Intergovernmental relations and the advocacy coalition framework: the operation of federalism in Denver water politics.

Brian A. Ellison

Abstract

The relationship between intergovernmental relations and the formulation and implementation of public policies is not well understood by scholars. Borrowing from the advocacy coalition framework, this study contends that public policies reflect the strategic choices of federal, state, and local actors operating within policy subsystems. The success of various governmental policy strategies is dependent on the autonomy of each actor and the level of policy fragmentation within the subsystem. These variables are defined, operationalized, and examined within the context of intergovernmental relations in Denver water politics.

Article

One truism of American government is that public policy is formulated and implemented in an intergovernmental context. Yet a succinct explanation of how intergovernmental relations affects public policy has largely eluded scholars. Perhaps these effects remain misunderstood because of our efforts to separate the policy process into stages,(1) or to segregate policies, and subsequently policy understanding, into the regulatory-distributive-redistributive typology.(2) In reality, policies are rarely formulated or reformulated outside the context of ongoing implementation and formal or informal evaluation. The same can be said of governing coalitions with relation to policy typologies. Governing is rarely conducted in a strictly distributive or redistributive environment. Most federal, state, and local agencies must deliver public goods and services within a context of distributive, redistributive, and regulatory responsibilities that make these distinctions almost analytically meaningless.(3)
Recent researchers have attempted to pry loose the relationship between public policy and intergovernmental relations. In education policy, for example, while ostensibly in the process of decentralization, the call by President Bill Clinton's administration for "outcome accountability and process deregulation" seem like more regulatory federalism with a pretense of federal humility than an attempt at genuine intergovernmental programming.(4) In environmental policy, California has launched an experimental program to bring itself into compliance with federal air-quality standards, but problems associated with technology and economic interest groups will make success difficult.(5) Local governments in Nevada were hampered from affective participation in the decision to place the nuclear-waste repository at Yucca Mountain, even though they will bear a disproportionate share of the policy burden.(6) In welfare policy, congressional distributive politics hampers the effective targeting of federal aid to the poor.(7) Finally, in intergovernmental mandate performance, researchers have found that cooperative versus coercive mechanisms work better when local governments are committed to federal policy objectives.(8)

These studies reveal an analytical tendency among researchers interested in intergovernmental policy phenomena to view formulation and implementation in objective rather than strategic terms, that is, understanding policy as a series of successes (e.g., the achievement of overt policy objectives), rather than understanding policy as tactical adjustments in a broader governing scheme (e.g., policies that pave the way for the future).(9) From an objective perspective, researchers argue that policy problems occur because intergovernmental hierarchy, in terms of communication or organization, breaks down, because members of the Congress play politics with intergovernmental programs, or because local governments are not committed to federal policies. Hence, program objectives tend to be explained as succinct, administrative activities confined to a single policy type. The assumptions that support these studies are imposed because most of the fundamental ideas about the conduct of federalism are built on conceptual frameworks based on a rational, top-down perspective of intergovernmental relations.(10) Does the federal government control intergovernmental programming? In one study of judicial conflict in environmental management, for example, researchers found that the federal courts have not "applied a consistent set of federalism principles" to the resolution of intergovernmental disputes: an indication that federal policymakers have no specific policy regarding intergovernmental relations.(11)

One way to approach these problems and to avoid thinking about government interaction in terms of policy stages, typology, or formal organization may be to borrow ideas from the advocacy-coalition framework developed by Paul Sabatier and Hank Jenkins-Smith.(12) As a causal model of the policy process, the purpose of the advocacy-coalition framework is to overcome the obstacles of the stages "heuristic" by focusing on policy change and the role of policy-oriented learning within subsystems.(13) Thus, the policy process is not understood as a series of problems that inhibits effective formulation or implementation, but as an iterative system of learning and policy adjustment. Next, the advocacy-coalition framework assumes that policy change should be understood within the context of policy subsystems that will "normally involve actors from all levels of government."(14) Hence, the advocacy-coalition framework envisions a policy process that is inherently intergovernmental and informally organized.
The purpose of this study is to offer refinements to the advocacy-coalition framework (ACF) that will advance our understanding of the relationship between domestic intergovernmental relations, public policy, and the nature of the policy process itself. After offering refinements to the ACF’s intergovernmental assumption, an examination of water politics in the Denver, CO, metropolitan area will be used to illuminate the proposed adjustments. The case of water politics in Denver was chosen because it provides an interesting example of complex interaction between governments over issues that cross policy types.

