policy outcomes which can upset political equilibrium, but eventually communities move back to a state of equilibrium once policies have changed and evolved based on new preferences driven by these entrepreneurs. The authors argue that since public entrepreneurs, unlike private entrepreneurs, cannot derive exclusive profit benefits from their actions, some other explanation must account for their behavior. They propose that these policy entrepreneurs may, in fact, encourage adoption of their innovations elsewhere in the policy process and actually share information and technical secrets, unlike private sector entrepreneurs. Additionally, the means through which entrepreneurs overcome barriers to entry into the ‘market’ of local politics is an important consideration.

Policy entrepreneurs can include actors within and outside of traditional government sources of influence and power. These entrepreneurs can include elected officials or they can be issue experts. For example, city managers, with their leadership acumen and technical knowledge of city governing act as entrepreneurs when citizens
demand or require change and elected officials do not provide that change (Teske & Schneider, 1994). Similarly, scientific elites can act as policy entrepreneurs based on their issue expertise in a particular field or scientific policy issue. These elites can at times, however, prove to be myopic in their views of the policy issue, failing to seek opportunities for collaboration across specializations and fields, as in the case of elite entrepreneurs in U.S. climate policy (Hart & Victor, 1993). Clearly, issue experts and elites have a unique opportunity to influence policy change based upon their knowledge. These elites, in some cases, may be in a particularly influential position that allows them to influence policy decisions and innovation to a greater degree than laypeople or even typical policy entrepreneurs. This expertise may prove to be one way in which entrepreneurs can overcome barriers to entry in local politics (Teske & Schneider, 1994).

Clearly, based on this presumed influence of policy entrepreneurs, there can be a downside to policy entrepreneurship. These individuals may have the ability to “play fast and loose with the public interest” and abuse their power, misuse and misguide people and policies, and can be ethically challenged (P. J. King & Roberts, 1992, p. 173). According to King and Roberts, however, the deliberative processes in place in democratic governments can help to provide accountability and keep entrepreneurial power in check. They also argue that while there are certainly cases of misdeeds among policy entrepreneurs, “as sources of creativity and innovation, public entrepreneurs are important catalysts for social learning and public sector renewal” (p. 189).
Based on this presumption of policy entrepreneur influence over policy change, this section analyzes the role that individuals played as policy entrepreneurs within RICD communities to answer the research question, *what level of influence did policy entrepreneurs have in the process of policy change in recreational water rights policy?* Because expertise can lend significant credibility to particular individuals and allow them extraordinary influence on policy change as well as reduce barriers to entry into the policy process, this section also analyzes case study data to answer the research question, *what was the role of issue experts in the process of policy change in recreational water rights policy?*

Within each community, as outlined in chapter five, interviews were conducted to ascertain the process through which the idea of applying for RICD water rights arose and the initiators of the idea. The data from interview subjects demonstrate that policy entrepreneurs played a central role in the process of policy change in all RICD communities.

“The lead proponent of that was a council member.” [LW-05]

“The idea actually came from one of the council members.” [LG-22]

“I think the fact that it came from a citizen and not from the government directly says something.” [LR-02]

While entrepreneurial circumstances vary across communities, the individuals who promoted the idea of applying for recreational water rights fall into three primary categories, as depicted in the table below. These policy entrepreneurs, as suggested by
the literature outlined above, come from within and outside of government and include
issue experts in the field of water rights.

Table 43: Initiators of RICD Idea in Colorado Communities

<table>
<thead>
<tr>
<th>Community</th>
<th>Initiator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden</td>
<td>City Staff</td>
</tr>
<tr>
<td>Vail</td>
<td>Attorney</td>
</tr>
<tr>
<td>Breckenridge</td>
<td>Attorney</td>
</tr>
<tr>
<td>Longmont</td>
<td>Attorney</td>
</tr>
<tr>
<td>Pueblo</td>
<td>Attorney</td>
</tr>
<tr>
<td>Gunnison</td>
<td>County and District Staff</td>
</tr>
<tr>
<td>Steamboat Springs</td>
<td>City Council and Citizens</td>
</tr>
<tr>
<td>Chaffee County</td>
<td>Citizens</td>
</tr>
<tr>
<td>Silverthorne</td>
<td>Attorney and City Staff</td>
</tr>
<tr>
<td>Durango</td>
<td>Citizens</td>
</tr>
<tr>
<td>Avon</td>
<td>City Council</td>
</tr>
<tr>
<td>Carbondale</td>
<td>Attorney and City Staff</td>
</tr>
</tbody>
</table>

First, in six RICD communities, the municipal or district water rights attorney acted as a
policy entrepreneur. Second, in six communities, staff or elected officials of the
government agency that filed the application for water rights acted as policy
entrepreneurs. Finally, in three communities, citizens promoted the idea of filing for
RICD water rights. In three of these communities a combination of actors promoted and
advocated for the RICD water right application either simultaneously or separately.

Based on these data summarized from case studies presented in chapter five, policy
entrepreneurship appears to have played a central role in the process of RICD policy
change. As the table below illustrates, it was issue experts in 8 of the 12 RICD
communities that were the entrepreneurs of RICD water rights.
### Table 44: Categories of Initiators of RICD Idea

<table>
<thead>
<tr>
<th>Community</th>
<th>Initiator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden</td>
<td>Expert (S)&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
<tr>
<td>Vail</td>
<td>Expert (A)</td>
</tr>
<tr>
<td>Breckenridge</td>
<td>Expert (A)</td>
</tr>
<tr>
<td>Longmont</td>
<td>Expert (A)</td>
</tr>
<tr>
<td>Pueblo</td>
<td>Expert (A)</td>
</tr>
<tr>
<td>Gunnison</td>
<td>Expert (S)</td>
</tr>
<tr>
<td>Steamboat Springs</td>
<td>City Council and Citizens</td>
</tr>
<tr>
<td>Chaffee County</td>
<td>Citizens</td>
</tr>
<tr>
<td>Silverthorne</td>
<td>Expert (A/S)</td>
</tr>
<tr>
<td>Durango</td>
<td>Citizens</td>
</tr>
<tr>
<td>Avon</td>
<td>City Council</td>
</tr>
<tr>
<td>Carbondale</td>
<td>Expert (A/S)</td>
</tr>
</tbody>
</table>

One individual was mentioned frequently across all categories of interview subjects (statewide experts, water attorneys, community decision makers, and opponents of RICDs). Glenn Porzak, the water attorney for Golden, Vail, and Breckenridge<sup>5</sup>, has been described as the inventor or father of RICD water rights by various interview subjects. The table below illustrates the characterizations of Porzak based on the subject’s stance on RICD water rights. Among those who support RICD water rights, all mentions of Porzak are positive. Among those who are opposed to RICD water rights there is still a majority of subjects who describe him in a positive manner.

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<sup>4</sup> Expert (S) = Expert government personnel such as water managers. Expert (A) = Water attorney.

<sup>5</sup> The law firm of Porzak, Browning, and Bushong also represented the City of Steamboat Springs as well as Chaffee County in their RICD cases. Additionally, the firm consulted in three other RICD cases either formally or informally.
### Table 45: Characterization of Glenn Porzak Among all Interview Subjects

<table>
<thead>
<tr>
<th>Description of Glenn Porzak</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pro-RICD Subject</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>6</td>
<td>Glenn is a tremendous visionary… he’s been given a tremendous amount of free-rein and he’s got a Midas touch. [LW-06]</td>
</tr>
<tr>
<td>Negative</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Anti-RICD Subject</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>5</td>
<td>He’s certainly been a leader in that whole side of it and he’s a brilliant guy. [CO-02]</td>
</tr>
<tr>
<td>Negative</td>
<td>4</td>
<td>What these guys have done is they’ve invested a lot of time and money in creating a legal product… and now that they’ve done that, the best way they can recoup their investment is to peddle this product around the state to as many locations as they can. [LR-01]</td>
</tr>
</tbody>
</table>

Porzak is clearly one of the primary entrepreneurs of RICD water rights in Colorado, having developed the legal arguments promoting such water rights and having litigated the first three cases. This, combined with the data presented above in regard to stakeholder participation in legislative policy change, demonstrates that Porzak was able to wield significant influence over policy change statewide and within local communities. While the City of Golden approached Porzak for advice on whether it could qualify for a water right for its kayak course, Porzak promoted the idea himself in Vail and Breckenridge.

“Glenn Porzak suggested we get a water right…” [LW-06]
“We just happen to have Glenn Porzak as our town water rights attorney.” [LG-01]

The reputation that the Porzak firm established in RICD water rights law produced significant benefits for the firm in terms of notoriety and business.

“There was a quote in there from some guy named Glenn Porzak and I said, ‘well, I’m going to call this guy up.” [EL-01]

“We said, ‘hey, you guys need to hire Glenn Porzak.” [LR-04]

“His firm being the go-to law firm if you were seeking one.” [LW-05]

“Glenn Porzak and his partners, they’re big time.” [WA-11]

“Porzak and his firm are the true champions of RICDs having done it, pioneered it. They’ve been through a lot of wars.” [WA-09]

“What they learned was that they hire Glenn Porzak because he knew what he was doing.” [LG-09]

“It’s his thing. He created this water right. He got the first ones in and he won and he beat the CWCB.” [WP-02]

Benefits from policy entrepreneurship for Porzak and his legal partners do not only include potential economic benefits from increased legal representation of RICD communities. Psychic benefits are also among the considerations for these entrepreneurs.

“Glenn Porzak who has strong environmental leanings.” [NG-01]

“We [Porzak firm] have always been closely aligned and tied in with the recreation based economy.” [WA-10]

“You had to be very passionate. You had to exude that passion, otherwise I don’t think we would have won.” [WA-10]
“We represent some nine different ski areas.” [WA-10]

Despite the benefits, both economic and psychic, that these attorneys presumably attained due to their policy entrepreneurship in RICD legal and policy circles, Porzak and his partners did not attempt to erect barriers to entry to retain exclusive profits from their entrepreneurship. These attorneys often shared technical knowledge about the legal process and successful strategies with other communities and other water rights attorneys, as suggested by their role consulting in several subsequent RICD cases where the firm was not retained as primary counsel. The data above show that within communities where Porzak was the water attorney of record prior to RICD interest, there was a high level of trust placed in his counsel and expertise in water rights matters. This expertise appears to have influenced at least three communities to pursue RICD water rights.

This level of trust these communities placed in Porzak suggests that issue experts may have a disproportionate ability to act as policy entrepreneurs based on their expertise as well as the trust that clients place in them, supporting the literature on the subject outlined above. The same picture regarding issue experts is evident in other RICD communities as well.

“The idea came… through our attorneys.” [LG-12]

“Back in 2001… [our water attorney] called me to let me know that there was new legislation passed that allowed for communities to seek water rights for recreational purposes.” [LG-21]

“I think the impetus for that… came from our water attorney.” [LW-11]
“It probably came as much for our water attorneys’ suggestions as a way to achieve what we were trying to achieve.” [LG-18]

This section analyzed the role that policy entrepreneurs played in RICD communities and the role that issue experts played within those communities. Data show that in each RICD community a policy entrepreneur was present to suggest the idea of filing for an RICD water right, promote the idea within municipal government, and advocate for the idea, if necessary. With regard to issue experts, these data show that the entrepreneurs in eight of the RICD communities were water attorneys or experts in water management. This suggests that these issue experts do play a significantly influential role in policy change within their area of expertise.

6.2.2 Citizens

Political participation literature presumes that citizen participation in the political process is important. Participation in politics is essential for democracy. It is through this behavior that the choices of “who gets what, when, and how” are made (A. Campbell, Converse, Miller, & Stokes, 1960, p. 4). Because this participation is important to democratic governance, this research study asks the question, *what was the role of citizens in the process of policy change in recreational water rights policy?*

Political participation is behavior that is aimed at influencing government or governmental policies. Political participation can include basic acts such as voting, as well as more complex actions such as protest, writing elected officials, or attending
public meetings and providing public input (Verba & Nie, 1972; Verba, Schlozman, & Brady, 1995 for example). This participation by individuals generally correlates with higher levels of wealth, education, and other socioeconomic (SES) indicators. This, however, is not simply due an innately higher level of interest in politics among higher SES individuals. Individuals who are among higher SES groups also tend to have the resources available to engage in participatory activities, such as knowledge, money, and group membership (Brady, Verba, & Schlozman, 1995; Verba et al., 1995).

Much of this body of research also presumes, however, that this participation does not happen without external influences to mobilize participants. Much participation occurs due to mobilization by organizations, not the self-directed behavior that Nie and Verba (1972) first studied. The mobilization model states that “participation is a response to contextual cues and political opportunities structured by the individual’s environment” (Leighley, 1995, p. 188). Participation, “results when groups, political parties, and activists persuade citizens to take part” (Jordan & Maloney, 1997, p. 119). Mobilization is “the process by which a group secures collective control over the resources needed for collective action” (Jenkins, 1983, p. 532). Groups that act as mobilization forces include social, religious, political, and even professional organizations. Rosenstone and Hansen (1993) state that “the more involved people are in social life, the more likely they are to be mobilized, the more likely they are to be offered the social incentives toward activism, and the more prone they are to take part in politics” (p. 83). This is supported by findings related to individual organizational and
religious membership in communities (Verba et al., 1995). In line with rational choice theory, Rosenstone and Hansen (1993) argue that “few people spontaneously take an active part in public affairs. Rather, they participate when politicians, political parties, interest groups, and activists persuade them to get involved” (p. 228). The significant lesson regarding participation among citizens, according to these authors is that individuals participate because someone “encourages or inspires” them to do so (p. 161).

This focus on external influences of political participation is important in the context of RICD policy change within Colorado communities because, as interview subjects stated, water law and policy is a complex and boring process for the average citizen.

“Water rights for people that even deal with them are pretty obscure.” [LG-09]

“It’s sort of one of those water rights things which seems to be abstract and boring.” [LR-05]

Individuals, therefore, may be unlikely to participate without efforts to encourage them to do so. This section will analyze whether citizens were involved in the process of policy change in Colorado communities and if so, what the nature of that participation was.

The first issue that must be addressed when analyzing whether citizens were involved in community processes of policy change in RICD water rights is whether communities made an effort to inform their citizens and seek input into the decision process. Without this information availability, it can be presumed, based upon research
that indicates that individuals are unlikely to participate even when information is available, that without such informational advantages, participation levels would undoubtedly be low.

Table 46: Effort to Make Citizens Aware or Involved in RICD Decision

<table>
<thead>
<tr>
<th>Community</th>
<th>Citizen Notice/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden</td>
<td>No</td>
</tr>
<tr>
<td>Vail</td>
<td>No</td>
</tr>
<tr>
<td>Breckenridge</td>
<td>No</td>
</tr>
<tr>
<td>Longmont</td>
<td>No</td>
</tr>
<tr>
<td>Pueblo</td>
<td>City Council Meetings</td>
</tr>
<tr>
<td>Gunnison</td>
<td>Yes</td>
</tr>
<tr>
<td>Steamboat Springs</td>
<td>Yes</td>
</tr>
<tr>
<td>Chaffee County</td>
<td>Yes</td>
</tr>
<tr>
<td>Silverthorne</td>
<td>City Council Meetings</td>
</tr>
<tr>
<td>Durango</td>
<td>Yes</td>
</tr>
<tr>
<td>Avon</td>
<td>City Council Meetings</td>
</tr>
<tr>
<td>Carbondale</td>
<td>City Council Meetings</td>
</tr>
</tbody>
</table>

The table above shows that four communities specifically did not attempt to make citizens aware of the issue of RICD water rights. Four other communities did so, but only through the minimal process of city council meetings and public notice therein. Finally, four communities state that they actively attempted to involve citizens in the policy process. The next important consideration is whether these attempts to solicit citizen participation and input by some RICD communities resulted in the desired participation and input.

