Chapter 10

The Science of Storytelling: Policy Marketing and Wicked Problems in the Greater Yellowstone Ecosystem

Chapter 10

Some issues in Yellowstone seem to never go away. Since the great fires of 1988, various groups have argued about park wildfire management policy. Snowmobile use in the park has been on the agenda since the publication of the winter use plan in 2000. Several lawsuits and millions of dollars later, it is still not settled.

Wolf recovery politics, bison management, and recreation impacts are examples of what Elizabeth A. Shanahan and Mark K. McBeth call "wicked problems." These are issues whose policy setting is characterized as circular, hostile, and unstable. Resolution, if it happens, is short-term and tenuous. Wicked problems are the sorts of politically charged issues that can be manipulated by images and "frames" around which rhetoric and emotion are constructed. Dramatic photos or rhetoric claiming an environmental crisis or threat to private property rights supercharges the debate.

Social scientists describe human behaviors and the study of social life between groups or individuals. Shanahan and McBeth work in an area of policy change, which accounts for the inter-relationships between economic activity, politics, popular culture, and environmental policy. Of particular interest to them is how various groups think about an issue and how they relate to other groups that hold opposing positions. Both sides use language and symbols. Often, the media is the vehicle for these interactions.

The work is important because it helps us understand decisions and social relationships beyond simple partisan politics. A wonderfully simple example is their work on the meaning of YNP. Depending on whether you see the park as a resource to be protected (conserved) or a resource for human use (exploitation), the language used to reconcile the two views becomes important. In the end, both sides may be able to agree on solutions if they can share language designed to minimize, rather than elevate, political tension.

J. Johnson



Wolf watchers at Slough Creek (NPS, Yellowstone National Park)

Chapter 10

The Science of Storytelling: Policy Marketing and Wicked Problems in the Greater Yellowstone Ecosystem

Elizabeth A. Shanahan and Mark K. McBeth

Elizabeth A. Shanahan, Department of Political Science, Wilson Hall, Montana State University, Bozeman, MT 59717; Email: shanahan@montana.edu

Mark K. McBeth, Department of Political Science, Idaho State University, Campus Box 8073, Pocatello, ID 83209; Email: mcbemark@isu.edu

Policy issues in the GYE are a turbulent confluence of divergent human values, contested science, overlapping administrative jurisdictions, and conflicting problem definitions. As such, the study of the complex and dynamic political nature of policy issues in the region is both a highly frustrating and thought-provoking endeavor.

Some of the seemingly intractable policy issues include how the public land agencies propose to manage area wildlife, commodity production, and recreation. Proposed solutions are often confronted with objections by an opposing coalition of stakeholders, which, in turn, lead to protracted lawsuits, lengthy administrative rule making, and dramatic appeals to public opinion by all sides. Many scholars describe policy making in the GYE as "wicked" in nature- circular, hostile, and unstable. In other words, the wicked policy environment of the GYE is one where the process repeats itself several times on one issue, victory is often short-term and always tenuous, and solutions rarely solve the problem; sometimes a solution makes things worse.

The broad aim of science is to build knowledge in the social, natural, and physical worlds. In a politically charged policy environment like the GYE, the challenge for the political scientist is to try to make sense of what is happening and why. Whereas a wildlife biologist might ask, "What is the carrying capacity for bison in Yellowstone National Park?", a political scientist asks, "How do we make decision about managing bison, how do we value them, and how do we understand our relationship to them?"

The policy world is full of people and groups (stakeholders) doing the work of government or trying to influence governmental decisions. The study of political science and policy, famously defined by Harold Lasswell as "who gets what, when and how," is centered on power. While traditional indicators of power in political science include measures such as money and access to decision makers, these aspects do not wholly explain why many of the GYE policy issues are so highly contested. Our research is aimed at achieving an empirical understanding of the wicked nature of these issues. Our approach is different. We focus on understanding political narratives - documents that have been publically disseminated by various stakeholders. We identify the conflicting values or policy beliefs that propel contested battles and analyze the political narrative tactics that are used to influence policy outcomes.