THE ADVOCACY COALITION FRAMEWORK

The dependent variable in the ACF is policy change, which occurs when actors in policy subsystems create, adjust, and manipulate policy in response to various stimuli from inside or outside the subsystem. Within policy subsystems, defined as groups of formal and informal actors who are actively involved in substantive policy issues,(15) actors form alliances around core beliefs about what government should do.(16) These alliances are called advocacy coalitions and tend to remain stable for a decade or more.(17)

Policy change can occur in two ways. First, change can occur when advocacy coalitions modify their beliefs and behaviors as they learn more about how to achieve their objectives. Thus, policy-oriented learning "refers to the relatively enduring alterations of thought or behavioral intentions that result from experience and/or new information."(18) Second, policy change can result from systemic changes external to the subsystem, such as elections or changes in the economy.(19) External events cause policy changes by creating the conditions necessary to produce new governing coalitions or new policy approaches.

Intergovernmental Relations and Policy Subsystems

The ACF assumes that coalition activity within subsystems occurs in all three arenas of government.(20) In a recent assessment, Sabatier and Jenkins-Smith note that this assumption raises questions of subsystem boundaries as they ask how actors from different governments fit into subsystems. Should actors from all arenas of government be placed into a single subsystem, "or does one assume that each level is a separate subsystem?"(21)

Typically, agencies from different governments have been considered members of the same policy subsystem, or even subgovernment. Indeed, the subgovernment concept, although withered by empirical challenge,(22) has been used to organize our understanding of federal, state, and local influences on the formulation and implementation of public policies. Federal agencies deliver the public goods, while state and local officials provide the justification for service delivery. Further research broadened the subgovernment concept as scholars began to argue that policy subsystems should include interest groups, researchers, and agencies from different governments not directly involved in the delivery of the public good but nevertheless involved in the policy process.(23)

Sabatier and Jenkins-Smith argue that actors from different governments should be placed into a single subsystem because "no one level of government operates independent of the others, and the hierarchical distinctions between levels of government are blurred in practice."(24) Indeed,
this should be the case because the fundamental idea of the advocacy-coalition framework is that actors within subsystems form coalitions around policy core beliefs to compete for favorable policy outputs. Still, they suggest that the analytical decision to place actors in the same or separate subsystems should be based on "a) the degree of autonomy of each level, b) the extent to which one level has legal rights to constrain behavior at another level, and c) the degree of integration of the two levels, e.g. what percent of actors are in both."(25)

These assertions generate some important problems for the ACE First, the assertion on autonomy is critical to understanding the relative strengths and weaknesses of coalitions within subsystems, but requires development. Sabatier and Jenkins-Smith inserted the autonomy concept into this list of considerations to account for relationships between nations and policymaking activity (e.g., international treaties).(26) But autonomy plays a large role in domestic intergovernmental policy activity. Some coalitions are anchored by public organizations that have been given a good deal of autonomy in the delivery of their public goods and services. The U.S. Forest Service,(27) Federal Bureau of Investigation,(28) International Boundary and Water Commission,(29) and Denver Board of Water Commissioners(30) have all been described as "autonomous" organizations. Of course, one fundamental misunderstanding about this variable is the assertion that autonomy equals independence from political oversight. Instead, autonomy is a function of governing relationships and legal institutional arrangements, and should be understood in terms of "undispersed jurisdiction"(31) or "territoriality"(32) (i.e., over the delivery of substantive public goods and services).

Sabatier and Jenkins-Smith's second and third assertions in fact reflect a single concern with policy fragmentation. Actors in coalitions are both constrained and empowered by legal responsibilities that define relationships and give actors in one government arena responsibilities for the activities of actors in another arena. Hence, policy fragmentation can be understood in two ways. First, fragmentation is a fundamental characteristic of American government and refers to the "multiple cracks"(33) or access points that typify a given substantive policy arena.(34) Formal control over policy in American government is shared among formal institutions and agencies at various levels. The second type of fragmentation, policy fragmentation, is more interesting and potentially elusive than structural fragmentation. Policy fragmentation occurs when a single government operates at cross-purposes. The federal government, for example, subsidizes the tobacco industry and supports antismoking programs. Similarly, in western water policy, the federal government spends millions trying to construct dams and reservoirs as well as millions trying to stop the construction of dams and reservoirs. Of course, policy fragmentation can be explained in many ways: as the result of systemic or structural fragmentation,(35) or the result of interest-group liberalism.(36) With regard to intergovernmental policy implementation and policy subsystems, both structural and policy fragmentation have the effect of expanding the number of actors in a subsystem and enhancing coalition competition.

**Autonomy and Policy Fragmentation**

In order to develop an analytical mechanism for assessing the relationship between governments, coalitions, and public policies, it is critical to understand the relationship between autonomy and policy fragmentation. For analytical purposes, autonomy and policy fragmentation can be
considered separate ends of a continuum in which successful coalitions should be considered highly autonomous while unsuccessful coalitions should be said to operate in a policy space that is highly fragmented. This thesis is based on the assumption that the literature on organizational autonomy and policy fragmentation should more appropriately focus on the activities of agencies within the context of a policy subsystem. Thus, agencies in policy subsystems cannot be said to exist without coalition partners who provide the resources for autonomy. In the same sense, the activities of a coalition are threatened when other coalitions are created, or brought into the subsystem, by governments that give agencies new programmatic responsibilities related to the task at hand.