While it may seem strange in our age of sunshine laws and values supporting open governance that two-thirds of RICD communities either did not attempt to inform
citizens or did so only at minimal levels, this may be closely related to the field of water rights and the technical nature of this policy area.

“You typically don’t have a public discussion about a water right filing because you tell everybody we’re going to file… there would have been a just a rush to the courthouse.” [LG-13]

“The specific question of the RICD was considered more of a technical detail.” [EL-04]

Presumably, water rights are similar in this respect to many other technical environmental policy decisions made within local governments. This may indicate that this lack of citizen input may be pervasive across environmental policy issues beyond RICD water rights, but where technical or complicated information is seen as beyond the scope of individual cognitive capacity and where these policies are seen as details in which citizens would not be interested.

The next question that needs to be addressed in order to understand whether citizens were involved in the process is whether, based on this public notice (or lack of public notice), citizens chose to participate in the process.

“They wanted the course, they wanted to go boating. They had the course, they were boating. Securing the future of the water, that’s something that isn’t really real to them.” [LG-09]

“There were remarkably few kayakers… who showed up at these meetings.” [LW-04]

“Sort of an activist group of people that were interested in it and I think the rest of the people were probably ambivalent.” [LW-09]

“I don’t know… other than the boating community if there was a… large public outcry for this.” [LG-21]
“There wasn’t a lot of discussion about the RICD filing.” [LG-13]

While levels of citizen participation differ somewhat among RICD communities, absolute levels of citizen participation appear to be quite low in recreational water rights policy processes. This suggests that citizens did not have the ability, or did not assume roles that would give them the ability, to influence policy change with regard to technical issues such as water rights. Whether this citizen apathy was a result of ambivalence, ignorance, or general political apathy is beyond the scope of this research project, but is an important and potentially significant issue of investigation.

6.2.3 Politicians

Politicians are often considered to be motivated by self-interest when making policy decisions (R. D. Arnold, 1990 for example). Based on this reliance on a self-interest model in relation to political decisions, this research asks the question, were politicians promoting their own self-interest (or an institutional self-interest) when making policy decisions in the process of policy change in recreational water rights policy?

In political decisions, policymakers are often accused of promoting their own personal self-interest over the collective interest (Stone, 1997). Institutional rational choice theory views all individuals as self-interested and utility maximizing (E. Ostrom, 1999). It is, therefore, not a leap of logic to assume that politicians are likewise promoting their own self-interest through their decisions related to public policy issues.
Public choice theory proposes that economic market principles can be attributed to decisions within the public domain. In this theoretical approach, not only are individuals self-interested in regard to their voting strategies (Buchanan, 1988), but political leaders are as well. These politicians “are egoists as well, they will pursue private goals instead of acting as benevolent despots aiming at the public good” (Engelen, 2007). Arnold (1990) argues that self-interest is importantly connected to vote choice in Congress. His study of congressional vote choice shows that elected officials calculate whether or not citizens will use information on voting against a candidate when deciding how to vote on a piece of legislation. Their concern for re-election and self-interest encourages them to refrain from voting in ways that are unpopular and visible. An analysis of the U.S. constitutional ratification process demonstrates that decision makers who are insulated from or removed from their constituents will vote based upon their own self-interests, even blatant economic self-interests (McGuire & Oshfeldt, 1989).

Because politicians want to win elections, these politicians will propose policies that comport with the preferences of the majority of voters in their communities to maximize electoral success (Lemieux, 2004). These “politicians are motivated by a desire to win and keep public office… politicians will seldom advocate or pursue policies that are unpopular with the electorate” (Meadowcroft, 2005, p. 59). While these policy recommendations can at times coincide with public preferences, the heart of public choice theory states that policy choices among self-interested officials “do not coincide
automatically with those of his constituents” (Barro, 1973, p. 19). These self-interested decisions can act to promote special interests and derive profits from vote choice among politicians. This focus on self-interested political decisions in economic-political institutions has helped to dispel the “often naïve presupposition that political agents, unlike economic ones, are unselfish” (Witt, 1992, p. 117).

Kalt and Zupan (1984) found that these theories of self-interested politicians as “narrowly egocentric maximizers explain and predict legislative outcomes poorly” (p. 279). Rather, elected officials base their decisions on a self-defined notion of “public interest.” Additionally, some recent studies have also shown that self-interest alone cannot account for voting decisions by policymakers. Instead, it is necessary to understand ideological preferences in addition to the traditional reliance on rational self-interest since many elected officials retain an emotional or ideological dedication to democratic governance on some level (Bowler, Donovan, & Karp, 2006). Stoker (1992) articulates the pitfalls of defining self-interest narrowly or broadly. She argues that the definition of self-interest influences the findings regarding such self-interest. If we consider anything that a person values to be related to self-interest (as she says rational and social choice theorists have), then almost any political decision can be categorized as such, but while these actions may be categorized as self-interested, they may not be considered selfish if they promote community welfare as well. If, on the other hand, we define self-interest more narrowly, there is more room in this theory for altruistic
political actions. These varying perspectives on self-interest in the political process are
considered next in the context of RICD community decision makers in Colorado.

It is important to note, when considering this research question, that six of the
twelve RICD communities analyzed in chapter five have significant second-homeowner
populations. A study of northwest Colorado counties, using addresses where property
tax notices were sent as a proxy measure for whether homes were considered primary or
secondary residences, showed that 60 percent of homes in this area of the state are
second homes⁶ (Venturoni, 2004). In this study, counties including five RICD
communities (Breckenridge, Silverthorne, Vail, Avon, and Carbondale⁷) were included.
As noted in chapter five, six RICD communities have significant second homeowner
populations. Steamboat Springs, although not included in this study, can be presumed
to have similar characteristics as the five communities included, since it also shares
demographic and second homeowner statistics that indicate resort influences present
unique concerns for some communities.

Only 5.6 percent of second homeowners surveyed in this study are registered to
vote in the communities where they own a second home. These second homeowners are
also consistently older, wealthier, and better educated than residents of these counties.
There is clearly a significant gap in the demographics of residents and non-residents
within these communities. According to survey results contained in this study,

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⁶ Also refer to demographic data on this subject in table 25 in chapter five.
⁷ Although Carbondale does not have a significant second homeowner population as noted in table 25.
however, out of 15 categories of policy issues of importance to survey respondents, residents and second homeowners only differed significantly on five of the measures (with second homeowners placing a higher priority on recreational opportunities and transportation infrastructure and residents placing a higher priority on the local economy, health care, and education systems). These findings are important to consider when addressing self-interest and vote maximizing behavior of politicians in RICD communities. If politicians are increasingly providing recreational amenities to their communities, it is not always in response to demands from local voters, as demonstrated by these data on second-homeowners. It is, therefore, possible that these decision makers are providing amenities that may not gain them electoral advantages.

Interview subjects classified as state water policy experts (separate from those involved within RICD communities) were asked their perception regarding the reasons why Colorado communities have applied for recreational in-channel water rights. These reasons differ from those presented by internal participants in the process of policy change, as illustrated in the table below. Far more mentions ascribing negative motivations for RICD applications such as wanting control of the river, wanting to prevent transmountain diversions, and wanting to prevent development were presented by statewide water policy experts than among community participants. Thirty-nine percent of statewide water experts listed negative motivations for RICD water rights applications, while only 14 percent (based on reasons listed in table 28 in chapter five) of community participants listed negative motivations for RICD water rights applications.
As presented in the cross-case analysis in chapter five, community decision makers cited economic development within their communities, protection of the community’s...
investment in the whitewater course, and protection of instream flows as the most important reasons for RICD application.

This difference between the perceptions of external water policy experts and community decision makers presents a significant challenge to the assertion that political decisions were made based upon self-interest. While community decision makers argue that their decisions were based upon the well-being of their communities, some would argue that this is also a self-interested motivation. If these decision makers made decisions that promote community benefits, these decisions may gain decision makers significant electoral support, which is a self-interest benefit of an otherwise altruistic decision. For example, in Golden, the whitewater park development helped attract businesses to the downtown and served a significant role in a revitalization plan for the community. If elected officials make decisions to establish economic drivers such as these, the community may benefit from increased revenue and development, which in turn may lead to elected officials being retained by voters for promoting positive economic development in the community. In other cases, such as Gunnison and Steamboat Springs where citizens value keeping native water in the local rivers, elected officials may benefit politically from making decisions that maintain streamflows and prevent out-of-basin water development.

These examples demonstrate that policymakers’ self-interest cannot easily be differentiated from community welfare. These examples further illustrate that elected officials may view whitewater park development and RICD applications as part of
doing their jobs of promoting economic growth and development within their communities. Defining community welfare may also include providing these recreational amenities to citizens and visitors. In at least half of these communities (based on study results presented above in regard to second homeowner demographics), however, significant portions of residents are not registered to vote in the community. This would suggest that the electoral self-interest argument may be less persuasive in these communities than might otherwise be the case. This is especially true if taking into consideration survey results described above wherein second homeowners actually placed a higher policy priority on recreational opportunities in resort communities than residents did. On the other hand, elected officials may view attracting second homeowners as part of economic growth and development (through the creation of local jobs and increased tourism spending), in which case providing this population with amenities they desire may have beneficial results for the full-time residents as well.

While this does not provide a definitive answer with regard to the role that self-interest played in the process of policy change in RICD water rights policy, it at least casts reasonable doubt on the proposition that political decisions were primarily based on self-interest in the case of RICD water rights.

6.3 Conclusions

This chapter presented a picture of individual and group influence on the process of policy change similar to what multiple theories of policy change would
propose. There are, however, some important differences. Supporting assertions proposed by interest group theory and by the advocacy coalition framework, stakeholder groups supportive of RICD water rights effectively mobilized and cooperated to promote legislative changes consistent with their policy goals. Punctuated equilibrium theory also suggests that the findings with regard to the inefficacy of long-standing groups of stakeholders are not atypical because disenfranchised coalitions of actors can, over time, gain a greater degree of influence and resources that allow them to influence policy decisions. In RICD legislative policy, the traditional water user stakeholder groups were less effective than their traditional policy influence and networks would suggest.

Additionally, the overall picture of policy change statewide involves state agencies as stakeholders. Specifically, the Colorado Water Conservation Board was mentioned by interview subjects across all categories as being highly opposed to the water right and heavily involved in the process of policy change. While it appears that the CWCB was only influential in initial legislative policy debates, it did wield tremendous power over community RICD applications once they had been filed\(^8\). This suggests that communities may have had to make continual or periodic decisions to maintain pursuit of their RICD applications (and expenditures of community funds) in

\(^8\) Specifically with regard to making these legal cases difficult to navigate and ensuring an extensive public debate over the issue of RICD water rights.
the face of opposition from the State, even after the community had decided to apply for
the RICD.

Within RICD communities, interview data illustrate that stakeholder groups and
citizens were not influential factors in local policy decisions. While groups were
involved in the initiation of policy change to provide recreational amenities, they were
not involved in the process related to RICD water rights in most communities. This may
be due to a self-selecting interest factor more than an inability to participate or influence
policy decisions, based on the three RICD cases where groups were active and
effectively involved in RICD policy decisions. In RICD communities, citizen apathy can
at least partly be explained by the lack of water law expertise that citizens have and the
fact that some communities treated the RICD application as a “technical detail” where
extensive public input was unnecessary. Additionally, as will be outlined in chapter
seven, because of a lack of local media coverage of RICD water rights prior to decisions
being made, citizens did not have information related to RICD water rights policies.

Policy entrepreneurs, including attorneys from a single law firm who served as
counsel for five RICD communities, prove to be important influences on RICD policy
change across all RICD communities, supporting theoretical propositions of multiple
streams framework and punctuated equilibrium theory. Those policy entrepreneurs
with specific issue expertise also had extraordinary influence over the policy process.
The trust placed in these individual experts may help to explain their ability to so
effectively promote policy change. This policy entrepreneurship appears to be the most influential factor addressed thus far in terms of promoting policy change.

Finally, self-interest was not clearly associated with political decisions made within RICD communities. The interview data show that within communities, reasons for RICD applications were overwhelmingly related to ideas of protecting the community, the resource, or the local economy. Only among participants external to community decision making processes was there an overall perception of RICD decisions being based on motivations such as self-interest, power, and politics. This, however, may not be as simple as it sounds. While ideas of protecting community and natural resources sound altruistic, they may also help provide electoral victories to politicians in communities where these values are important (and where most residents supportive of these goals are registered to vote within the community). It is then difficult to subdivide reasons for RICD applications into categories that are clearly self-interested and non-self-interested. These political decision makers may very well have made policy decisions based on the best interest of their communities, but at the same time may be increasing their own electoral success.

The next chapter analyzes the role that information and policy timing play in the process of policy change in local communities. This includes analyses of media coverage and influence over RICD application decisions, the modes of learning about policy innovations, the role that accurate policy knowledge played in this process of policy change, and the influence that previous RICD cases had on later cases.
7. The Role of Information and Timing in Policy Change

Mass media are presumed to influence public opinion and the policy agenda by covering some issues and not others (McCombs, 2005; McCombs & Shaw, 1972). Additionally, the role that media play in disseminating information, accurate or otherwise, can play a significant role in public policy processes. However, according to some case study research, media may actually have a limited ability to influence policy decisions due patterns of crisis-driven and fleeting news coverage (Kingdon, 2003).

This chapter analyzes how mass media influenced the process of policy change in Colorado RICD communities, how knowledge spreads related to RICD policy innovation, how this knowledge influenced other communities, and how the historical and legal precedent set in early cases of RICD communities influenced later communities. These questions are addressed using coded interview and legal data from the case studies presented in chapter five. This information is supplemented by a content analysis of archival media coverage of the RICD process in local newspapers. Conclusions are then presented based upon these analyses.

7.1 Mass Media

Mass media, including newspapers, radio, television, and the internet, are believed to wield great influence in our media-based culture. Based on the assertion of powerful mass media influence on policy decisions, this section analyzes media data to
answer the research question, *how did mass media coverage of recreational water rights policy influence the process of policy change in recreational water rights policy?*

Theories of agenda-setting\(^1\) and framing help explain how communities could be influenced by mass media. Agenda-setting is directly related to the issue of cooperation to adopt new policies because media influence on the public’s issue agenda can determine the issues that citizens and policymakers consider as important (McCombs & Shaw, 1972). Framing theory states that media influence issue agendas by portraying an issue as positive or negative; citizens will then be influenced by media to hold similar opinions (Iyengar & Kinder, 1987). Cohen (1963) stated that mass media “may not be successful in telling its readers what to think, but it is stunningly successful in telling its readers what to think *about.*” The assumptions set forth in agenda-setting theory are simple: the more coverage mass media give to a particular issue, the higher priority that issue will exhibit on the public’s agenda, or set of issue priorities (Iyengar & Kinder, 1987; McCombs & Shaw, 1972). Nicodemus (2004) found that of two newspapers in a single community, one framed a particular environmental issue in a more proactive, positive, communitarian light, while the other emphasized the difficulties of making a difference in the political process and of challenging the polluter. Nicodemus argues that the framing of stories in this context may have impacted the community’s likelihood of collective action towards policy change.