Policy making in the GYE does not occur in a vacuum or somehow separate from larger social and political realities. Instead, policy conflict in the GYE is reflective of policy problems and processes facing American democracy. Thus, given the political and social context of the wicked policy environs of the GYE, we can get a glimpse into the health of our democracy and what our responsibilities are as citizens to contribute to our democratic wellbeing.

To best illuminate how we conduct our social science research, we begin with detailing the historical and cultural basis for divergent value differences in the GYE. We then specify how we conduct our research to understand the wicked nature of the policy environment. We conclude with reflections on how both our research approach and our results help us know Yellowstone. Finally, we give you an opportunity to test drive our methodology.

The Greater Yellowstone Area in Context

One of the reasons there is such a wicked policy environment in the GYE is due to divergent perspectives as to the meaning of Yellowstone itself. When the Yellowstone National Park Act (1872) was passed and created the world's first national park, it set the stage for a contested meaning of what Yellowstone National Park (YNP) is or would become. The statute articulates the dual mission of YNP is to be both a "pleasuring ground



▲ PHOTO 10.1 Roosevelt Arch at the North Entrance commemorates the creation of Yellowstone National Park in 1872. The original mission of the National Park Service is "...to promote and regulate the use of the...national parks...to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." Even during the fires in 1988 the Park stayed open to visitors so they could experience wildfire firsthand. (NPS, Yellowstone National Park)

for the benefit and enjoyment of the people" and a place reserved "for the preservation, from injury or spoliation, of all timber, mineral deposits, natural curiosities, or wonders within said park, and their retention in their natural condition." Following the creation of YNP, various meanings of the Park have evolved. In turn, these meanings form the basis of policy debates of the Park's management practices.

The birth of YNP was built on a "creation myth," which framed the meaning of the Park as a natural wonder to protect. The classic story is that the Washburn expedition camped at Madison Junction in the fall of 1870 and decided that because of Yellowstone's immense size and beauty, the region should be set aside as a national park. However, Yellowstone historians Paul Schullery and Chris Magoc find the diaries made no mention of such a conversation even though members of the Washburn party wrote of many far less momentous discussions. The covert propagator of the creation myth story is believed to be Nathaniel Langford, who in 1905 was a supporter and advocate of the Northern Pacific Railroad. In fact, the passage of the Yellowstone National Park Organic Act economically advantaged the railroad when Northern Pacific officials successfully lobbied for creation of the park. The railroads wanted a western tourist attraction and recreational opportunities as an impetus to extend their rail lines to the American West for their own economic gain. These two meanings of YNP- a resource to be protected (intrinsic value) and a resource for human use (economic and recreation value) - dominate the current political environs of the GYE.

Meaning attributed to something, whether it is YNP or the American Flag, is based on normative values. Normative values are personal beliefs of how things *ought* to be or how things *should* be. For example, in the environmental politics literature, how people view the relationship between humans and nature is a normative value that drives how people ascribe meaning to nature. An anthropocentric normative view (sometimes referred to as cornucopian or conservationist view) of this relationship understands nature's purpose as fulfilling human need for survival and progress; a biocentric normative view (sometimes referred to as preservationist or intrinsic value view) tends to see nature as harboring

an intrinsic value, where human needs are no greater than those of nature. This normative debate is often portrayed through the comparison of Gifford Pinchot's conservationist perspective with that of John Muir's preservationist perspective. Since the early western expansion days, these opposing meanings for our public lands have been hotly debated.