Martin Smith's research on state autonomy and policy subsystems provides support for these arguments regarding autonomy, policy fragmentation, and the importance of governmental agencies to coalitions. Smith argues that the coherence of state policy objectives determines whether subsystems are open or closed, and that coalitions form around governmental actors. Thus, when governments have various, sometimes conflicting, objectives in a given policy area, more groups are invited into the subsystem and the potential for succinct, specific, governmental action is decreased. In Minneapolis, for example, Edward Goetz and Mara Sidney found that subsystem cohesion and coalition formulation regarding community development was the result of local government action.

Autonomy conceptualized as "undisputed jurisdiction" also helps address other problems with the ACE. Edella Schlager, for example, argues that ACF scholars have not adequately addressed collective action problems, such as how coalition members "agree upon common strategies to pursue shared goals." Her analysis leads her to pose, hypothetically, that coalition members primarily seek to secure "legislatively imposed structures that insulate and constrain the operation of a public agency..." and are secondarily concerned with programmatic effectiveness. Thus, while policy core beliefs may be the glue that holds coalitions together, what pushes them together is the prospect of untoward government action in a specific policy area that might create new, competing agencies or realign jurisdictions.

**HYPOTHESES**

In order to test these ideas, succinct definitions of the autonomy and policy fragmentation concepts and their relationship to the advocacy-coalition framework and intergovernmental relations must be provided. Remember that policy change is the dependent variable of the ACF and that one of the theory's fundamental assumptions is that policy change occurs in an intergovernmental context. This suggests that an analytical distinction about the composition of coalitions in the intergovernmental context is dependent on: (1) autonomy; and (2) policy fragmentation.

Autonomy should be understood as the struggle to build jurisdictional control over substantive policy areas by members of a coalition. Autonomy is fundamentally institutional, and is rooted in the ability of a government agency to perform its functions without interference from other governments.
H1: When agencies that anchor coalitions do not share programmatic responsibilities with agencies from other governments, policy change is unlikely.

Policy fragmentation also plays a critical role in coalition formation and behavior. Policy fragmentation occurs when responsibilities for the delivery of public goods and services are shared by agencies from different governments, and also when legislatures give agencies disparate goals. Thus, when policy subsystems are composed of multiple agencies with competing goals, the opportunity for policy change increases.

H2: When subsystems are populated by agencies with multiple programmatic responsibilities from different governments, policy change is likely.

The analytical utility of the autonomy-fragmentation continuum will be briefly accessed in the following sections through a case study of intergovernmental relations in Denver water politics.(42) The purpose of this exercise is to assess the plausibility of the continuum.(43) As such, the hypotheses will serve as analytical guidelines for theory building and conceptual refinement.(44)

WATER RESOURCES DEVELOPMENT AND INTERGOVERNMENTAL POLITICS IN THE DENVER METROPOLITAN AREA

Like most other cities in the western United States, Denver, CO is an accident. The city started as a mining supply camp, became a respite for people suffering from tuberculosis because of its arid climate, and ultimately, due to the political proclivities of its early leaders, became a western crossroads. The accident, of course, is that Denver is located in an area lacking water resources. The region's groundwater is nonrenewable; the Rocky Mountains block most of the moisture from the west; and its natural sources of water, Cherry Creek and the South Platte River, were inadequate by the 1870s.(45)

Water scarcity has dominated intergovernmental politics in the Denver metropolitan area since the turn of the century. To understand how and why water resources development and intergovernmental politics go hand-in-hand in Denver, it is important to begin with a discussion of Denver's past annexation powers and practices followed by an examination of the agencies and institutional arrangements that govern water.

Denver as Annexation Machine

The city and county of Denver was created in 1902 when state voters amended the Colorado Constitution, consolidating three counties and the city into a single government. By the time the amendment was approved, for instance, Denver was a multi-county city with urban problems that state and county officials felt should be managed and funded by the citizens of Denver. Thus, Denver was also given strong annexation powers in order to avoid future intergovernmental conflicts. Areas of surrounding, unincorporated counties could be added to Denver with the approval of the city council and the registered voters within the boundaries of the annexation.(46)
Until the end of World War II, Denver's intermittent annexation program, following the boom-and-bust economy, proceeded as planned. But after the war, more people moving into the metropolitan area chose to live outside Denver in order to escape urban problems and high taxes. In 1920, for example, 23 percent of the metropolitan population lived outside Denver; by 1940 the figure had grown to 28 percent. By 1960, 49 percent of the population lived outside Denver; by 1986, it was 75 percent.(47) As suburbs became cities, the counties surrounding Denver became more metropolitan with rural, suburban, and even urban constituencies. The diversity of demands created by these other governments, especially in economic development programming, led to the need for broader institutional capacities and for more diverse tax bases, and threw them into competition with Denver for limited annexation opportunities.