\(^1\) In this chapter, agenda-setting specifically refers to the media effects literature on the subject of mass media influence on public opinion.
An important element of the agenda-setting theory is inference, according to Miller and Krosnick (2000, p. 302). They argue that journalists select stories based on their view of what is important in society. By inference, individuals assume that the issues covered by the media are therefore the most important issues of the day.

“Journalists, selecting and highlighting a few stories each day, determine which issues are treated as important in the news” (Paletz, 1999, p. 141). “The news is non-neutral: the mass media operate to promote certain views of the world which favour existing social relationships and dominant ideology, at the expense of other views” (Lowe & Morrison, 1984, p. 77). Entman (1989b) argues that, in this respect, agenda-setting attributes a great deal of audience autonomy to individuals. Agenda-setting theory assumes a great degree of influence held by mass media, but it is up to individuals to receive the messages and pay attention to those messages, and therefore to be affected by mass media messages. Every scholar does not assume this level of audience autonomy, however. Paletz (1999) states that, “the public are recipients, willing or unwilling, passive or active, of this media content, over whose making they have little direct influence” (p. 330).

Entman argues that media’s pervasive influence can directly affect public opinion. He states that, “the only means of influencing what people think is precisely to control what they think about” (Entman, 1989a, p. 77). In this regard, perhaps Cohen was underestimating the potential effects of mass media coverage. Entman suggests changing Cohen’s famous phrase to read, “the media do not control what people prefer;
they influence public opinion by providing much of the information people think about and by shaping how they think about it” (p. 83).

Agenda-setting relates to the process of policy change because “media content is pervasive and rife with explicit and implicit political meaning” (Paletz, 1999, p. 330). Agenda building has to do with the mechanisms by which “social problems originate on the media agenda and how they are subsequently transformed into political issues” (A. Anderson, 1993, p. 25). These social problems must compete with many other issues for attention from the media and therefore must relate to a wider social context in order to find a place on the political agenda.

Framing takes agenda-setting theory a step further in arguing that the nature of coverage of issues will determine how the public views those issues. By framing an issue as negative, the public not only can place increased importance on the issue (agenda-setting), but can also place negative importance on the issue (second-level agenda-setting, or framing). Second-level agenda-setting focuses on the attributes and characteristics of media coverage and how those variables affect what individuals think about a certain issue (Severin & Tankard Jr., 1992, p. 237). Agenda-setting theory, including its framing component, can explain how mass media effect what individuals think about and how they think about it.

More recent studies have further supported these findings. Baumgartner and Morris (2006) argue that soft news sources, such as *The Daily Show With Jon Stewart* are successful in influencing viewers’ beliefs about the political world. Additionally, they
demonstrate that the negative comical nature of the show’s coverage, holding other things constant, contributes to a negative view of all political parties and candidates by viewers of the show.

The American public has been found to be ignorant of many political issues. Delli Carpini and Keeter (1996) showed that Americans often do not know the basic issues or people in current events, which the authors deem necessary to participate in the democratic process. Information, it is argued, is vital so that individuals can effectively and accurately participate in politics including voting for the candidate that best matches their beliefs and discussing political issues. Downs states that citizens “acquire political information for two main reasons (1) to help them decide how to vote, and (2) to form opinions with which they can influence government policy” (Downs, 1957, p. 238). In a rational electorate, citizens make decisions about political issues based upon comparison of information gained from an exhaustive search of all information. In the real world, “rational decision-makers acquire only a limited amount of information before making choices” (p. 207). Individuals do not have the time or motivation to perform all of the information searches themselves (Simon, 1955). Some of this information gathering work can be transferred to others, such as the media (Downs, 1957). This is how rational individuals are able to reduce the costs associated with becoming better informed.

Because knowledge is not abundant in the American electorate, the mass media’s role is increasingly important and influential. Some look at this influence with
skepticism: “it may take many repetitions of a media message to pierce the public’s indubitable haze of neglect and distraction, this very same political indifference may enhance the likelihood that messages which penetrate will have an impact” (Entman, 1989a, p. 79). This follows Zaller’s (1992) RAS model, which argues that if an individual demonstrates little resistance to messages, based on a lack of previously held opinions, and that message constitutes a large part of the individual’s library of information, based on a lack of previous information, then the message has a higher likelihood of making an impact and being accepted and incorporated into the belief system of the individual.

Others look at the information provided by the media to uninformed individuals as a more positive and beneficial factor of media influence. Mass media supply cues, which “enable voters to call on beliefs about people and government” (Popkin, 1994, p. 16) and help them make informed decisions about the political process. They use shortcuts to overcome the limitations placed on them by their lack of knowledge. Mondak (1993) argues that, “the citizen attends to the political world with an eye towards expedience, introducing cognitive mechanisms that enable decision making that is both reliable and efficient” (p. 168). Information can therefore have large effects on the political process. Althaus (1998) found that “the effects of information asymmetries on collective opinion are both larger and more common than suggested by previous work” (p. 553), and that these effects result “in different preference orderings
for collective opinions” (p. 554). Whether viewed as a positive or negative influence, mass media messages undoubtedly have a significant effect on political knowledge.

This is disconcerting when viewed in connection with news production values. News is a product of “a complex array of social, organizational, and cultural processes. The news media present us with particular versions of reality which are necessarily selective” (A. Anderson, 1993, p. 107). The economic pressures on media organizations and journalists, “do shape the values that guide the creation of news—brevity, simplicity, predictability, timeliness” (Entman, 1989a, p. 19). These same economic factors predict that media “will factor in who cares about a topic when deciding whether it is newsworthy, since advertisers place different values on individuals” (Hamilton, 2003, p. 72). It is not purely lofty ideals of journalistic integrity that help decide what issues are placed atop the media agenda. The high “fixed costs of gathering, producing, and distributing news mean” that not every product that is demanded in the media market would be available to consumers (p. 120). Entman states that the inadequacies of journalism “are the product of a process, of a close and indissoluble interrelationship among the media, their messages, their elite news sources, and the mass audience” (Entman, 1989a, p. 10). These economic considerations force news “organizations [to] wind up depending upon elites whose primary goal when talking with reporters is to manage publicity rather than illuminate the truth” (p. 20).

By directing public attention to certain aspects of the policy process, the media wield incredible influence over the political process (Kennamer, 1992). Media influence
is not necessarily directly aimed at the political process. It is more of a “two-stage process: the media first influence citizens, who in turn influence the elected and appointed public officials who represent them” (p. 105). The mass media industry “now plays the dominant role in bringing public events to the attention of the masses” (Ansolabehere, Behr, & Iyengar, 1993, p. 2). This, in turn, influences the public policy agenda.

“The policy agenda consists of issues commonly perceived by public officials as meriting governmental attention and those actively being considered by them for action. The interplay between politicians and the press produces this agenda” (Paletz, 1999, p. 314). Environmental issues do not always fall on that list. As Downs (1972) wrote, “American public attention rarely remains sharply focused upon any one domestic issue for very long” (p. 38). He predicted that this would be especially true for environmental issues. There are five stages to what he calls the “issue attention cycle.” The build up of momentum in the pre-problem stage, the discovery of problems in the second stage, the realization of costs of environmental solutions in the third stage, the gradual decline of public interest in the fourth stage, and the limbo of the post-problem stage all can be at least partially attributed to mass media attention paid to the issue in question. Downs’ argument can be understood in the context of modern media coverage. If media shift attention to new issues of importance quickly, public attention will also shift and therefore those issues that were once considered important may no longer be considered
such. Sustained media attention may be necessary for policymakers to address
problems.

The mass media have particular relevance when it comes to environmental issues
and coverage of those issues in the political sphere. Many of these environmental
problems are complicated and removed for most citizens. “One of the difficulties with
environmental ‘facts’ is they are often very complex and fiercely contested by different
parties representing various interests” (A. Anderson, 1993, p. 53). Most environmental
issues require prior knowledge to understand and synthesize. It requires mass media
coverage for most citizens to understand, realize, and act on environmental problems.

The history of environmental policy in the United States illustrates a great deal of
reliance on the mass media for publicity, campaigns, political mobilization, and
continued vigilance with regard to specific environmental issues (Neuzil & Kovarik,
1996). Not only did journalists like Lippmann fight battles in the media, but also,
journalists like Horace Greeley, John Muir, and William Borroughs impressed the
masses with affective story telling about the West and its grandeur. Those fighting for
environmental preservation and other causes have used the media effectively. They
have used mass media for three purposes (Lowe & Morrison, 1984). First, mass media
help to prop up environmental organizations by lending legitimacy. Second, media
pressure has helped to influence governmental decisions in impending cases. Third,
groups have hoped to improve public opinion through their use of media outlets to
publicize environmental issues. Not only do environmental groups use the media, but
they also must be attuned to media needs and requirements. “Modern systems of communication demand that campaigns must be ‘media friendly’, attuned to the news values of vast profit-making organizations” (A. Anderson, 1993, p. 6).

Based on this requirement of media friendly attitudes, Anderson argues that those who attempt to package environmental issues in such a way as to attract media attention have to focus on several requirements of the media culture. Most news coverage is event-centered. Media tend to focus on crises events, not on-going problems. Additionally, most news organizations work on a news cycle that is tightly wound. If a story cannot make a deadline, it may be forgotten. These characteristics of news media coverage mean that technical or complex environmental issues such as water rights may be neglected by media outlets.

Due to the pervasive nature of mass media in American culture, the lack of knowledge of citizens, the reliance on the part of these uninformed citizens on news media for their policy information, and the selective nature of journalistic coverage, news media can have incredible influence over the process of policy change. Based on this presumed ability of the mass media to influence policy change, this section will analyze the influence that local news media had on the process of policy change within RICD communities. Because it is impossible to determine all of the many news influences on state legislators over the course of RICD policy change\(^2\), it is not possible

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\(^2\) This limitation is due to the fact that there are many local news outlets as well as statewide news sources across the state of Colorado and there have also been several iterations of legislators that have held office.
in the context of this study to determine the level of influence that mass media had on
the process of policy change in the legislative arena with regard to RICD policy.

7.1.1 Mass Media Coverage

The data provided in this section regarding media coverage of recreational in-
channel water rights in Colorado communities are based on a content analysis of
archival newspaper coverage in RICD and non-adopter communities, as outlined in
chapter four. These results are presented so that the reader can understand a) the
perceived balance of media content with regard to recreational water rights within case
study communities, b) the actual balance of that media coverage, and c) the timing and
influence of media coverage on community policy decisions.

Within each RICD community, archival news data were collected for a period of
one year prior to the community’s RICD application filing continuing through the
conclusion of the RICD case. In non-adopter communities, media data were collected as
far back as possible within the window of RICD policy change (1998-2007). Local media
archives were accessed using three primary methods, as outlined in chapter four. First,
major daily newspapers in Colorado RICD communities (Denver Post, Rocky Mountain
News, and the Pueblo Chieftain) are available through electronic database searches such
as Lexis-Nexis, EBSCO Host, and Access World News. Second, daily newspapers in
smaller markets were researched through their online database archives. Finally, in
during this time. Without surveying legislators about mass media consumption patterns, any findings
regarding mass media content and its influence on the policy process would be merely conjecture.
three cases, in-person archival research was required to obtain data for local media archives. A total of 17 newspapers were researched in order to provide a complete archival database of all newspaper coverage related to RICDs and whitewater parks in the twelve RICD communities and six non-adopter communities throughout the entire process of policy change. In three instances newspaper markets overlap. First, Breckenridge and Silverthorne share a newspaper. Second, Vail and Avon share two newspapers. Finally, Golden (adopter) is served by the two statewide dailies in Denver (non-adopter).

While an argument can easily be made that television news coverage is important, it has not been included in this research study for several reasons. Television news coverage often relies upon the local newspapers for story leads and ideas and therefore follows newspaper content. This, then, would indicate that television coverage of RICD stories will not be different to any great degree from the newspaper coverage on the same subject. Second, because of the time constraints placed on television news and because of the complicated nature of water rights in Colorado, television news does not cover these stories to the extent that newspapers do. Finally, there are no local television markets within RICD communities that would allow for a discrete analysis based upon news coverage of local RICD issues.

Internet sources, such as weblogs and organizational websites, likewise were not studied in this research project for several reasons. The state of research on internet effects is much less developed than that on traditional mass media. Second, from an
historical perspective, it is virtually impossible to collect a thorough sample of internet content related to RICDs. Internet content changes daily and is generally not archived in the same manner as traditional media messages. Because of the transitory nature of web information, an historical sample cannot be collected that would inform this research to any substantial degree. Third, because we are still somewhat uncertain how internet media affect public issue agendas, it is not possible to make any assumptions based on theory that would indicate how individuals use, consume, and receive internet messages. Presumably, the internet is used in different ways than traditional media, but this research project does not have the capacity to determine these many subtle differences.

Interview subjects in many RICD cases discussed the nature of local news media coverage about the community’s RICD application and legal case. In other cases where interview subjects did not initiate discussion regarding media coverage, questions were posed to determine the perceived nature of media coverage as well as the quantity of media coverage in RICD communities. In five RICD communities, interview subjects did not report a large amount of media coverage on the RICD issue.

“I just don’t recall a lot of press.” [LG-13]

“It’s not something that they seem to think is very newsworthy.” [EL-07]

“I wouldn’t call it extensive coverage, but I think they did good coverage.” [LG-03]

“It hasn’t been very newsworthy.” [WA-04]
In all but one of the other RICD communities, media coverage was largely described as favorable towards the RICD filing.

“It was editorialized wonderfully.” [LW-06]

“The editorial board strongly favored the RICD.” [LW-08]

“It’s an issue that locals are aware of and recognize because there has been a lot of good coverage on it.” [LG-03]

“The articles were of the view that the city needed to obtain the RICD.” [LW-05]

In Chaffee County, however, the media coverage was described as balanced or opposed to the RICD water right application.

“If anything, they were in opposition.” [EL-2]

The following table illustrates the perceptions regarding mass media coverage across the state of Colorado among water experts not involved in specific RICD cases. Almost half (9 of 19) of mentions regarding media coverage describe it as balanced.

**Table 48: Characterization of Media Coverage Across Colorado**

<table>
<thead>
<tr>
<th>Character of Media Coverage</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balanced</td>
<td>9</td>
<td>For the most part the media coverage was non-biased. [ER-03]</td>
</tr>
<tr>
<td>Misinformation</td>
<td>3</td>
<td>It was all emotional and very little basis in good science. [CO-01]</td>
</tr>
<tr>
<td>Skewed</td>
<td>7</td>
<td>Media has been sympathetic to RICD rights. [WA-02]</td>
</tr>
</tbody>
</table>
The table below breaks these perceptions down according to the interview subject’s position on RICD water rights generally.

Table 49: Characterization of Media Coverage by Respondent’s RICD Position

<table>
<thead>
<tr>
<th>Character of Media Coverage</th>
<th>Times Mentioned</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pro-RICD Respondent</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balanced</td>
<td>8</td>
<td>For the most part the media coverage was non-biased. [ER-03]</td>
</tr>
<tr>
<td>Misinformation</td>
<td>1</td>
<td>There is a lot of misinformation about how these affect different things. [WA-03]</td>
</tr>
<tr>
<td>Skewed</td>
<td>3</td>
<td>Media has been sympathetic to RICD rights. [WA-02]</td>
</tr>
<tr>
<td><strong>Anti-RICD Respondent</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balanced</td>
<td>1</td>
<td>Half of the articles tend to be fairly balanced. [CW-01]</td>
</tr>
<tr>
<td>Misinformation</td>
<td>1</td>
<td>It was all emotional and very little basis in good science. [CO-01]</td>
</tr>
<tr>
<td>Skewed</td>
<td>4</td>
<td>The only time the Post and News got involved was when it went to the Supreme Court and then they got it wrong. [CW-02]</td>
</tr>
</tbody>
</table>

When delineated according to RICD position, those interview subjects in favor of RICD water rights largely described media coverage as balanced, while interview subjects opposed to RICD water rights viewed media coverage as skewed or as a source of misinformation. Sixty-seven percent of interview subjects supportive of RICD water rights described the coverage as balanced. Eighty-three percent of interview subjects
aligned with anti-RICD groups or issue positions described the media coverage as biased or inaccurate. These perceptions of mass media coverage of RICD water rights issues and cases as being biased according to RICD opponents may be because of the supportive nature of most media coverage across the state, as described in the table below.