In the GYE today, the cornucopian perspectives and environmental protection values are exacerbated by a rapidly changing American West. Deep cultural divisions center on competing symbolic meanings of the American West that reflect both the romantic preservationist perspective and rugged individualism economic perspective. This regional cultural division has intensified given recent rapid changes in the GYE's economic and social landscape. The local economies of the American West have experienced a decline in its extractive-resource base (e.g., mining, logging) and an increase in three economic sectors: tourism, construction, and service-based industries. The changes in the economic base and increases in population have translated into cultural differences that are typically cast in the dichotomy of the Old West (a rural, agricultural, and natural resource based economy) versus the New West (an urban, environmental amenity - service based economy fueled by tourism). This Old West - New West dichotomy, while overly simple, is useful for understanding how policy stakeholders in the area have coalesced around similar meanings of YNP and its surrounding area.

Actors in the Policy Process

Stakeholders in the policy process are those individuals or groups who have an interest in a particular policy outcome. There are a plethora of stakeholders in the region, and they vary according to the policy issue at hand. Each of the individuals within these groupings harbors a normative perspective regarding the meaning of Yellowstone and each holds different values and divergent policy beliefs. In turn, the policy arena is increasingly polarized.

INTEREST GROUPS

Interest groups typically represent a well-defined constituency of like-minded members willing to incur some cost of being included in the group. Interest groups in the area tend to cluster into one of three categories: environmental interest groups (e.g., the Greater Yellowstone Coalition, Buffalo Field Campaign), motorized recreation groups (e.g., Blue Ribbon Coalition), and extractive industry groups (e.g., Montana Stockgrowers Association; Montana Logging Association). The environmental groups' idea of resource protection is one that places YNP in the context of the larger GYE ecosystem as one of the last vestiges of untouched wilderness in the contiguous United States. Some environmental groups believe that Yellowstone bison should be free to migrate beyond Park boundaries in the winter months, despite the concern of ranchers that these bison may transmit a disease (brucellosis) that would gravely affect the cattle industry. Motorized recreation groups see the GYE as an area reserved for motorized recreational access throughout all seasons; these groups advocate for snowmobile access to the Park over objections that the machines pollute and stress wildlife during the hard winter months. The extractive industry groups view the economic viability of their livelihood as having precedence over protection of the resource goods in the area. They believe the sustainability of logging is more important than protecting grizzly habitat through the designation of roadless areas in national forests.

CITIZENS

Citizens are a broad category of stakeholders that include visitors to the area and gateway community residents. First-time visitors to YNP often have a conception of the Yellowstone as a zoo. As Lee Whittlesley and others have pointed out, tourists often view Yellowstone wildlife not as real creatures but rather as symbols or relics of times gone by. The boundaries surrounding the Park are understood as real and meaningful, thus creating an inside-outside dynamic that excludes any notion of ecosystem management and biodiversity. To those who live in the gateway communities surrounding the Park, Yellowstone is often seen as a commodity that allows them to make a living. To achieve this end, they view the Park as a place to protect, but also as a place for mostly unregulated access so that the visitors will sustain the

local economies by eating and seeking lodging in the gateway communities.

ELECTED OFFICIALS

Different governing coalitions have engendered varying meanings of the GYE. For example, presidential administrations have weighed in on GYE policies that overturn previous administrative decisions and ricochet issues such as snowmobile access across bureaucratic and judicial jurisdictions. The Clinton era engendered a protectionist meaning for YNP, whereas the Bush administration saw YNP as a resource for humans (recreational, economic). However, it is both correct and overly simplistic to argue that partisanship plays a role in GYE politics. For example, Republicans tend to favor extractive commodity use and reject regulation; thus, it is not surprising that the Wyoming and Idaho Republican congressional delegation have been united in opposition to wolves and snowmobile regulation. However, while Montana Republican governors Marc Racicot and Judy Martz strongly supported the lethal management of bison outside of Yellowstone, the issue has hardly been resolved under the administration of Democrat Brian Schweitzer. Furthermore, the late U.S. Senator Craig Thomas (R-Wyoming) was lauded by the environmental interest group the Greater Yellowstone Coalition for his opposition to natural gas development on public lands. Montana Democratic U.S. Senators Max Baucus and John Tester rarely take the lead on GYE environmental policies.