By 1973, Denver's aggressive annexation posture had become a major intergovernmental problem. The commissioners of Jefferson, Arapahoe, and Adams counties passed resolutions that year calling for a constitutional amendment to change Denver's liberal annexation procedures. At the same time, suburban residents collected more than 50,000 signatures to stop Denver's growth by amending the state constitution. The Poundstone amendment, named after its sponsor, required Denver to seek approval for annexations from the registered voters in the counties where the land would be taken.(48) Although the Colorado General Assembly quickly approved a referendum to create a boundary control commission, supporters of the Poundstone amendment refused to remove their initiative from the ballot.(49)

The Denver Water Board and Metropolitan Growth

Regional politicians sold the proposals as alternative mechanisms to deal with Denver's annexation problems,(50) but both passed by large margins. Thus, the boundaries of the city and county of Denver have essentially been frozen since December 1974. Nevertheless, Denver and the suburbs continue to fight over economic development and control of regional resources because neither amendment altered the fundamental mechanism of regional development. Indeed, both Denver and suburban growth have been governed by the ability of Denver's water utility to store, treat, and deliver water to the metropolitan area.(51)

The Denver Board of Water Commissioners and their utility, the Denver Water Department, were created in 1918. Because Denver's progressive leaders wanted the city's water department to be "managed by a nonpolitical board of businessmen," the agency was organized along the commission model.(52) As such, the nonpolitical water commissioners have never considered themselves part of Denver's annexation program, but their water-management activities necessarily paralleled Denver's annexation activities. People would move into the unincorporated counties and ask the commissioners for water services, which would be extended with the expectation that the area would be annexed. By the 1940s, however, the water department found that many of the water distribution systems inherited through annexation were substandard, either because developers eager to maximize profits built them or because the annexed area lacked a sufficient tax base to maintain a water system. In response, the water commissioners decided to restrict water sales to special district or general-purpose governments, reasoning that these governments would have the taxing authority to maintain their systems. The water commissioners also enforced operational compliance in these governments through their Engineering Standards manual and their rules and regulations for water distribution. Taken
together, these actions helped assure the water department's engineers that systems acquired through annexation would comply with their technical standards.(53)

These Denver Water Board policies created a proliferation of special districts in the metropolitan area, along with a good deal of fragmentation in the region's planning capacities. Although many suburban general-purpose governments found themselves freed from Denver's annexation threat after ratification of the Poundstone amendment, in their midst were dozens of special district governments with institutional ties to the Denver Water Board. Given that Denver's water-distribution contracts prohibited the special district governments from extending their service boundaries without approval, the water commissioners had at least as much control over suburban growth as county planning and zoning commissions. In practice, developers would petition the special districts for an expansion into their service areas, while the water commissioners would make the final decision. Thus, while the water commissioners could not give the developers the permission needed to build a strip mall, housing development, or an apartment building, their control over service-area expansion was ultimately the deciding factor in the type of new development that would be built.(54)

**Metropolitan Cooperation: Foothills to Two Forks**

Because it was clear that areas outside the city would need water service, the Denver Water Board was given an intergovernmental mission: to ensure an adequate supply of high-quality water to Denver and its inhabitants and to lease water not needed by Denver to the surrounding metropolitan area.(55) In practice, the water commissioners have made a firm distinction between Denver and suburban customers, for example, by supporting almost unlimited development inside Denver, charging Denver customers lower rates, and imposing service restrictions on suburban customers first during water shortages.(56)

Although Denver's population had basically stabilized by the 1960s, especially in proportion to the water department's capacity to serve Denver residents, the water commissioners continued to expand the department's capacity to provide water service to the suburbs. During the 1960s, for example, with completion of their Blue River Diversion Project, the water department doubled its inflow and storage capacity. By 1973, facing extreme shortages in treated water supply, the board proposed the construction of a new, massive water-treatment plant on its property in the foothills southwest of Denver.(57)

The water commissioners used suburban demand for treated water to justify construction of the Foothills Water Treatment Plant. This justification, however, proved costly for the board and ultimately led to a major battle. Denver residents did not understand why they should finance a suburban water project and refused to pass the board's first bond issue. Although the board received support for the project from its special district water suppliers, the suburban general-purpose governments, already promoting the idea of a boundary control commission, did not want to be tied further to Denver's apron strings.