The perception of media coverage, according to interview data presented here, varies greatly according to individual stance on the recreational water rights policy. Importantly, interview subjects, in discussing perceptions of media bias, frequently referred to local newspaper reporters as lacking knowledge of water rights and misunderstanding the policy and legal issues.

“I just don’t think the reporters understand it very well.” [WA-03]

“The only time the Post and News got involved was when it went to the Supreme Court and then they got it wrong.” [CW-02]

This supports the proposition outlined in the literature review with regard to the inability of mass media to adequately cover technical environmental issues.

The table below depicts the nature of media coverage within local news markets. These data are based upon a content analysis of each archived news article in each community. Content analysis for this research coded articles according to the number of quotations from interest groups in support of or opposed to RICDs; the number of paragraphs describing RICDs in a positive manner, a negative manner, or a neutral statement of facts; and the number of groups or individuals mentioned on either side of
the RICD debate. Editorials were coded generally as supportive or opposed to the RICD since this form of article generally does not provide multiple perspectives on an issue, but rather attempts to persuade the reader based on one policy perspective. As noted in chapter four, there was minimal coverage coded as neutral. This is likely due to the fact that reporters most often attempt to portray the various “sides” to any given story. These sides, then are subjective based upon the position of the interview subject in the article. Only statements of undisputed fact, rather than opinion, were coded as neutral.

Newspapers in Colorado used varying frames to tell the story of the RICD water right process within each community. The two primary frames included discussion of the needs for the water right as well as conflict caused by the water right. In some instances the story was told as an ‘us versus them’ storyline where the community was described as needing the water right to protect its future economic growth (Formosa, 2005). In other cases the story was told as one of conflict where in neighboring water users were “alarmed” at the thought of such a water right being owned by the local community and the feared effects of such a water right (Metz, 2003).

The media data used for this study were coded, as stated above, according to positive, negative, and neutral mentions of RICD issues. By focusing on success stories, or other positive cases involving economic gain as a result of kayak courses as well as successful legal cases, some newspapers portrayed a more positive viewpoint to the RICD story. The following examples provide instances of positive media coverage, as coded in this study.
Proponents of the recreational diversion say it could help protect the community’s financial investment in the river park and economics in the county (White, 2004b).

Rafters and kayakers are encouraging the city to secure additional water rights in the Animas River to keep water levels high and in better shape for their businesses (P. Miller, 2004).

Supporters of recreational water rights say it is a way to sustain river activities for fly fishing, tubing and kayaking, even when future development farther up the river calls for more water (Metz, 2004).

Additionally, some newspapers included quotations from objectors to the RICD case more than others or focused on conflicts or problems associated with RICDs. The following examples, contrastingly, were coded as negative mentions of RICDs.

Participants in a panel discussion… agreed a recreational in-channel diversion water right would not benefit Chaffee County (White, 2004a).

I don’t see a lot of positives coming from this… guaranteeing water for recreation at Smelter Rapid could create shortage upstream (Rodebaugh, 2004).

Municipalities and landowners upstream fear the city’s requested recreational water right would place an immediate call on the river, limit any future growth and could cost thousands of dollars in legal fees (Metz, 2004).

As is clear, there was considerable variation in framing of the RICD issue in positive and negative terms. Editorials were likewise coded, but as a single supportive or negative code since each editorial advocated a single issue position with regard to RICD water rights. Editorial content included the following clear messages:

Golden is trying an innovative, environmentally friendly way to re-energize its downtown, but the effort could founder if the state legislature interferes ("Editorial: Golden won’t be buffaled," 2001).
Those new rights would help keep the Arkansas whole as it winds through the lower valley on its way to Kansas, while providing immeasurable pleasure to kayakers, hikers, fishermen and everyone who has ever known the pleasure of listening to the whisper of the Arkansas on a lazy summer day ("Editorial: Going with the flow," 2001).

The following table is based upon this coding and content analysis for all media coverage for the time period outlined above.

### Table 50: Media Coverage of RICD Issues

<table>
<thead>
<tr>
<th>Community</th>
<th># Total RICD Articles</th>
<th># Local RICD Articles</th>
<th>% Positive Paragraphs: Local</th>
<th>% Positive Quotations: Local</th>
<th>% Positive Local Editorials</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aggregate Data:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Adopters</strong></td>
<td>423</td>
<td>168</td>
<td>67.7</td>
<td>72.3</td>
<td>80.1</td>
</tr>
<tr>
<td>Golden</td>
<td>65</td>
<td>10</td>
<td>53.5</td>
<td>65.4</td>
<td>85.7</td>
</tr>
<tr>
<td>Vail</td>
<td>53</td>
<td>5</td>
<td>72</td>
<td>83.7</td>
<td>-----</td>
</tr>
<tr>
<td>Breckenridge</td>
<td>53</td>
<td>6</td>
<td>74.6</td>
<td>92</td>
<td>100</td>
</tr>
<tr>
<td>Longmont</td>
<td>13</td>
<td>2</td>
<td>80</td>
<td>57.1</td>
<td>-----</td>
</tr>
<tr>
<td>Pueblo</td>
<td>70</td>
<td>36</td>
<td>68.7</td>
<td>70.8</td>
<td>60</td>
</tr>
<tr>
<td>Gunnison</td>
<td>18</td>
<td>9</td>
<td>87.1</td>
<td>85.7</td>
<td>100</td>
</tr>
<tr>
<td>Steamboat Springs</td>
<td>44</td>
<td>23</td>
<td>56.4</td>
<td>61.6</td>
<td>-----</td>
</tr>
<tr>
<td>Silverthorne</td>
<td>53</td>
<td>7</td>
<td>66.6</td>
<td>76.9</td>
<td>-----</td>
</tr>
<tr>
<td>Chaffee County</td>
<td>52</td>
<td>30</td>
<td>58.4</td>
<td>57.3</td>
<td>40</td>
</tr>
<tr>
<td>Avon</td>
<td>53</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Durango</td>
<td>52</td>
<td>31</td>
<td>39.7</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Carbondale</td>
<td>3</td>
<td>2</td>
<td>87.9</td>
<td>94.7</td>
<td>-----</td>
</tr>
<tr>
<td><strong>Aggregate Data:</strong></td>
<td>80</td>
<td>2</td>
<td>64.7</td>
<td>50</td>
<td>-----</td>
</tr>
<tr>
<td><strong>Non-Adopters</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boulder</td>
<td>1</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Denver</td>
<td>65</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Fort Collins</td>
<td>3</td>
<td>2</td>
<td>64.7</td>
<td>50</td>
<td>-----</td>
</tr>
<tr>
<td>Lyons</td>
<td>4</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Glenwood Springs</td>
<td>4</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Palisade</td>
<td>3</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
</tbody>
</table>
Based on this content analysis, it is clear that even in Chaffee County, where media coverage was described as mixed or opposed to the RICD, all media coverage (with two exceptions: editorials in Chaffee County and paragraph content in Durango) was strongly supportive of RICD water rights and the legal cases related to obtaining those water rights. This table is limited to those articles related to local RICD cases (38.8 percent of total articles) and local editorials (4.6 percent); the additional articles that were published in local newspapers addressed local kayak courses (13.5 percent), other legal cases (13.2 percent), other kayak courses (2.9 percent), legislation related to RICDs (18.5 percent), and general RICD issues (7.3 percent).

It is clear, based upon the comparison with non-adopter communities in this content analysis, that coverage within RICD communities was significantly more pervasive than in non-adopter communities. The coverage that did appear in non-adopter communities (specifically Fort Collins) was, however, supportive regarding RICD water rights issues. Of course, based on agenda-setting logic, one can argue that this lack of coverage could have influenced issue agendas, leading to a lack of public and political support for the policy idea. Interview data do not point to any such pattern, however. In non-adopter communities there was still ample information about other community RICD decisions and cases.

“All of these people are having to spend money to fight for these things… let’s use the resources that we have to try to get something done rather than fight.” [LG-10]

“It’s very costly to apply for recreational water rights.” [LG-04]
These two examples do, however, demonstrate that subjects in non-adopter communities focused on the potential negative attributes associated with applying for an RICD. Nonetheless, in non-adopter communities, newspaper coverage of non-local RICD issues was 49.3% positive and 46.7% negative. While this shows a more balanced news picture than in adopter communities, it does not explain the negative impressions that interview subjects in non-adopter communities had related to RICD water rights. These data demonstrate that other reasons led to the decision not to apply for RICD water rights rather than a lack of information regarding the policy or legal process.

Despite the consistently supportive media coverage across case study communities, mass media did not influence policy decisions to the degree that agenda-setting theory and studies of media influence on political issue agendas might lead one to believe. The following section discusses the ability of this media coverage to influence RICD policy change within case study communities.

7.1.2 Mass Media Influence

While mass media coverage of RICDs within local communities and statewide was heavily skewed in favor of supporting RICD water rights applications and issues, this pattern of local media coverage does not support the theoretical assumptions of the model set forth in agenda-setting theory. In order for mass media coverage to influence policy change within local communities, this media coverage would clearly need to begin prior to policy decisions being made. This, however, was not the case in RICD...
communities in Colorado. The following table depicts the timing of the start of media coverage in each RICD community. Non-adopter cases are not included because there is no relevant policy decision to relate media coverage timing to.

This table shows that in the 12 RICD communities, media coverage began after the date of RICD application filing in half of the communities.

<table>
<thead>
<tr>
<th>Community</th>
<th># Total RICD Articles/Local RICD Articles</th>
<th>Date of First RICD Article</th>
<th>Date of First Local Article</th>
<th>Date of RICD Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden</td>
<td>65/10</td>
<td>03/01/01</td>
<td>03/01/01</td>
<td>12/30/98</td>
</tr>
<tr>
<td>Vail</td>
<td>53/5</td>
<td>04/05/02</td>
<td>06/25/02</td>
<td>12/26/01</td>
</tr>
<tr>
<td>Breckenridge</td>
<td>53/6</td>
<td>05/27/01</td>
<td>05/27/01</td>
<td>12/28/00</td>
</tr>
<tr>
<td>Longmont</td>
<td>13/2</td>
<td>02/13/01</td>
<td>04/13/04</td>
<td>12/27/01</td>
</tr>
<tr>
<td>Pueblo</td>
<td>70/36</td>
<td>04/19/01</td>
<td>11/05/01</td>
<td>12/31/01</td>
</tr>
<tr>
<td>Gunnison</td>
<td>18/9</td>
<td>Fall 2001</td>
<td>Fall 2001</td>
<td>03/29/02</td>
</tr>
<tr>
<td>Steamboat Springs</td>
<td>44/23</td>
<td>09/27/03</td>
<td>09/27/03</td>
<td>12/22/03</td>
</tr>
<tr>
<td>Silverthorne</td>
<td>53/7</td>
<td>05/27/01</td>
<td>03/09/05</td>
<td>12/27/04</td>
</tr>
<tr>
<td>Chaffee County</td>
<td>52/30</td>
<td>05/26/03</td>
<td>10/25/04</td>
<td>12/30/04</td>
</tr>
<tr>
<td>Avon</td>
<td>53/0</td>
<td>N/A</td>
<td>N/A</td>
<td>12/27/05</td>
</tr>
<tr>
<td>Durango</td>
<td>52/31</td>
<td>05/21/03</td>
<td>06/08/04</td>
<td>02/28/06</td>
</tr>
<tr>
<td>Carbondale</td>
<td>3/2</td>
<td>10/13/05</td>
<td>04/06/06</td>
<td>05/02/06</td>
</tr>
</tbody>
</table>

In the six communities where media coverage began prior to RICD application filing, the coverage still started after the decision to seek an RICD water right in four of the communities (Pueblo, Gunnison, Steamboat Springs, and Carbondale). In fact, the first article in each of these communities was about the decision to file the application for the RICD water right. Due to the public nature of the policy process in both Chaffee County and Durango, there was local coverage related to the issue prior to RICD application.
filing or the decision to file in both communities. Decision makers in both communities state that this media coverage did not influence their decisions with regard to filing for an RICD. While this assertion by decision makers is certainly not definitive due to the many potential biases of self-reported data related to self-reported behavior, it does raise questions about media influence in these communities where media coverage began prior to policy decisions being made. This is true in these two communities specifically because while the decision was made to apply for an RICD, media coverage of the issue was the most balanced in Chaffee County and Durango.

Based upon the interview data presented above, as well as content analysis and the analysis of the timing of media coverage in RICD communities, it is clear that this media coverage did not influence policy decisions related to RICD water rights applications in at least 10 of 12 RICD communities. Media coverage in non-adopter communities likewise did not have the ability to influence local RICD decisions based on the general dearth of non-adopter community media coverage related to local RICD water rights. The media coverage in RICD communities, however, could potentially influence the policy process through a positive feedback loop involving media influence on public and leadership opinions if, as proposed in chapter six, the resistance of state agencies (or other external stakeholders) to RICD applications forced communities to continually or periodically reconsider their decisions to invest funds into the legal process associated with obtaining an RICD water right. This assertion is based on previous research related to a two-stage model of media influence on the policy process.
via public opinion (Kennamer, 1992). If this were the case, positive media coverage and potentially positive public opinion resulting from that media coverage could influence policymakers to decide in favor of continuing the fight for RICD water rights.

Additionally, just the presence of potential media coverage could influence policy decisions in favor of “community welfare” policies, however decision makers might define this welfare. This follows Arnold’s (1990) hypothesis that political decision makers will refrain from making unpopular and visible decisions. The potential for, in addition to the certainty of, media coverage may be important in influencing policy decisions. These propositions, clearly, are beyond the scope of this study. They are, however, important topics for further research in similar policy settings based on agenda-setting theory’s well established links between media coverage and public opinion.

### 7.2 Path Dependence and the Role of Knowledge

As North (1990) posits, the timing of policy change and the institutional history related to that change can significantly influence the nature of institutional change that takes place. Policy changes “evolve incrementally, connecting the past with the present and the future; history in consequence is largely a story of institutional evolution in which the historical performance of economies can only be understood as a part of a sequential story” (North, 1991, p. 97). In other words, the process of policy change is
just that— a process— in which the institutional structures and histories of the past influence future decisions and changes.

The complex web of political and economic organizations that experience “massive increasing returns” due to policy change, “owe their existence to the opportunities provided by the institutional framework” that they reside in (p. 109). This path dependence theory argues that a gradual or incremental evolution of institutions or policies is an accurate depiction of policy change. This is significantly due to the fact that new entrants into the institutional picture (new policy organizations) do not have to undertake the full costs associated with institutional innovation because some of those costs have previously been paid by other organizations that went through the same, or similar, process. In this manner, policies cannot be viewed as distinct occurrences, but rather should be viewed as “cumulative. Each step depends in a fairly clear-cut way on the work of predecessors” (Arrow, 2000, p. 171). Arrow argues that within dynamic systems where “the steady state is determined not only by arbitrary initial conditions but also by chance events which occur during the process” path dependence follows (p. 178). These increasing returns or lower barriers to entry based on previous institutional innovation can clearly be beneficial to new entrants to a policy field.