BUREAUCRATIC AGENCIES

Public agencies constitute another group of stakeholders who harbor meaning for what Yellowstone is. Many of the career public servants working in these agencies have scientific expertise in understanding YNP and the GYE. For example, the National Park Service (NPS) has biologists on staff and the Montana Department of Livestock (MDOL) has a state veterinarian. Yet, these agencies cannot help but to feel the pressures from their institutional cultures and political overlords. They are thus influenced by the policy desires of varying administrations (presidential and gubernatorial) as well as local and regional concerns, needs, and powers. At times, the meaning of Yellowstone is divided between their role as scientists and experts and their role in the fragmented political world of policy making. For example, the NPS strongly supported the elimination of snowmobiles inside YNP because of concerns over pollution and wildlife stress, but local politics and presidential orders have required them to accommodate snowmobile access. Similarly, the MDOL wants the Yellowstone bison to remain within YNP boundaries over the concern for spreading brucellosis to cattle; recent cases of the disease in cattle herds have expanded the attention to include wild elk herds. Thus, there is no coherent ecosystem policy in part because other federal and state agencies, compared to the NPS, have different constituencies, legislative mandates and institutional incentives. Because of the conflicting demands and lack of coordination among agencies, the NPS finds it difficult to execute a scientifically based plan for the management of Yellowstone.

In sum, from the National Park Service enabling legislation in 1872, to the recent economic and cultural changes, the meaning of the Park and its surrounding area cannot be reduced to one 'correct' meaning for stakeholders in policy decisions. The central battle over the meaning of the GYE is one of economic use versus



▲ PHOTO 10.2 Winter recreation in Yellowstone is a "wicked problem" that has been debated since the Park was opened to snowmobile traffic in 1974. Park Service concerns about the effects of snowmobiling prompted limits on the number of machines allowed to enter the Park. Limits have been implemented, overturned, and reinstated in recent years. The use of the political system for this wicked problem runs the gamut of executive orders, judicial rulings, and promulgated rules. (NPS, Yellowstone National Park)

environmental preservation. The wicked or intractable nature of policy making in the region means that these policies will not be resolved by factual argument. In such controversies, long-standing policy solutions rarely occur because policy battles tend to revolve around what Advocacy Coalition scholars refer to as *core policy beliefs* or normative values that groups or individuals hold as 'true' rather than objective scientific fact. It is upon these core policy beliefs that the various meanings of YNP and the GYE are built and wicked policy ensues.

Wicked Policy Research in the Greater Yellowstone Area

Social scientists, like any scientists, try to explain why certain phenomena happen the way they do. In our case, we seek to understand the wicked nature of policy issues: *why do problems that are seemingly solvable using science, common sense, and practicality escalate to high levels of hostilities that lead to lawsuits, stalemate, and solutions that serve the interests of neither warring party?* Our studies specifically focus on how stakeholders' policy narratives contribute to policy wickedness in the GYE. Below, we present the findings from three studies of policy narratives.

POLICY MARKETING: IS PUBLIC OPINION FOR SALE?

Much of our work is an empirical analysis of how policy narratives intensify political conflict and gridlock. But, in order to understand these results, we must first describe a theory for why policy narratives are so powerful. Our theoretical framework places the GYE into the context of larger societal trends - that of the entrenchment of a marketing culture and the rise of consumerism. Our argument is that the contemporary economy no longer focuses on production but rather on creating demand for goods and services. This shift has led to a marketing culture, a culture that has permeated political life leading to the "permanent campaign" and to marketing slogans being used to sell everything from environmental policy (e.g., the Bush administration's "clear skies" initiative) to education (e.g., No Child Left Behind) to war (e.g., "shock and awe," and "the surge"). Concurrent with this trend has been the development of a "consumer" culture or orientation among citizens. For many, a person's identity comes not from their job but from their consumption. Citizens become passive recipients of marketing symbols and emotional sound bites, not only in the economic market, but also in the political system. We argue that the consumer's political knowledge and interests are marketed to them and policy marketers, not citizens, define public policy problems. The ensuing policy solutions are related more to ephemeral lifestyle choices than they are to rational debate or economic and political interests. This theory of policy marketing occurs in the GYE, as interest groups, elected officials, and the media all engage in activities that seek to shape public opinion and contributing to policy intractability. Like any ad campaign, these narratives sell new ideas, new crises, and new solutions.