In response, the water commissioners resorted to tested tactics to create support for their project. First, the board imposed a moratorium on new suburban service, which moved Denver's voters to approve the agency's funding referendum but further antagonized the suburban general-purpose
governments. Second, after years of delay caused by the annexation disputes and effective court challenges brought by environmentalists, the board restricted lawn and garden watering, and implemented a tap-allocation program. Finally, the pressure to resolve the Foothills crisis led to the development of an arbitrated settlement. In exchange for the permits needed to build the project, the board agreed to implement a water conservation program, improve fish habitat, create a forum for public participation, and pay the legal expenses of several environmental interest groups.\(^{(58)}\)

While the metropolitan area was reeling from the Poundstone amendment, the Foothills compromise, and various lawsuits brought by the counties, metropolitan cooperation was being promoted by Denver and suburban politicians as the solution to the region’s problems. The metropolitan cooperation concept was first introduced as a solution to the annexation crisis of the 1970s, and the creation of a boundary control commission was its first manifestation. At the heart of the metropolitan cooperation discussion was the argument that problems between the governments could be overcome by sharing resources. The suburban general-purpose governments, for example, wanted area governments to combine their water resources to form a metropolitan water authority. Denver wanted assistance with services and amenities that the city’s residents paid for but suburban residents enjoyed, such as hospitals, the airport, parks, and cultural facilities.\(^{(59)}\)

The water commissioners also came to realize in the early 1980s that they would no longer be able to single-handedly achieve their water development goals in the face of extreme opposition from environmental groups, federal agencies, elected officials, and the suburban general-purpose governments. In order to continue expanding its system, the board would need new allies, in the spirit of metropolitan cooperation, that could help balance the overwhelming pressures against development. In 1982, the board turned to the one group that had supported the Foothills project, but that had been swamped in the ruckus of the conflict - their special district government water distributors. Thus, in July 1982, the board signed an agreement with 42 water distributors that would allow them to share the costs and benefits of new water developments. Specifically, the Metropolitan Water Development Agreement (MWDA) split the costs and benefits of all future projects at 20 percent for the Denver Water Board and 80 percent for the distributors. In 1984, concerned about rapid population increases in the Denver area, the water commissioners signed yet another contract that designated the objective of their partnership with the special district governments: the Two Forks Dam and Reservoir and the Colorado River Joint Use Reservoir.\(^{(60)}\)

As the U.S. Army Corps of Engineers began the permit process for the reservoir, environmental interest groups, federal agencies, and elected officials from a variety of governments fought over the project in terms of environmental impacts, conservation programming, and suburban sprawl. By 1990, after the water commissioners and their partners spent over $40 million to earn the permits needed to build the project, the U.S. Environmental Protection Agency used its authority under the Clean Water Act to veto the project. But to local government officials in the Denver metropolitan area, Two Forks was an attempt to reform local administrative and planning processes and to create new institutional structures that would instigate metropolitan cooperation on a variety of fronts. By 1989, for example, 14 general-purpose governments had joined the
special districts in their agreement to build the water project with the board. As expected, the uneasy coalition of water distributors fell apart after the project was vetoed.(61)

POLICY CHANGE: THE ACF AND INTERGOVERNMENTAL RELATIONS IN DENVER

Between 1918 and 1984, the Denver Water Board maintained a policy of strict ownership of its water plant and facility. Unlike other western cities,(62) the water commissioners have actively resisted federal assistance with the construction of Denver's water plant. In 1948, for example, the Bureau of Reclamation offered to construct a massive transbasin water project for Denver and the Front Range, including the components of the Blue River Diversion and Two Forks Dam and Reservoir, but the water commissioners argued against it and pursued a smaller project.(63) Although the water commissioners have taken funds from the federal government for several planning efforts, such as an Environmental Protection Agency grant for its experimental potable-reuse facility, no government shares ownership of Denver's water utility.(64)

The board has also been careful not to dabble in water-resource development programming outside municipal and industrial water storage, treatment, and delivery. One objection the board had to the Bureau of Reclamation's 1948 proposal, with its irrigation component, was that it would tie the agency's resources to the state's powerful agriculture industry. In the 1950s, several governments on the western slope of Colorado's Rocky Mountains sued the board in federal district court to prevent construction of the Blue River Diversion. The case was resolved when the board agreed not to sell water to farmers.(65)

If the board did store its water in projects controlled and owned by other governments, a major component in its ability to respond to drought would have been lost, as well as the water security enjoyed by Denver's residents. Sharing storage capacity in a federal reservoir, with a variety of other governments, does not carry the same control as owning the reservoir and making the rules. Thus, during water shortages, suburban governments and farmers would have begged the federal government for their fair share of diminished water supplies.(66)

Why, therefore, did Denver's water-development coalition change its policy in the early 1980s and join with regional governments to build a shared water project? How did coalition realignment within the subsystem account for these changes?

Subsystems

Water resources development in the Denver metropolitan area is governed within an urban growth subsystem. The growth subsystem was given definition at the turn of the century when state, city, and county politicians created the city and county of Denver. Given their vision of the development of a 600-square mile supercity, they also created a system of easy annexation to Denver.(67) As documented in other cities,(68) bankers, realtors, developers, construction companies, and public service providers have dominated Denver's growth subsystem.