This path dependence can also, however, encourage suboptimal policy performance.

Initial institutional decisions— even suboptimal ones— can become self-reinforcing over time. These initial choices encourage the emergence of elaborate social and economic networks, greatly increasing the cost of
adopting once-possible alternatives and therefore inhibiting exit (Pierson, 2000c, p. 492).

Because new institutional changes require high fixed start-up costs, learning curves, and coordination costs, these established institutions create incentives that reinforce their own stability rather than encouraging further policy innovation.

Two definitions of path dependence among political scientists are presented by Pierson (2000b). He argues that the broad definition of path dependence as a theoretical conceptualization that whatever happened at an earlier point in time will affect later outcomes and therefore timing and sequence of events matter, is not altogether helpful in political science theory. A more narrow concept of path dependence, however, in which “preceding steps in a particular direction induce further movement in the same direction” is useful in helping to understand the importance of increasing returns and relative benefits of policy change (p. 252).

Pierson (2000b) offers a framework for analyzing path dependence including 1) multiple equilibria, where a number of outcomes are possible in any given situation, 2) contingency, where small events can have large affects on institutions, 3) timing and sequencing, in which when an event takes place is as important as whether it takes place and earlier events matter much more to policy change than later events, and 4) inertia, where positive feedback leads to a resistance to institutional change once an initial change has been instituted. Greener (2005) echoes this call for a more systematic
analysis of path dependence in attempting to explain institutional innovation and resistance to such innovation when lock-in occurs.

The spread of policy knowledge, the uptake of that knowledge, and the application of information to policy decisions are also important factors to consider in modeling the process of policy change within a network of communities. In the theory of policy transfer, governments learn from the experiences of other governments (Michaels, Goucher, & McCarthy, 2006). In environmental policy decisions, information and policy are connected in this interconnected cycle of policy change.

Learning from others can happen simply by observing the behavior of other actors in a policy process (or any organizational process) and can lead to a convergence of behavior around particular options or alternatives (Bikhchandi, Hirshleifer, & Welch, 1998). Within states, policy innovation takes place based upon two forces (Boehmke & Witmer, 2004). First, the process of social learning, wherein “state officials tend to draw on the experiences of nearby states when considering whether they should adopt a policy,” influences initial decisions in the policy process (p.39). Second, economic competition then drives other entities to adopt policies due to potential increases or decreases in revenue and competition for jobs, taxes, and similar economic benefits.

The social learning that takes place and influences policy adoption is a complex process, but like many cognitive processes is based upon cues or heuristics (Grossback, Nicholson-Crotty, & Peterson, 2004). Among policy actors, the liberal-conservative ideological spectrum is used as a cue regarding whether adoption of a new or innovative
policy is desirable. This use of ideological cues helps to reduce the uncertainty of policy adoption and decisions. Based upon this logic of bounded learning, Meseguer (2006) finds that countries are highly influenced by neighboring countries’ successful experiences related to policy decisions when deciding whether or not to adopt those same policies. The political and social linkages between policy actors and states, therefore, increase the likelihood of policy diffusion or transfer (Tews, Busch, & Jorgens, 2003).

While policy transfer and this process of social learning is a valuable construct to consider in analyzing processes of policy change, it is not a sufficient explanation for these changes. An analysis of policy transfer is valuable in explaining the adoption of new policies within communities, but it is only one explanatory variable and cannot in itself explain the process of policy change (Dolowitz & Marsh, 2000). Based on the assertions presented above, we would expect policy communities that are geographically or socially linked in some manner to experience higher levels of policy transfer. Additionally, we would expect those communities with similar ideological or social needs to experience greater degrees of policy transfer. Finally, we should see that later cases of policy transfer might involve an economic competition component as a reason for policy adoption.

While rational choice theorists argue that self-interest can largely explain individual choices, an increasing acknowledgement of the belief structures of decision makers based on shared cultural backgrounds and experiences (Denzau & North, 1994)
demonstrates that learning, history, and ideology can be complimentary forces. While this may be true, some scholars call for a more systematic understanding of political discourse and how this communication of ideas can influence policymaking (J. L. Campbell, 2002).

Policy information is widely produced, but its usefulness to decision makers is questionable. Some scholars (see Webber, 1991 for example) argue that despite the prevalence of policy information and analysis, decision makers do not seem to use these information sources in their decisions to improve decision-making. Studies indicate that rarely is this information or analysis used in forming policy decisions and rarely is it used in an attempt to improve policymaking, despite the desire for such outcomes on the part of policy scientists (T. I. Miller, 1989). “Policy elites at the centre of the state are relying too much on… deductive reasoning, policy templates, and one-dimensional epistemologies” (Bell, 2004).

The willingness of decision makers to listen to ‘useable knowledge’ and incorporate that knowledge into policy decisions, while perhaps uncommon, is not impossible. In the field of environmental policymaking, scientific information is often incorporated into policy discussions and decisions. This is encouraging for those who advocate a more thorough examination of policy decisions based on knowledge and science (Haas, 2004). A prevalence of policy information related to alternatives, appropriate scientific understanding of natural resources, and methods for environmental policymaking is evident in U.S. environmental policy. This information,
however, can be used (and manipulated) “by a host of self-interested actors, not an eagerly awaited source of consensus” (Healy & Ascher, 1995, p. 17). Access to this policy knowledge can alter the power structure of organizations and political processes.

The majority of this research on policy diffusion or transfer and the role of policy knowledge focuses on state-level actors. Increasingly, scholars are seeking to understand these processes in the context of local government decisions as well (Godwin & Schroedel, 2000). This chapter further examines these historical and information dissemination and use patterns in the RICD case studies to understand the role that information, learning, and historical timing and sequencing play in the process of policy change in RICD communities. Summaries and analyses of case study data presented in chapter five inform these sections, along with interview data from subjects within RICD communities.

### 7.2.1 Policy Learning

Based upon the theory of path dependence and the importance of historical policy context in the process of policy change, this section analyzes modes of policy learning and transfer among RICD communities to understand, how did knowledge of a new policy option spread among communities in the case of recreational water rights policy?

The case study analysis in chapter five informs the following table, which outlines how each RICD community learned about the option of applying for a recreational water right. In all of the early cases, the community’s water attorney was
integ rall involved in disseminating knowledge regarding this new policy option. As
the option became better known, community leaders and citizens also became sources of
information regarding the policy option. Within half of the RICD communities, learning
about the RICD policy option occurred as a direct result of attorney involvement and
dissemination of expert knowledge. Later in the process, starting in Gunnison, citizens
and staff members of government entities knew about the policy option and in some
cases collaborated to initiate and advocate for the RICD application within the
community.

The information important for local RICD decisions consisted of knowledge
about the policy option as a legally recognized water right, the costs associated with the
RICD application process, the history of political opposition from state agencies and
neighboring water users in RICD communities, and the specific procedural
requirements related to RICD applications. Once communities decided to apply for
RICD water rights, the information necessary for success becomes much more
community-specific and technical, including engineering, hydraulic studies, economic
impact reports, and technical legal information. This information is provided by experts
hired by the community and does not play a role in the policy process related to the
decision of whether to apply for an RICD.
### Table 52: RICD Community Learning Processes

<table>
<thead>
<tr>
<th>Community</th>
<th>Learning Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden</td>
<td>Attorney</td>
</tr>
<tr>
<td>Vail</td>
<td>Attorney</td>
</tr>
<tr>
<td>Breckenridge</td>
<td>Attorney</td>
</tr>
<tr>
<td>Longmont</td>
<td>Attorney and Staff</td>
</tr>
<tr>
<td>Pueblo</td>
<td>Attorney</td>
</tr>
<tr>
<td>Gunnison</td>
<td>Collective Understanding</td>
</tr>
<tr>
<td>Steamboat Springs</td>
<td>Citizen Initiative</td>
</tr>
<tr>
<td>Chaffee County</td>
<td>Citizen Initiative</td>
</tr>
<tr>
<td>Silverthorne</td>
<td>Attorney and Staff</td>
</tr>
<tr>
<td>Durango</td>
<td>Attorney and Collective</td>
</tr>
<tr>
<td>Avon</td>
<td>Collective Understanding</td>
</tr>
<tr>
<td>Carbondale</td>
<td>Attorney and Collective</td>
</tr>
</tbody>
</table>

Within several of the communities that learned about the RICD water right from citizens and collective knowledge, media coverage of other RICD cases also played a role in policy learning.
Table 53: Mode of Community Learning About RICD Policy Opportunity

<table>
<thead>
<tr>
<th>Learning Mode</th>
<th>Communities</th>
<th>Significant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attorney</td>
<td>Golden, Vail, Breckenridge, Longmont, Pueblo, Steamboat Springs, Silverthorne, Durango</td>
<td>None of us people who practice water law in Colorado hadn’t at least generally heard of when...the Golden case occurred and the legislation that occurred. [WA-04]</td>
</tr>
<tr>
<td>Media²</td>
<td>Steamboat Springs, Silverthorne, Avon</td>
<td>There was a quote in there from some guy named Glenn Porzak and I said, ‘well, I’m going to call this guy up’. So I got his phone number and I called him up. [EL-01]</td>
</tr>
<tr>
<td>Collective Understanding</td>
<td>Gunnison, Silverthorne, Chaffee County, Avon, Durango, Carbondale</td>
<td>It’s so well known as an option or a tool that... how could it not come up? [EL-06]</td>
</tr>
</tbody>
</table>

Media coverage of other cases and attorney dissemination of knowledge regarding RICDs appear to have been the two primary modes of learning leading to the later collective understanding of the policy option presented by the six RICD communities listed above.

² Clearly, media coverage of RICDs can be a contributing factor, or even a primary factor, in the ‘collective understanding’ mode of learning listed herein. This research is not able to differentiate between these modes of learning based on interview data, so they are listed separately, but with the acknowledgement that these two modes of learning may be interconnected at least tangentially.

³ Silverthorne and Avon share local newspapers with Breckenridge and Vail, so media coverage was present starting several years prior to these two RICD applications.
“Once you had a good success story like a Golden… and was out there in the paper saying they were making millions of dollars a year on this, I think that’s enough to have a lot of city councils think about it.” [ER-02]

“It was known in the process by everybody involved because… at that time there was a lot of discussion about RICDs.” [LR-05]

“Anybody that was involved in water knew what was going on.” [LW-11]

“We got to talking and kind of looking at what other communities were doing as far as building boating facilities in rivers and given that two or three other communities: Steamboat, Gunnison, Golden, had done RICDs, we started taking a hard look at the possibilities of doing that.” [LG-18]

In addition to learning about RICD water rights, it is important to consider what communities learned with regard to RICD water rights from earlier cases and whether communities actively tried to take lessons from earlier cases.

“We did our homework and reached out to other communities that were in the process or had gotten an RICD previously.” [LG-19]

“I followed the Golden case, which was one of the earlier ones and then went down the line with Steamboat, watched the Gunnison.” [EL-05]

“We tried to keep track of what was going on with different rights.” [LG-22]

“I looked at what other communities had been doing, particularly looking at Golden. One they’d built their park they wanted to protect it to make sure that it would be operational.” [LG-05]

Based on this evidence, it is clear that many RICD communities actively sought advice or lessons from communities that had undertaken their RICD applications previously, an encouraging finding for those scholars who advocate increasing use of knowledge in
policy decisions. Specific information was gathered by late-comers to the policy process regarding the earlier RICD cases.

“We were aware that other communities had spent hundred of thousands of dollars in the securing of recreational water rights in the state of Colorado.” [LG-21]

“The lessons that we learned were... who should we contact in terms of experts.” [LG-16]

“I went in front of city council with a couple other people and we said, ‘hey you guys need to hire Glenn Porzak. He’s gotten the Golden case.’” [LR-04]

“We kind of followed them as the model for the application, for format. Being really the first to file under the new statute, we didn’t know quite what to make of the language.” [WA-05]

Early cases of RICD water right applications appear to have influenced later cases. In some of these later cases, specific information with regard to legal strategy, legal format, and potential costs and benefits of the water right were sought from communities that had already been through the process.

Chapter five outlined the reasons why RICD communities applied for the water right. This analysis indicates that the assumption of an economic competition motivation for policy transfer is accurate at least in some instances. Gunnison, Carbondale, Steamboat Springs, Durango, Silverthorne, and Avon all show patterns of RICD adoption based partially on the fact that neighboring competitors for tourism dollars and related tax revenue had built whitewater courses and applied for water rights to protect the long-term viability of those courses.
There is also a clear pattern within most RICD communities (with the exception of Longmont and Pueblo) supporting the assertion that similar social needs, ideologies, or geographic connections will increase the likelihood of policy transfer. As demonstrated in chapter five’s discussion on demographics and community characteristics, many RICD communities rely to a large extent on tourism revenue for income. Additionally, many of these communities face similar patterns of second-homeownership, residents who demand recreational opportunities, and constituents who demand environmental protection of resources. These ideological similarities among RICD communities may help to explain the ease with which policy knowledge and innovation took place.

This effort to gain information from previous cases demonstrates the importance of knowledge to policy decisions with regard to new or innovative policy changes. It also demonstrates that perhaps depictions of policymakers as unable or unwilling to invest time and resources in obtaining policy information and applying that information to policy decisions is unfounded in some cases—a hopeful sign for those who strive for better informed policymaking.

7.2.2 Policy Timing

Not only is the process of learning about policies significant to path dependence, but the timing and sequence of policy initiation also are vital. North (1991) argues that policy change does not happen in an historical vacuum. The history, current
institutional structure, and sequence of events leading to policy change can all directly influence the likelihood of institutional, or policy change. The proposed importance of policy timing and context are analyzed in this section in attempting to answer the research question, how did early cases of policy change influence later community processes of policy change?

This study attempts to examine the role of path dependence in RICD policy evolution based upon Pierson’s (2000b) call for a more systematic approach to path dependence analysis. First, it is possible to establish that multiple equilibria exist within these communities. Within each community, there is a clear possibility that the process of policy change would not be undertaken. Multiple policy or institutional possibilities exist simply because there is no guarantee that communities will select to apply for RICD water rights, as is demonstrated by the existence of non-adopter communities that could potentially benefit from such a policy choice.

Second, what appeared to be small effects of Golden’s application initially, led to large legal and policy changes within the water rights allocation and adjudication system in Colorado.

“We’re a small town and these things aren’t a big deal.” [LG-09]

“The veracity of the State coming after us surprises me because by any definition this is a pathetically junior water right.” [LG-09]

“The one thing we didn’t understand was that the State would have as much passion fighting us as they did.” [LG-09]
This seemingly small decision to file for a water right based upon established legal precedent eventually reshaped water policy across the state.

Third, this study establishes that timing and sequence do, indeed, matter. Earlier cases involving RICD water right applications faced much greater challenges by state agencies than did later ones. While table 31 in chapter five outlines that there is no significant difference in the amount of money that communities have had to spend defending their RICD applications over time, the requested amount of water included in these applications has consistently risen over time. The table below illustrates the different flow volumes (requested or decreed, based upon the status of the RICD application currently) among cases.

Table 54: Volumetric Increases in RICD Applications Over Time

<table>
<thead>
<tr>
<th>Community Name</th>
<th>Cubic Feet Per Second Flow</th>
<th>Year of Application</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-SB 216</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Golden</td>
<td>1000</td>
<td>1998</td>
</tr>
<tr>
<td>Vail</td>
<td>400</td>
<td>2000</td>
</tr>
<tr>
<td>Breckenridge</td>
<td>500</td>
<td>2000</td>
</tr>
<tr>
<td><strong>Post-SB 216</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longmont</td>
<td>350</td>
<td>2001</td>
</tr>
<tr>
<td>Pueblo</td>
<td>400</td>
<td>2001</td>
</tr>
<tr>
<td>Gunnison</td>
<td>1200</td>
<td>2002</td>
</tr>
<tr>
<td>Steamboat Springs</td>
<td>1400</td>
<td>2003</td>
</tr>
<tr>
<td>Silverthorne</td>
<td>600</td>
<td>2004</td>
</tr>
<tr>
<td>Chaffee County</td>
<td>1800</td>
<td>2004</td>
</tr>
<tr>
<td>Avon</td>
<td>1400</td>
<td>2005</td>
</tr>
<tr>
<td>Durango</td>
<td>1400</td>
<td>2006</td>
</tr>
<tr>
<td>Carbondale</td>
<td>1600(^5)</td>
<td>2006</td>
</tr>
</tbody>
</table>

\(^5\) Carbondale’s volumetric amount is based upon a pending application, while the other measurements are based upon decreed water rights.
This may help explain why costs of the RICD application have not gone down over time, but demonstrates that sequence and timing do matter. While Golden’s water right is large by any measure, subsequent decreed volumes of 1400 cfs, 1600 cfs, and 1800 cfs demonstrate that the bar has been raised in terms of RICD water right volumes.

This study, while compelling and accurate due to the recent nature of policy change, is not able to posit whether inertia will bind communities to this institutional framework of RICD water rights based upon preferences for in-channel recreational flows or whether further policy innovation will occur, as suggested by Pierson. This is an important area for further research as the immediacy of the RICD policy innovation fades.

The importance of policy history and timing is highly relevant in RICD communities in Colorado. While Golden faced a unique process of policy change as the initiator of the concept, at least with regard to this modern permutation of in-channel recreational water rights for large volumes of water, each subsequent case made the decision to apply for recreational water rights in the context of previous cases.

“If we had to be the first one to go to the Supreme Court, if I knew it was going to take that much, I’m not sure Chaffee County could have taken it on.” [EL-02]

“A lot of communities were watching what happened in the Golden case, watching what happened in the legislature, and then watched what happened in Vail and Breckenridge. And that kind of got them interested when they saw that these got through and actually succeeded.” [WA-01]
“We weren’t the pioneers of RICD. Bless those people that did it for us.” [EL-02]

“I think now you’ll see some other communities come in because they know they can do it for far less because the spadework has been done by other communities.” [WA-10]

“It certainly laid the foundation for other communities to be able to do it.” [LG-09]

“We had to establish in our case that there was economic benefit… other people now have to quantify theirs, but they do not have to establish that this type of use does have economic benefit.” [LG-09]

“Who knows what Golden spent breaking the ice for us.” [LW-06]

This acknowledgement among interview subjects in RICD communities that earlier cases benefited theirs, through the establishment of legal precedent and by navigating unknown policy territory, clearly demonstrates that these early RICD cases influenced later cases. Later RICD communities, in many cases, would not have been willing to undertake the legal and political costs associated with breaking new legal ground. These communities, specifically Longmont, Silverthorne, Chaffee County, Avon, and Carbondale, largely owe their water rights to the communities that established the legal and policy precedent related to recreational in-channel water rights and potentially reduced the costs of obtaining such a water right for these communities.

The following figure illustrates the process of path dependence with regard to recreational in-channel water right policy changes in Colorado communities. While early cases in Golden, Vail, and Breckenridge heavily influenced the first group of cases to proceed under Senate Bill 216, cases that were initiated after the Gunnison Supreme
Court decision were more heavily influenced by Gunnison’s legal precedent. These cases, however, were still somewhat influenced by the policy precedent set by Golden, Vail, and Breckenridge and the reasons that these communities initiated their recreational water rights applications.

Attorneys involved in later cases consulted with the Porzak firm and community leaders in Golden, Vail, and Breckenridge in order to learn lessons, despite the differences in legal structure for current cases and cases prior to the Gunnison decision. The mention of Golden as a leader by communities throughout the RICD process demonstrates that there is still a significant level of influence over RICD policy and ideology from these early RICD cases.
Solid black lines indicate a direct legal influence over other cases, while a dashed line indicates a conceptual or policy influence over other cases.

There are certainly individual cases where specific communities influenced later applications due to similar kayak features, policy goals, or location. This chart illustrates the general level of influence that significant RICD cases demonstrate (specifically those cases where a trial in the Colorado Supreme Court was required).

Figure 22: Model of Path Dependence in RICD Policy
As described in chapter six, no interview subjects mentioned groups from other communities assisting in lobbying on behalf of local RICD water rights applications or assisting in navigating the process associated with filing an RICD application. While information, institutional change, and specific knowledge related to RICD applications carried over from one community to the next, groups of community members or activists did not assist later communities in promoting their own RICD applications.

Interestingly, interview subjects in three non-adopter communities discussed their perceptions that applying for an RICD water right has become significantly more difficult due to the political battles that have taken place over the course of recreational water rights policy evolution.

“All these people are having to spend money to fight for these things… let’s use the resources that we have to try to get something done rather than fight.” [LG-10]

“Part of the problem is that Golden got everybody in the state so unhappy about what they did that it’s made it real difficult for people that have come down later and wanted to develop these things.” [LG-11]

This perception is significant due to the fact that, as demonstrated by the case study analyses, the opposition that each community has faced lessened significantly after the Gunnison Supreme Court decision was issued. Subsequent cases have faced far less opposition from state agencies with regard to their RICD applications. This is illustrated well by the fact that Durango’s RICD was decreed without the need for a trial, despite predictions of a protracted legal battle and significant concerns related to compact impairment issues. This perception of RICD water rights being more difficult to obtain
in later stages of the process seems antithetical to the analyses presented here. This calls into question the accuracy of the policy knowledge available within non-adopter communities and the importance of accurate policy knowledge to the process of policy change within communities.

7.3 Conclusions

The analysis presented in this chapter addresses the influence that mass media coverage had on the process of policy change within local communities as well as the spread of policy knowledge and the timing of policy initiation (path dependence). This chapter presents evidence to contradict the presumed influence that mass media coverage has on policy decisions. Due to the fact that coverage in 10 of the 12 RICD communities did not begin until after the decision to file for the water right had been made, this media coverage, however supportive it may have been, did not influence the decision to apply for a recreational water right.

The primary influence that this coverage could have over the policy process within local communities would potentially be in ongoing policy decisions. As suggested in chapter six, if state agencies such as the CWCB (or other stakeholder groups) fight against the RICD application, the community may face continued or periodic decisions regarding whether to continue investing community funds in the RICD legal battle. If this is the case, positive media coverage and potentially positive public opinion resulting from that media coverage could influence policymakers to
decide in favor of continuing the fight for RICD water rights. This, clearly, is speculation and beyond the scope of this study. It is, however, an important topic for further research in similar policy settings.

This chapter discusses the role that information regarding policy options plays in the process of policy change. Based on evidence from both RICD communities and non-adopter communities, it is clear that accurate knowledge about policy options was necessary for policy change. In those communities that might otherwise be interested in the policy (Fort Collins, Glenwood Springs, and Lyons), at least one of the considerations when deciding not to apply for the RICD water right involved misinformation regarding the difficulty of obtaining such a water right before and after the Golden case. As all water experts interviewed state, the process has become much more navigable and less contentious over the course of the history of RICD policy in Colorado. The case studies presented in this study and the historical overview of the RICD policy support that perspective as well.

This chapter additionally presented evidence related to the mode of learning about the RICD policy within RICD communities. Half of the RICD communities learned about the RICD policy option at least partially through a collective understanding derived from policy history throughout Colorado and the various sources of information dissemination therein. This analysis suggests that the theory of path dependence and the presumed influence that policy history and timing have on policy change is significant and important to consider in a model of policy change. The
early cases of recreational water rights significantly influenced those immediately after
the enactment of Senate Bill 216, while the later cases were more heavily influenced by
the Gunnison case due to the legal precedent that was set in that case. In this model, all
communities were influenced by prior community decisions to file for recreational water
rights, including Golden since it relied on legal precedent set in City of Thornton v. City of
Fort Collins.

The next chapter presents a model of policy change based upon the analyses
presented in this chapter and preceding chapters. This model incorporates the lessons
learned and the influential factors determined through these data analyses.
8. Policy Change at the Community Level

As presented throughout this dissertation, multiple theories of policy change inform research on the subject. In chapter one, the most significant and well developed theories of policy change were presented in order to establish a list of possible common influential factors in policy change processes and define research parameters for this study. Traditional theories of public policy such as the stages (Brewer & deLeon, 1983) approach have been largely abandoned in favor of causal theories that incorporate multiple actors and influences of change (Sabatier, 1991). Modern theories of policy change incorporate these policy communities (Kingdon, 2003), advocacy coalitions (Sabatier, 1988), information dissemination (Stone, 1997), policy entrepreneurs (F. R. Baumgartner & Jones, 1993; Kingdon, 2003), and timing and sequences of policy events (F. R. Baumgartner & Jones, 1993; North, 1991; E. Ostrom, 1990).

These potentially influential factors have been analyzed to build a model of community policy change based on a cross-case analysis of Colorado communities that have made recreational water rights policy decisions. As Sabatier (1991) suggests, differences in political behavior are to be expected across different policy subsystems. This research shows, however, that some research findings presented here specifically relate to environmental policy, such as the importance of resource dependence for policy change, while others shed light on broad concepts of policy change in general.
### 8.1 Community Processes

This study analyzed the process of policy change within Colorado communities specifically as it relates to local decisions to apply for recreational water rights. It analyzed the processes within each community, the reasons for policy change, the influence that groups and individuals had on that process of change, and the role of information and policy timing in that process. The research questions answered in the preceding chapters were presented in order to answer the more broadly stated question, *why did some communities choose to apply for recreational in-channel water rights when other communities that may have benefited from recreational water rights chose not to?* This research question is answered in this section, based upon the data and analyses presented in chapters five through seven.

The tables below summarize the significant variables analyzed in this research study and the role that each played in RICD communities and in non-adopter communities. The primary actors and potentially influential factors analyzed in this study are presented here as a summary of the most important findings in chapters five, six, and seven. This includes a summary of stakeholder involvement, resource dependence (socially or economically), policy entrepreneurship, mass media coverage, and policy relevant information.
Table 55: Influences on Policy Change in Adopter Communities

<table>
<thead>
<tr>
<th>Community</th>
<th>Economic Interest in RICD/Course</th>
<th>Social Interest in RICD/Course</th>
<th>Policy Entrepreneur Presence</th>
<th>Stakeholder Group Support</th>
<th>Media Coverage Timing&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Accurate Policy Information</th>
<th>Threats to Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden</td>
<td>High</td>
<td>High</td>
<td>Yes</td>
<td>Yes (c)&lt;sup&gt;2&lt;/sup&gt;</td>
<td>After</td>
<td>Yes</td>
<td>Medium</td>
</tr>
<tr>
<td>Vail</td>
<td>High</td>
<td>High</td>
<td>Yes</td>
<td>Yes (c)</td>
<td>After</td>
<td>Yes</td>
<td>Medium</td>
</tr>
<tr>
<td>Breckenridge</td>
<td>Medium</td>
<td>High</td>
<td>Yes</td>
<td>Yes (c)</td>
<td>After</td>
<td>Yes</td>
<td>Medium</td>
</tr>
<tr>
<td>Longmont</td>
<td>Low</td>
<td>Medium</td>
<td>Yes</td>
<td>No</td>
<td>After</td>
<td>Yes (b)</td>
<td>Medium</td>
</tr>
<tr>
<td>Pueblo</td>
<td>Low</td>
<td>High</td>
<td>Yes</td>
<td>Yes (c)</td>
<td>After</td>
<td>Yes</td>
<td>High</td>
</tr>
<tr>
<td>Gunnison</td>
<td>High</td>
<td>High</td>
<td>Yes</td>
<td>Yes (c)</td>
<td>After</td>
<td>Yes (b)</td>
<td>High</td>
</tr>
<tr>
<td>Steamboat</td>
<td>High</td>
<td>High</td>
<td>Yes</td>
<td>Yes</td>
<td>After</td>
<td>Yes (b)</td>
<td>High</td>
</tr>
<tr>
<td>Silverthorne</td>
<td>High</td>
<td>High</td>
<td>Yes</td>
<td>No</td>
<td>After</td>
<td>Yes (b)</td>
<td>High</td>
</tr>
<tr>
<td>Chaffee County</td>
<td>High</td>
<td>High</td>
<td>Yes</td>
<td>Yes</td>
<td>Before</td>
<td>Yes (b)</td>
<td>High</td>
</tr>
<tr>
<td>Avon</td>
<td>High</td>
<td>High</td>
<td>Yes</td>
<td>Yes (c)</td>
<td>After</td>
<td>Yes (b)</td>
<td>Medium</td>
</tr>
<tr>
<td>Durango</td>
<td>Medium</td>
<td>High</td>
<td>Yes</td>
<td>Yes</td>
<td>Before</td>
<td>Yes (b)</td>
<td>Low</td>
</tr>
<tr>
<td>Carbondale</td>
<td>Medium</td>
<td>Medium</td>
<td>Yes</td>
<td>Yes (c)</td>
<td>After</td>
<td>Yes</td>
<td>Low</td>
</tr>
</tbody>
</table>

<sup>1</sup> Before or after policy decision was made.

<sup>2</sup> (c)= group presence in the community specifically advocating for whitewater course construction, not RICD water rights.

<sup>3</sup> (b)= Interview subjects explicitly mentioned previous RICD cases when asked about sources of information they used to make policy decisions.
Table 56: Influences on Policy Change in Non-Adopter Communities

<table>
<thead>
<tr>
<th>Community</th>
<th>Economic Interest in RICD/ Course</th>
<th>Social Interest in RICD/ Course</th>
<th>Policy Entrepreneur Presence</th>
<th>Stakeholder Group Support</th>
<th>Media Coverage Presence(^4)</th>
<th>Accurate Policy Information</th>
<th>Threats to Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boulder</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>N/A(^5)</td>
<td>Low</td>
</tr>
<tr>
<td>Denver</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>N/A</td>
<td>Low</td>
</tr>
<tr>
<td>Fort Collins</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes (c)</td>
<td>Yes</td>
<td>No</td>
<td>Medium</td>
</tr>
<tr>
<td>Lyons</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Low</td>
</tr>
<tr>
<td>Glenwood Springs</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes (c)</td>
<td>No</td>
<td>No</td>
<td>Low</td>
</tr>
<tr>
<td>Palisade</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes (c)</td>
<td>No</td>
<td>N/A</td>
<td>Low</td>
</tr>
</tbody>
</table>

\(^4\) About local policy idea

\(^5\) A value of N/A is assigned to these communities due to the fact that there was no discussion within the community related to an RICD water right application. Since there was no discussion of the matter, it is not possible to discern whether the information they had to base discussion on was accurate or inaccurate.
First, either economic or social dependence on the resource was demonstrated in all RICD communities as well as five of six non-adopter communities. Communities saw potential benefits from tourism use of the whitewater courses and several also saw it as a means of downtown revitalization. Ten RICD communities also perceived an immediate or long-term threat to the resource, as discussed in chapter five, while only one non-adopter community perceived threats to the resource. Policy entrepreneur presence was evident in all RICD communities and no non-adopter communities. Third, stakeholder group presence related to water rights was present only in three RICD communities and in no non-adopter communities. Stakeholders were present in eight RICD communities related to building whitewater park features and in half of non-adopter communities related to whitewater park construction. Mass media coverage is also summarized here, with six RICD communities receiving media coverage related to local RICD issues prior to filing an RICD application, but in only two of those communities was coverage of the issue present prior to local decisions to file for RICD water rights. In non-adopter communities there was media coverage related to local RICD issues in only one case. Finally, all RICD communities had access to accurate policy information, while all non-adopters (where information could be measured) exhibited inaccuracies in the policy information available to them.