Within the growth subsystem are several advocacy coalitions. Because water is the key to growth in the metropolitan area, a water-development coalition has worked to secure water resources for
the city. The Denver Board of Water Commissioners anchors the water-development coalition, and was given a good deal of institutional autonomy by the city's growth pioneers. The relationship between the board and other pro-growth components of the subsystem is revealed through an examination of the water commissioners and their backgrounds. Between 1918 and 1992, there were 53 water commissioners. Thirty-seven of them were in business, either banking, real estate, or commerce, and twenty-two had some experience in Denver politics. Seven of the commissioners were engineers, and thirteen of them were attorneys. Only three commissioners were women, and only one of the commissioners could be labeled an environmentalist.(69)

Both the state of Colorado and the federal government were original members of the water-development coalition. Colorado, for example, has participated and struggled to enhance expansion of the Denver metropolitan area through the Colorado Water Conservation Board, which was created in 1937 "for the purpose of aiding in the protection and development of the waters of the state."(70) A host of federal agencies has worked to support water resources development in Colorado and for the Denver metropolitan area. The Bureau of Reclamation, for example, conducted extensive water-use studies on the Blue River during the 1930s and 1940s, and actively encouraged the construction of projects to move water over the Rocky Mountains to Denver.(71)

At the turn of the century, county governments were part of Denver's growth coalition, supporting annexation and a rapidly growing city, but they now work against Denver to support their own growth. Adams, Jefferson, and Arapahoe counties have active economic development programs and work ardently to secure new sources of revenue from expanding tax bases. Suburban municipalities also support metropolitan growth, and are now working to develop their own water resources that can be used to encourage development. Cities such as Aurora and Thornton have spent millions of dollars on legal expenses associated with the transfer and purchase of agricultural water rights.(72)

Between the turn of the century and the late 1960s, members of the growth subsystem agreed that communities, governments, and the metropolitan area should expand. But during the late 1960s and early 1970s, transportation problems, chronic air pollution, intergovernmental rivalry for new sources of tax revenues, environmental degradation, sprawl, and a deteriorating quality of life triggered a debate about the costs and direction of growth. Federal legislation also gave environmental and anti-growth advocates a forum for participation in regional planning processes. These changes have had a significant impact on the subsystem, as groups with fundamentally different ideas about the nature of growth have entered the subsystem and now compete with traditional pro-growth coalitions. New members of Denver's growth subsystem, including an advocacy coalition composed of the Environmental Protection Agency, the Colorado Division of Wildlife, the Environmental Defense Fund, and others, actively question the idea that growth should continue as long as new sources of water can be provided to the area.

Autonomy

To provide further definition of the subsystems and the alignment of coalitions, we must first look at autonomy. Autonomy is fundamentally institutional and was defined earlier as the struggle by coalitions to build jurisdictional control over substantive policy arenas, hence:
H1: When agencies that anchor coalitions do not share programmatic responsibilities with agencies from other governments, policy change is unlikely.

With significant foresight, the founders of the Denver Water Board predicted that the agency's resources would lie like a diamond in the rough of metropolitan politics. Today, the Denver Water Board has the resources and benefits from institutional structures that protect its ability to perform its function. Board members are appointed by the mayor, serve six-year overlapping terms, and cannot be removed from office. The water commissioners also exercise complete control over the water department's revenues, although municipal bond sales must be approved by the citizens of Denver.(73)

Although the agency was given nearly absolute autonomy within Denver's government, politicians from the Denver metropolitan area have launched several efforts to place the Denver Water Board under the control of elected officials and to politicize the water fund. In 1982, for example, the commissioners of Jefferson, Adams, and Arapahoe counties sued the board and asked the court to subject the agency to regulation by the Colorado Public Utilities Commission. However, because the water commissioners are protected by a framework of state law designed to promote water resources development, the Colorado Supreme Court had no choice but to rule against the counties.(74)

In refuting the county challenge, the supreme court noted that the home-rule provisions in the Colorado Constitution protect municipally owned utilities. Article V, Section 35 states that the "General Assembly shall not delegate to any special commission...any power to make, supervise, or interfere with any municipal improvement, money, property, or effects...or perform a municipal function whatever." Article XXV established the Colorado Public Utilities Commission, whose members are appointed by the General Assembly, and empowered it to regulate utilities provided "that nothing herein shall be construed to apply to municipally owned utilities."

In addition to the institutional autonomy provided by the city charter and the state constitution, the Denver Water Board's programmatic responsibilities are protected by Colorado's water rights system - known collectively as the doctrine of prior appropriation. Originally designed by miners in response to water scarcity, the system separates water rights from land ownership and gives claimants the opportunity to divert water resources for various purposes.(75) Thus, beginning in 1918, the Denver Water Board was able to claim water rights on the western slope of the Rocky Mountains for diversion to Denver.