This information presents a picture where policy entrepreneurship and accurate policy knowledge were vital to policy change in favor of applying for RICD water rights. Additionally, stakeholder group presence seems to only have been effective in the
process related to construction of whitewater park amenities. This is likely a self-limiting factor as mentioned in chapter six, rather than a context specific factor, since stakeholders chose to be uninvolved in water rights cases in most communities, but involved in the process related to whitewater park construction. Media presence, as suggested in chapter seven, may have the most influential role to play in an ongoing decision process, wherein decisions have to periodically be made about whether the community will continue with its policy decisions. This occurred in several communities that were faced with opposition from outside of the community from state agencies and other external stakeholders. This media coverage, if supportive of the policy, could potentially create a positive feedback loop if citizens’ policy opinions are influenced by the media coverage. Finally, it appears that an economic or social dependence on the resource is an important factor in construction of whitewater park facilities and perceived threats to the resource influence RICD application decisions.

8.1.1 Model of Policy Change

Based upon the analyses presented in preceding chapters and addressed in the previous section, it is clear that certain influential factors drove policy change in Colorado communities in the case of recreational in-channel water rights. The conceptual model presented in chapter one was a starting point from which this research study began. With the benefit of empirical evidence, it is now possible to create an evidence-based model of policy change within Colorado RICD communities. In the
model below, based on the case study data, one important finding is that there were actually three potential decision points in the RICD process, rather than the single decision illustrated in the model in chapter one (see Figure 1). First, when making the decision to provide recreational infrastructure, stakeholders and local government staff support were influential in the decision process. Second, in the process related to water rights decision-making, the communities that perceive long-term or immediate threats to the resource are more likely to apply for RICD water rights. The community must also have accurate knowledge of the policy option in question, and a policy entrepreneur must advocate for the policy. The third potential decision point comes when opposition from external stakeholders, such as government agencies, creates a tension in the community between continuing pursuit of the RICD water right and abandoning the idea. Media coverage supportive of the policy innovation that leads to public support for such a policy, which in turn creates a positive feedback loop to policymakers, could influence the process at this decision point. The important elements of this model are outlined below.

- **Decision to build recreational infrastructure:**
  - Necessary elements include **staff support** and **resource dependence**
  - Helpful elements include **stakeholder demands**

- **Decision to apply for recreational water rights:**
  - Necessary elements include **resource dependence**, **policy entrepreneurship**, and **accurate policy knowledge**
o Helpful elements include perceived threats to the resource

• Decision to continue fight for policy objectives:
  o Helpful elements include positive media coverage and citizen support

All of these policy processes and influences take place in the context of previous policy experiences within the community as well as in similar communities (according to geography, economy, or political ideology, as presented in chapter seven). The last decision point, related to ongoing policy decisions in the face of external opposition, is based upon informed speculation about the processes and influences analyzed in this study. Specifically, as outlined in chapter seven, mass media may have the most important influence on local policy processes where ongoing decisions are necessary. In these cases, the fact that local media did not cover policy issues in advance of local decisions does not eliminate a potential for mass media influence. These media can still influence the process of ongoing policy decisions after the initial policy decision has been made. These processes are outside the scope of this research, as indicated by dashed lines in the model.
Stakeholder demands for recreational amenity

Resource Dependent community, either economically or socially

Decision to build infrastructure

Policy Entrepreneur promotes the idea to community decision makers

Threats to the Resource are perceived either immediately or long-term

Policy Knowledge is accurate but portrays the policy as beneficial to the community

Media Coverage of decision, issues, and process

Citizens are informed through media coverage

Policy Change Decision is made: file for RICD water right

Decision to continue fighting for water right in the face of opposition and high costs

External Stakeholder Opposition to policy decision

Staff support of idea to provide recreational amenity

Policy History and previous cases

Figure 23: Model of Local Policy Change in Colorado Recreational Water Rights Policy
8.2 Hypotheses for Further Testing

This study and model have provided insight into the process of policy change within a group of Colorado communities with regard to seeking recreational water rights to protect whitewater park infrastructure, environmental aesthetics, and local economic drivers. Based upon the findings presented in chapters five, six, and seven, the following hypotheses are offered as avenues for further study and potential testing of these findings. They are likely relevant not just to water rights decisions but also to a broader class of local policy choices.

Chapter five concluded that RICD adopter communities chose to apply for recreational water rights due to their dependence on the resource, either socially or economically. The communities that were more likely to apply for RICD water rights also perceive a threat to that resource. Hypothesis one is therefore based upon a community connection to local natural resources.

H1: If a community demonstrates either an economic or social dependence on a natural resource and perceives a threat to that resource, that community will be likely to adopt public policies that promote conservation or non-consumptive uses of that resource.

Chapter six analyzed the role that groups and individuals played in the process of policy change and determined that stakeholder groups were important in RICD communities, but only to the extent that they promoted adoption of policies involved in the provision of recreational amenities and infrastructure. The following hypothesis,
therefore, relates to the role that these groups play throughout the process of policy change.

\[ H2: \text{Stakeholder groups select where to be involved in the policy process, and their influence over policy outcomes will therefore be limited to that part of the decision process on which they focus their attention.} \]

In state legislature debates over RICD policy, however, these groups showed significant influence and involvement, but only insofar as they formed effective coalitions of likeminded stakeholders. The following hypothesis is therefore proposed.

\[ H3: \text{If stakeholder groups successfully coalesce around shared policy beliefs, they will be more effective in influencing policy outcomes.} \]

Chapter six also addressed the role that state agencies played in the process of policy change, arriving at inconclusive results regarding the influence that state agencies had over the policy process. The state agency in question, the CWCB, was able to influence early legislative attempts and increase the political debate over policy change, but did not diminish the success of RICD communities in most cases. Hypothesis four, therefore, acknowledges the limitations of these research findings in this regard.

\[ H4: \text{State agencies will demonstrate a higher level of influence in drawing attention to policy issues, rather than the specifics of legislative or legal action.} \]

The role of policy entrepreneurs in policy change was also analyzed in chapter six. These significant findings demonstrate that policy entrepreneurs, and issue experts acting as policy entrepreneurs, played an important role in policy change within communities. The following two hypotheses are based upon these findings.
H5: If a policy entrepreneur is present within a community, the likelihood of policy change in favor of the entrepreneur’s desired outcome will increase.

H6: If a policy entrepreneur is also an issue expert, then that entrepreneur will face fewer limits on their influence over policy outcomes and change.

Finally, chapter six analyzed the role of decision-maker self-interest in the process of policy change within Colorado communities. The findings establish a degree of uncertainty related to whether self-interest truly motivated political actors. The following hypothesis, therefore, expands on that doubt.

H7: If political decision makers share ideological beliefs similar to those of constituents, policies passed will reflect both the beliefs of the decision maker as well as the community and therefore will benefit the community (but can also prove to benefit the actor, either through economic of psychic benefits).

Chapter seven analyzed the role of information and timing in the process of policy change in RICD communities. The influence of mass media coverage of policy issues on the policy process was called into question by findings that demonstrated that media coverage of RICD issues did not start in most communities until after the decision to file for RICD water rights had been made. Hypothesis eight is based upon this finding. Hypothesis nine is based upon the stated presumption that media’s largest role in this process of policy change may be related to ongoing policy decisions, rather than discrete decisions.

H8: Local newspaper coverage is unable to influence discrete policy decisions because it relates primarily to decisions that have already been made.

H9: If mass media cover those decisions in a supportive manner, however, this coverage will positively influence ongoing or periodic decisions whether to engage in lengthy legal or political battles over policy issues.
Chapter seven, then, analyzed the role of policy learning, timing, and sequence in the process of policy change in RICD communities. Findings indicate support for theoretical presumptions that economic competition, social learning, and community linkages (such as ideology and geography) influenced policy transfer. Additionally, this study supports the proposition that path dependence and the role of sequences of policy events played important roles in policy change. The following hypotheses are based upon those findings.

H10: If communities share ideological, social, or geographic traits with policy innovator communities, they will be more likely to experience policy transfer and adopt similar policies.

H11: If communities are in economic competition with policy innovators, they will be more likely to adopt similar policies out of a desire to remain competitive.

H12: If a community is a policy innovator (or early-adopter), it will experience higher barriers to entry (legal, political, or other costs) than communities that enter the policy process later.

H13: Communities exchange policy information through expert channels, mass media, and informal communications, which influence and encourage policy change.

These hypotheses are avenues for further exploration that may confirm or disconfirm the findings of this study and allow for a broader application of the ideas presented herein. While this research is grounded in the literature on policy change as well as empirical findings, the hypotheses presented here provide general theoretical propositions upon which to base future research, either in water rights policy or beyond.
water rights policy, to further clarify and understand the factors that influence policy change in local communities.

**8.3 Policy Lessons and Conclusions**

This study has attempted to build a model of policy change in local communities, drawing on lessons from theoretical models presented from varying theoretical viewpoints. The findings presented in this study have been limited to RICD policy in Colorado communities, but in most cases have been defined broadly so as to provide avenues of further exploration by scholars in various contexts.

This concluding section of the study presents avenues for further exploration as well as lessons learned from this study. While this study does not claim to answer all questions related to policy change, the supporting and contradictory findings related to policy influences such as stakeholder groups, policy entrepreneurs, political self-interest, mass media influence, and path dependence, are significant to both environmental policy literature as well as public policy literature more broadly.

**8.3.1 Policy Lessons**

Some important and surprising findings are worth highlighting here. Additionally, areas for further exploration of this research are outlined to provide direction and suggestions for future development of these ideas.
8.3.1.1 Resource Dependence

While economically dependent economies understandably and not surprisingly are more likely to adopt recreational water rights than those communities that do not have an economic stake in recreational opportunities, there is a second level of dependence that appears to be important to consider - the social dependence of a community on the natural resource. This dependence also appears to play a large role in policy change. Several communities saw potential economic gains to be won from building kayak courses near their downtown business districts. Other communities in this study did not make decisions to apply for recreational water rights based on an expectation of economic gains, but rather because the river serves important social and communal purposes for residents. This connection to the resource is important to consider when conducting research on community-level policy change. This social connection to the resource may also help explain what otherwise would be considered altruistic behavior on the part of politicians. If taxpayers and voters expect resources to be preserved, protected, or developed in a certain manner, it may be in decision makers’ electoral self-interests to support policy change that will lead to these goods and services.

8.3.1.2 Stakeholder Groups Influence

As important as stakeholder groups are considered to be in policy change (and they seem to be in the infrastructure-building decisions of the recreational water rights process), it is important to remember that some policy change processes involve
multiple steps and if stakeholder groups are not interested or invested in the several stages, their influence may only impact a limited part of the policy process. This is a lesson for both policymakers and stakeholders. In order to effectively consider stakeholder needs and desires when promulgating policies, policymakers must remember that some stakeholders may involve themselves in only part of the policy process, but the process as a whole may affect their interests. In these cases, if policymakers intend to be responsive to stakeholder needs, it is imperative that stakeholders be actively engaged in the process. Stakeholders may not be informed, interested, or motivated by technical details of policy, but these details can often affect their interests greatly.

For stakeholders who seek to influence policy change, it is important to understand the significance of being involved in the process in its totality. While gaining group member support for technical details may be more tedious than gaining support for broad policy ideas, these details can influence policy outcomes to a large extent. Remaining active through the entire process of policy change is important for stakeholder groups that aim to influence both broad policy goals and the details of policies and regulations (legal, legislative, or otherwise).

8.3.1.3 Policy Entrepreneur Influence

Policy entrepreneurs, in policy literature, are described as significant to policy change. This study finds that they were, indeed, important to the process of policy
change. It is important to consider the various levels of policy influence that individuals may hold, however. Professionals, such as attorneys, may wield a great deal of influence over policy matters in comparison to citizens. This research study presents a picture where policy entrepreneurs were often attorneys or government staff, not citizens or advocacy groups. It appears to be the case that due to their expertise and status accorded to experts, these policy entrepreneurs did not have to invest the resources (time, energy, money) that other policy entrepreneurs would have to invest in order to make the same level of difference to the process of policy change. While it is important to recognize the benefits associated with listening to experts, it is also important for policymakers to be cognizant and wary of the level of influence that these individuals may have on community policies.

**8.3.1.4 Information Effects**

*Information* is a vital component to policy change. Surprisingly, several non-adopter communities appear to have relied on word of mouth information in making their decisions to not pursue recreational water rights rather than seeking information from experts or other RICD communities and came to understand that it is currently more difficult to obtain a recreational in-channel water right. Experts and RICD communities would disagree with this statement due to the newfound stability of policy and process that is in place for RICD applications. This, along with the patterns of policy information exchange and spread of information presented in chapter seven,
demonstrates the importance of accurate information to communities in policy change decisions. It is important for policymakers to thoroughly understand the true costs and benefits associated with policy change before deciding whether or not to proceed. Whether through formal legal, policy, and legislative research, or through informal interviews with informants from other communities that have experience with the policy in question, community leaders would be well served to undertake a process of information gathering before making a decision on behalf of their community.

8.3.1.5 Mass Media Influence

In this study, local news media coverage did not have the capacity to influence policy change prior to policy decisions. While small market media may have more direct influence on readers (due to the nature of small versus large communities), the small staff and capacity of local media outlets may prevent them from engaging in significant policy discussion prior to policy decisions or considerations by local officials. While media are often maligned due to their fleeting coverage and crisis reporting (Kingdon, 2003), local community policymakers must understand the limitations inherent in local news coverage. With limited staff, technical resources, and news budgets, these media outlets often are only capable of covering the issues that are presented to them through media outreach and breaking news events, rather than investigating and digging for stories.
This trend of increasingly limited resources may continue to grow. Because economic theory tells us that there will be a lack of investment in hard-news reporting (Hamilton, 2003), and studies show that smaller newsroom staffs translate to higher profits for local newspapers (S. Lacy & Blanchard, 2003), we can expect to see a decline in newsroom staffs. Additionally, the size of a newsroom staff has been positively correlated with reporting quality (Meyer & Kim, 2003) and with competition within the media market from other newspapers (S. Lacy & Martin, 2004). Because fewer and fewer cities now have multiple local newspapers and declining circulation rates are leading to decisions to reduce newsroom staffs (Angwin & Hallinan, 2005), these studies indicate that we will increasingly see smaller newsroom staff, fewer resources, and poorer quality of newspaper journalism. While statewide media can help inform citizens about policies, these outlets do not have the ability to relay detailed information on local policy issues in the same manner that local media do. If this is the case, the watchdog role of local media will suffer, as will a citizenry dependent on local news for policy information.

If local policymakers see media as a potential aid in garnering public support or informing the public of community projects or policies, it is essential to enlist the aid of local news media. While the media outlets themselves might not have the ability to seek out stories of this nature, research has time and again demonstrated the incredible potential of the media to set the public’s issue agenda (Iyengar & Kinder, 1987; McCombs & Shaw, 1972). In other words, once a story makes it into the press, people
tend to care about it. Local governments should not view the media as enemy, but rather should be encouraged to proactively work with media to solicit accurate news coverage of issues.

**8.3.1.6 Citizen Influence**

Interestingly, this process of policy change in recreational water rights in Colorado is often viewed, as perhaps many natural resource policies are, as being a technical detail that *citizens* are not interested in and do not need to be involved in. While citizens in these cases were usually informed through the required process of public notice, no attempt was made to actively engage citizens in the process and seek significant citizen input and comment in most communities. This changed in later RICD communities, perhaps due to the political controversies surrounding the issue which led to a heightened public awareness of RICDs. However, whether to seek support for a policy issue to demonstrate community approval in court, legislative proceedings, or other policy venues, or just to ensure that citizens’ needs are being met and their interests are being taken into consideration, local governments should consider actively engaging the public. Local governments would be well-served to consider the potential benefits and drawbacks of citizen input and to follow an appropriate plan for public input when making policy decisions.
8.3.2 Areas for Further Research

The link between media coverage and citizen support or opposition for a policy, described in the model in chapter eight, cannot be made based on this research, but is an important part of the process to consider and research further. Due to the fact that mass media coverage of local policy issues generally happens after decisions have been made and the process is mostly complete, the most important aspect of media influence may be the ability of media information to promote participation and engagement among citizens. This connection could best be drawn by methods not employed in this study such as citizen surveys, long-term participant observation, or experimental designs. Case study research, however, can help inform these studies by promoting an understanding of how citizens use the information they gather from media sources, what motivates them to become politically engaged, and whether there is a link between the two. Mass surveys and other research designs could then be built to accurately measure these factors.

Reasons why communities may be more or less likely to provide the initial recreational infrastructure upon which this property right policy is based are important to understand the entire picture of recreational water rights or any non-consumptive resource development project. This research allows us to conclude that a community that is economically or socially dependent on the resource and that can afford to provide the amenity (or has access to grant funding for such a project) will do so when asked by
stakeholders and supported by staff, but there may be other reasons that communities are likely to do so.

Additionally, it would now be helpful to test the hypotheses that are offered in this chapter and the theoretical concepts that are outlined herein. This model is specifically relevant to environmental policy, but exploration into other resource contexts and public policy venues is a direction that future research and empirical testing might proceed. Testing these hypotheses in a greater number of cases will allow for an understanding of the generalizability of these findings and provide further clarification and elaboration of these ideas.

8.3.3 Conclusions

This study attempted to understand the process of policy change in local communities in Colorado with regard to seeking recreational in-channel water rights. It used variables identified as important in the case studies to develop a general model that can help understand the process of environmental policy change in local communities. The factors found to be important in this study: resource dependence, policy entrepreneurship, and policy information, are broadly defined and can be applied to a variety of environmental policy contexts.

As communities move away from traditional consumptive uses of natural resources to a more sustainable and non-consumptive use of local resources, studies that seek to understand how and why communities make these decisions and the processes
that they go through when doing so become increasingly important. Understanding these processes in a single instance of policy change can help illuminate ideas and theoretical insights that may help us determine how other communities could move towards sustainable resource policies. Understanding necessary elements of a policy change to include more sustainable uses of natural resources may also provide tools and lessons to those attempting to promote wise use of resources in a variety of contexts. While the resource is the target of policies and user practices, it is the people making decisions and human institutions and processes that need to be understood in order to promote this evolution of policy change and increased sustainability.
Appendix A

Codebook

**Community Name**: General mentions about the community by local subjects

**Course**: Any mention related to the Whitewater Park and not the RICD process

**CWCB**: Mentions of the community’s relationship or interaction with CWCB

**Litigation**: All mentions related to the process or issues in litigation
  - **Costs**: Mentions of the costs of litigation, trial, or RICD application

**Media**: Mentions of media coverage of the local RICD issue or course

**Negotiation**: Mentions of negotiating with objectors or issues in negotiation

**Participation**: Mentions of any involvement in the policy process
  - **Opponents**: Specific mentions of individuals or groups opposed to RICD
  - **Supporters**: Specific mentions of individuals or groups supportive of RICD

**Process**: Mentions of the timeline, details, or process to apply or decide on RICD
  - **Initiator**: Mentions of local entrepreneurs

**Reasons for RICD**: Mentions of reasons the community filed for RICD

**Water Issues**: Mentions of any important local or basin water issues
  - **Volume**: Mentions related to the RICD volumes requested or decreed

**Water Supply Picture**: Mentions of local water sources and supply

**Gary Lacy**: General mentions of Gary Lacy as involved in RICD process
  - **Business**: Mentions of gaining business because he coupled with RICD issue
  - **Construction**: Mentions of how whitewater parks are built
  - **Design Criteria**: Mentions of criteria he uses to design parks

**General Reasons for RICD**: Mention of reasons communities apply for RICD not listed below by subjects not directly involved in community process (perceptions from outside)
  - **Control**: Community wants to control river
  - **Economic**: Economic growth related to RICD and kayaking
  - **Environmental**: Environmental protection of RICD
  - **Instream Flow**: Establishing an instream flow with RICD
  - **Recreation Booming**: Recreation-specific mentions
  - **Water Protection**: Preventing transmountain diversions or transfers

**General RICD Issues**: General mentions associated with RICDs, problems, or issues
  - **Agriculture**: Mentions related to ag and RICDs

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1 This basic format was used for all 12 RICD communities
Compact Impairment: Mentions of RICDs impairing compact obligations
Costs of Kayak Courses: Mentions that courses do not require investment
Economic Impact of Recreation: Mentions of economic RICD argument
Environmental Impacts of Recreation: The impact of recreators on environment
Future Water Development: Harm future upstream development
  Just Like Other Rights: Yeah, but so do other rights
Growth Limits: RICDs will limit growth in Colorado or Front Range
Location of RICD: Not appropriate on all streams
Old West vs. New West: Conflict is a cultural shift
Overall Community Impressions: Mentions related to general communities
Path Dependence: Any mention of community learning or reliance on past cases
Entrepreneurs: People who initiated RICD idea in state or local processes
  Lawyers as Entrepreneurs: Mentions about lawyers as entrepreneurs
Second Class Rights: RICDs do not have same protection as other water rights
Volume: General comments on the volume of RICD requests and decrees
West Slope: Conflict between West Slope uses and Front Range

Glenn Porzak: Any mention of Glenn and his role or influence
RICD Business: Mentions of increased business due to RICDs

History: Any mention of water law history that does not fit below
  Cases of Ag Transfers: Mentions of actual cases of transfers from ag to municipal
  Citizen Input: Whether citizens have an input in water law in Colorado
  Colorado vs. West: How is Colorado same or different from other states?
  Conservation Language: Conservation as using all of the water vs. saving water
  Evolution of Colorado Water Law: How it has changed over time
    Administration of Water Rights: How water rights are managed
    Evolution of RICD: The importance and process of the RICD evolution
  Non-Consumptive Uses: Growth of non-consumptive uses in Colorado
  Prior Appropriation Concepts: General PA concepts, processes, terms
  Territoriality of Water Experts: ‘Old boys club’ comments
  Traditional Uses: Changing uses from traditional to newer uses

Legislative Process: General comments on the legislative process or involvement in it
  Effective Groups: Groups that were effective
  Individual or Group Involvement: Groups or individuals that were involved
  Outstanding Issues: Issues not dealt with in three rounds of legislation
  Senate Bill 216: Any comments or issues related to 216
  Senate Bill 37: Any comments or issues related to 37
  Senate Bill 62: Any comments or issues related to 62
Litigation: Mentions of trial, decisions, or general RICD or water rights in court
Costs: General mentions of the expense of water rights in adjudication
CWCB: CWCB’s role in the litigation of RICDs specifically
Negotiation: Any mentions of negotiating RICD cases generally

Non-Adopters: General mentions of communities not applying for RICDs
Media: Mentions of media coverage in these communities
Reasons for No RICD: Reasons other than those listed below
  Cost: Too expensive
  Enough Water: Do not need it here
  Local Water Picture: Calling rights are downstream
Specific Cases
  Boulder: Specific mentions of this case
  Denver: Specific mentions of this case
  Fort Collins: Specific mentions of this case
  Glenwood: Specific mentions of this case
  Lyons: Specific mentions of this case
  Palisade: Specific mentions of this case

Statewide Involvement: General mentions of groups or individuals involved statewide
CWCB: General comments on CWCB involvement
  Attitudes: Mentions of CWCB attitudes or beliefs on RICDs
  Functions: Descriptions of CWCB’s role in RICD and water policy
Opponents: Mentions of groups or individuals involved statewide
Supporters: Mentions of groups or individuals involved statewide

Statewide Media: Mentions of statewide media coverage not listed below
  Balance: Mentions of media balance as pro or con RICDs
  Quantity: Mentions of the amount of statewide media coverage of RICDs
Appendix B

Interview Subjects: Background and General RICD Information

<table>
<thead>
<tr>
<th>Elected Officials</th>
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<tr>
<td>Kathleen Curry</td>
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<td>Jim Isgar</td>
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<tr>
<td>Don Ament</td>
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<td>Russell George</td>
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<td>Gregory Hobbs, Jr.</td>
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<td>Edward Kowalski</td>
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<td>Sarah Murphy</td>
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<td>Grady McNeill</td>
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<td>Hal Simpson</td>
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<th>Water Attorneys</th>
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<td>Steve Bushong</td>
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<td>Anne Castle</td>
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<tr>
<td>Chris Treese</td>
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<td>Patricia Wells</td>
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<td>Eric Wilkinson</td>
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<tr>
<td>Greg Felt</td>
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<td>Tom Iseman</td>
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1 Pseudonyms are used in Appendices A and B if subject requested one to be used in place of their real name.
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<td>Gary Lacy</td>
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### Appendix C

#### Interview Subjects: Community Case Studies

<table>
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<tr>
<td>Ken Brenner</td>
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<td>Michael Hassig</td>
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<td>Jerry Mallett</td>
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<td>Ron Wolf</td>
<td>Avon</td>
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<td>Sidny Zink</td>
<td>Durango</td>
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<td><strong>City/County Staff</strong></td>
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<td>Davis Farrar</td>
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<td>Todd Oppenheimer</td>
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<tr>
<td>Mike Sullivan</td>
<td>Durango</td>
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<tr>
<td>Shaun Sullivan</td>
<td>Denver</td>
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<td>Norman Wood</td>
<td>Avon</td>
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**Local Water Districts and Boards**

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<tr>
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<tr>
<td>Steve Harris</td>
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<td>John McClow</td>
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<td>Terry Scanga</td>
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<td>Alan Ward</td>
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<td>Robert Weiss</td>
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<td>Les Williams</td>
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<td>Dennis Yanchunas</td>
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**Recreation Interests**

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<td>Greg Felt</td>
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<td>Mike Harvey</td>
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<td>Joel Heath</td>
<td>Vail</td>
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<tr>
<td>Kent Vertrees</td>
<td>Steamboat Springs</td>
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**Water Attorneys**

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<th>Name</th>
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<tbody>
<tr>
<td>Steve Bushong</td>
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<tr>
<td>Glenn Porzak</td>
<td>Golden, Vail, Breckenridge, Steamboat Springs</td>
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<tr>
<td>David Robbins</td>
<td>Silverthorne</td>
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Appendix D

Interview Subject Coding

Actors in Government:
Elected Officials
Local: EL-#
State: ES-#

State Agency Employees
CWCB: CW-#
Other: CO-#

Local Government Employees: LG-#

Actors outside Government
Local Recreation Interests: LR-#

Water Attorneys: WA-#

Water Providers (water districts, water boards)
Local: LW-#
General: WP-#

Non-Governmental Organizations
Environmental/Recreation: ER-#
General: NG-#

Recreation Engineers: RE-#

1 In several cases, an interview subject falls into more than one category. In these instances, the subject has been coded according to their primary role in RICD policy.
Appendix E

Sample Interview Questions

General/Background Questions
1. Can you describe the evolution of the RICD issue?
2. Can you talk about the role that the CWCB has played in the issue and if that has changed since the first cases?
3. With recreation becoming such a large part of Western economies, why is there such a fight over recreational uses of water?
4. I have been told that one of the benefits of prior appropriation is that it can evolve and change according to new needs. Is this true in your opinion?
5. Do you think we will see this issue in other Western states, or will they shy away from it now that it has been such a controversy in Colorado?
6. Do you see any other changes in beneficial use on the horizon?
7. Can you describe both sides of the debate from your point of view?
8. Have you seen communities, NGOs, or other stakeholders take the lead in the RICD issue?
9. How do RICDs affect population growth in Colorado?
10. Do RICDs have an impact on Colorado’s ability to provide water for its citizens?
11. Do you think that RICD legislation is complete, or will it continue to be debated in years to come?
12. Have you seen newspaper articles or television news reports on the RICD issue?
13. Have these reports generally been positive, negative, or balanced in describing the debate?
14. Are there stakeholder groups that are particularly influential in the RICD issue?
15. Is there any room in water rights law for citizens to become involved in the process?
16. With the cost of litigation and the lengthy water rights application process, do you think that some communities shy away from applying for RICD rights because it is too expensive?

Community Specific Questions
1. Can you tell me how the RICD issue arose in community X?
2. Where there specific reasons why the community addressed the issue?
3. Were there individuals or groups that approached the city or were instrumental in getting the city to apply for an RICD?
4. Were there any opponents of the RICD that voiced concern within the community?
a. What was that concern?
5. What was your role in the community? Did you advocate for or against the application at any time?
6. What costs or benefits did the city see in applying for the RICD?
7. The legal process is lengthy and expensive. Did this play a role in determining whether the community would apply for an RICD?
8. Has the community previously been involved in any major litigation over water rights?
9. Is the river in high demand, is it over-allocated like many Colorado rivers?
10. Is the community involved in any other major litigation over water rights currently?
11. How long did it take for your community to be granted an RICD?
12. Did the community view the RICD application as risky since the legislature had not acted on this form of beneficial use yet?
13. Did the community have to negotiate with any objectors on your RICD application?
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Figure 7: *Steamboat Springs Boating Park at High Flow* used with permission of Kent Vertrees

Figure 10: *Vail Whitewater Park* used with permission of Davis Farrar

Figure 13: *Arkansas River Legacy Whitewater Park, Pueblo* used with permission of Holly Ward

Figure 15: *Steamboat Springs Boating Park* used with permission of Kent Vertrees

Figure 17: *Salida Boating Park, Chaffee County* used with permission of Mike Harvey

Figure 19: *Avon Whitewater Course* used with permission of Norman Wood

Figure 20: *Gateway Park, Carbondale* used with permission of Davis Farrar

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1 If not author’s own work
Biography

Deserai A. Crow was born March 14, 1975 in Boulder, Colorado. She holds a Masters of Public Administration (December 2002) from the University of Colorado at Denver and a Bachelor of Science in Broadcast Journalism (May 1997) from the University of Colorado at Boulder. She was named the Outstanding Graduate in 2002 at the University of Colorado at Denver’s School of Public Affairs. She received the John C. Buechner Graduate Scholarship for commitment to public service, the Colorado Commission for Higher Education Graduate Scholarship, and was inducted into Pi Alpha Alpha national public affairs honor society. Her research interests include environmental policy, political participation, mass media influence, and institutional change. Her professional experience as a broadcast journalist and in public affairs for the U.S. Fish and Wildlife Service inform her scholarly research and teaching.