The prior appropriation system is based on three tenets that establish priority for the development of water resources: (1) beneficial use; (2) first in time, first in right; and (3) use-it-or-lose-it. The Colorado Constitution defines beneficial uses of water as use for domestic, agricultural, and industrial purposes. Water rights holders are also given priority for development based on the date their right was established. Thus, water rights holders with claims in 1918 get to develop their water before those with claims in 1940. Finally, in practice, those with water rights must be able to develop them: use-it-or-lose-it. If water rights holders cannot demonstrate that they are actively working to develop their water rights, then junior water rights holders can proceed with their projects.(76)
For water resource developers in the Denver metropolitan area, this system gives the board a huge advantage because it has senior water rights, and, unlike other metropolitan cities that also have water rights, the board has the institutional capacity and the fiscal resources to build water projects. Thus, with regard to water resources development, there is little other governments can do to challenge the board's water development programming and its water monopoly in Denver. Indeed, one Denver columnist wrote after the Poundstone amendment passed in 1974:

Everything in Denver will exist in perpetuity as it does today.... Except for the Water Board - which, as it sells water to the suburbs, is Denver's chief weapon in the war of growth. Not even the creation of a metropolitan water district would supercede the doctrine of beneficial use if the board can - and no doubt it can - maintain its water rights.(77)

Policy Fragmentation

Policy fragmentation occurs when legislatures give agencies disparate goals, and when responsibilities for the delivery of public goods and services are shared by agencies from different governments.

H2: When subsystems are populated by agencies with multiple programmatic responsibilities from different governments, policy change is likely.

The water commission took just 15 years, from 1921 to 1936, to complete its first major transbasin diversion project. The board filed for water rights on the Blue River in 1923 and completed the project in 1963 after forty years of effort. Given that the water rights needed to develop Two Forks Dam and Reservoir were also filed in the early 1920s, the time frame required to build a water project is clearly escalating. For the most part, the board's ability to develop water projects has been hampered by the intergovernmental competition caused by policy fragmentation.

There are two ways of thinking about policy fragmentation within this subsystem. First, there is fragmentation that is caused by competition among functional rivals: governments that provide services to their citizens but that compete for access to the same basic resource. Governments, such as Westminster and Aurora, Colorado, have developed independent water systems and compete with the Denver Water Board to provide services to new developments. Tensions created by this competition were revealed, for example, during the metropolitan cooperation process of the 1980s. In order to promote the process, the mayor of Denver, Frederico Pena, formed a group of ten metropolitan county and municipal governments to consider and make recommendations concerning cooperation on "a wide variety of issues including water, transportation, [the] airport, health care for the indigent, cultural facilities, growth and land use planning, and other topics."(78) Although the group accomplished some of its goals, such as the formation of a cultural facilities district and construction of the Denver International Airport, the entity eventually fell apart over the fundamental issues of water and growth.(79) The mayor of Westminster, for example, stated: "In the 1960s, we went, by a vote of the people, to an independent water supply. Anything that would put us under someone's else's custody would lead to bloodshed."(80)
Policy fragmentation in the growth subsystem also occurred as the Congress passed a variety of environmental protection statutes in the early 1970s. Statutes such as the National Environmental Policy Act, the Clean Water Act, and the Endangered Species Act gave citizens and federal agencies an opportunity to participate in the growth subsystem. Indeed, during the Foothills conflict in the 1970s, then U.S. Representative Timothy Wirth stated that the federal permit process resembled "nightmares in which the well-meaning wagon train of federal agencies pulls into an orderly circle on the prairie south of Denver - and then commences to fire toward the center of the circle."(81)

Federal changes in water-resources management policy also forced the water department to pursue goals contrary to its fundamental mission, which can be documented by examining agency participation in the Two Forks permitting process. In order to acquire the Clean Water Act dredge-and-fill permits required to build the project, the Denver Water Board and its allies had to examine a variety of alternatives and pursue unique goals. Many environmental organizations, for example, argued that the water department had not considered conservation as a source of supply in its hydrological models. But the commissioners and the water department's engineers were hesitant to pursue regulatory programs that might fail during droughts.(82)

Moreover, the water commissioners had to work with multiple groups with access to the permitting process, including ten federal, thirteen state, and four local agencies: (1) the Denver Regional Council of Governments and the Northwest Colorado Council of Governments; (2) Grand, Douglas, Summit, and Jefferson counties; (3) the state of Nebraska; and (4) a host of environmental interest groups.(83)

CONCLUSION

The legal and institutional structures that provide a foundation for the Denver water-development coalition's anchor, the Denver Water Board, remain intact. Nevertheless, the coalition changed its policy with regard to plant ownership in response to changes brought to the subsystem by policy fragmentation. As the political economy that governs the policy area changed, and as groups and agencies with different ideas about the direction and nature of growth entered the subsystem, the water commissioners sought new ways to conduct their business. That the water commissioners were able to manage the system effectively and to win approval for their project from the U.S. Army Corps of Engineers is a testament to administrative adaptability. That the U.S. Environmental Protection Agency ultimately vetoed the Two Forks project is a testament to the impact that the federal government can have on local policy subsystems.

The story of water-resources development in the Denver metropolitan area reveals the utility of the autonomy-policy fragmentation continuum in understanding intergovernmental politics in complex policy areas. When the Denver Water Board was truly able to perform its mission without interference from other governments and agencies, it constructed projects and provided the foundation for growth. Other governments began to challenge the fundamental institutional and legal structures that protected the Denver Water Board in the 1950s and 1960s, but state policymaking institutions, such as the General Assembly and the Colorado courts, were not willing to change the system that brought water to Denver. It took federal policymakers, serving the demands of national constituencies to bring about the fundamental changes that altered the board's policy environment.
The case of water-resources development and intergovernmental politics also demonstrates the strategic proclivities of the water commissioners and their allies in Denver. The board's willingness to share programmatic responsibilities were revealed after the Two Forks veto when it announced that its partnership with the special district governments was over. This action infuriated the suburbs and special district governments, which claimed that the board demonstrated a "Jekyll and Hyde" attitude "expecting and getting cooperation when it needs help on issues...but then refusing to extend the same spirit of cooperation to water policy."(84) In terms of strategy, the Denver water commissioners had just split the bills for a $40 million environmental impact statement with their special district partners at a ratio of 20 percent to 80 percent.

It seems true that actors from different governments have a role to play in single policy subsystems. But governments are not single entities and should not be considered so as actors in policy subsystems. Agencies from various governments can enter subsystems and have disparate affects on subsystem outputs. The next step in this examination of the advocacy-coalition framework and intergovernmental relations will be to distinguish how actors from various governments form coalitions. Specifically, researchers need to find a mechanism to account for differentiations in coalition power.


9 Thomas J. Anton, American Federalism and Public Policy: How the System Works (Philadelphia: Temple University Press, 1989), pp. 76-77. Anton describes these phenomena as manifestations of the rationalist paradigm versus the advocacy paradigm. Under the rationalist paradigm, policies are viewed, and subsequently analyzed, as solutions to problems. The advocacy paradigm, however, reflects a less organized system in which problems are created and solutions proposed by advocates of specific government benefits.


16 Sabatier and Jenkins-Smith contend that policy core beliefs reflect the coalition's normative commitments and causal perceptions and are the "glue" that holds advocacy coalitions together. Secondary aspects of belief systems reflect operational and institutional beliefs associated with policy design and implementation and are often adapted or modified to meet emerging challenges and difficulties. Sabatier and Jenkins-Smith, "The Advocacy Coalition Framework: An Assessment," 7-8; Hank C. Jenkins-Smith, Gilbert K. St. Clair, and Brian Woods,

17 Sabatier and Jenkins-Smith, "Evaluating the Advocacy Coalition Framework."


32 Anton, American Federalism and Public Policy, p. 79.


34 Anton, American Federalism and Public Policy, p. 79.


38 Smith, Pressure, Power, and Policy.


42 Documentary and archival data on Denver water politics and the Denver Water Board were collected at the Denver Public Library Western History Collection, the Denver Water Board Archives, regional newspapers, magazines, university libraries, and government document collections beginning in 1992. Sixty-four original interviews were conducted with a variety of actors in Denver water politics, including members of the Denver Water Board; Denver Water Department managers; local, state, and federal government employees and elected officials; and
representatives from environmental groups, pro-growth organizations, and the private sector. In order to provide a forum for replication and further academic review, the data collected for this article can be obtained by contacting the author at: Master of Public Administration Program, Southwest Missouri State University, 901 South National Avenue, Springfield, MO 65804.


50 Commentary, "Annexation Amendments: Against No. 1; For No. 5," The Denver Post, 13 October 1974.

51 Ellison, "The Denver Water Board."


54 Ellison, "The Denver Water Board," 106, 114-116. The water commissioners have exerted overt control over suburban growth in several ways. During the Blue River conflict of the 1950s, for example, the Board stated flatly that no new development would be allowed outside its present service area. More recently, during the late 1970s, the Board created and implemented a "Tap Allocation Program" which allots a certain number of taps to a given service area.
expansion: apartment buildings and malls require many taps while single-family estates require fewer.

55 Miller, The Denver Water Department.


60 Board of Water Commissioners, Platte and Colorado River Storage Projects Participation Agreement (Denver: Board of Water Commissioners, 1984); Ellison, "The Denver Water Board," 118-120; Ellison, "Autonomy in Action."


67 Leonard and Noel, Denver; Miller, The Denver Water Department; Ellison, "Autonomy in Action;" Ellison, "The Denver Water Board."


69 Denver Water Department Archives, copy available through author.

70 Colorado Revised Statutes, 37-06-102.


72 Ellison, "The Denver Water Board," 188.


74 Boards of County Commissioners v. Denver Board of Water Commissioners, Colorado Supreme Court, 718 P. 2d 235 (1986).

75 Milliken, "Water Management Issues in the Denver, Colorado, Urban Area."

76 Colorado, Constitution (1992), art. XVI, sec. 6; Milliken, "Water Management Issues in the Denver, Colorado, Urban Area."