Our next step provides empirical work to support our claim that policy narratives are purposefully constructed by groups to influence public opinion and policy outcomes. Thus, we pursue two broad research questions: 1) what do these policy narratives look like? (in other words what are the empirical elements of a policy narrative?) and 2) is it possible to quantitatively study policy narratives using existing policy theory? Research questions arise from theory and guide the research. Developing research questions is key to all scientific work. The balance of this chapter presents the process by which we investigate these two research questions – something we call "the Science of Storytelling."

THE SCIENCE OF STORYTELLING PART I: CORE POLICY BELIEFS

One of the mainstream theories that inform our work is Paul Sabatier and Hank Jenkins-Smith's Advocacy Coalition Framework, which asserts that groups hold core policy beliefs or normative values that serve as the glue for advocacy coalitions. When disputes between opposing coalitions center on these beliefs, they lead to conflict. The result is a lack of policy learning between groups as accumulated scientific evidence is ignored in favor of value-based conflict. The empirical measurement of these beliefs has been problematic in the literature, and we wanted to test whether narratives found in stakeholders' documents were a reliable source of policy

beliefs. Thus, our first investigation was testing whether there was a "science of storytelling" or policy beliefs predictably and consistently embedded in stakeholders' policy narratives.

There are three core policy beliefs critical in the GYE: federalism, the relationship between humans and nature, and type of science used.

FEDERALISM. Federalism is the normative belief of what level of government should make the policy decision—the federal government (national federalism) or local governmental entities (compact federalism). Differing views of American federalism play an important role in Yellowstone politics. Old West groups contend that GYE issues are ones that affect local citizens; therefore, locally elected officials and local groups should have the power to decide policies. New West groups are more likely to state that Greater Yellowstone is an area of national concern and national groups, citizens, and elected officials outside the region should be central to policy making.

RELATIONSHIP BETWEEN HUMANS AND NATURE. This core policy belief is best understood in terms of divergent management orientations. The New West philosophy is reflective of biocentricism, where human interference in natural processes is kept to a minimum and natural resource extraction takes a back seat to biodiversity. Conversely, the Old West philosophy is based on active natural resource management and a belief that humans rule nature for our purposes.

SCIENCE. The differing role of science is a key issue in Greater Yellowstone debates. The science preferred by New West groups is characterized by natural management, habitat and ecosystem protection, and biodiversity. In addition, conservation biology that favors biodiversity and protection of endangered species is a popular scientific position of New West advocates. Old West groups, on the other hand, argue that technology can correct environmental problems. They value science that is human centered; they view nature as a commodity that is to be directed and managed through technological innovation.



▲ PHOTO 10.3 Content analysis begins with assembling public documents, seen here as newspaper articles from local Greater Yellowstone Area media outlets, and meticulously reading the narrative, coding the contents, and recording the results into a codebook. Here are two researchers reconciling their individual coding results of press coverage of wolf, bison, and snowmobiling wicked policy issues to ensure inter-coder reliability. (Liz Shanahan)

These policy beliefs are all around us, in press releases, newsletters, and media spots. The issue is – are they embedded in New West and Old West policy narratives? Because these policy narratives are everywhere, with the potential to be very influential on our opinions, they are important sources of stakeholder belief systems.

We investigate the science of storytelling by identifying all public documents generated by two prominent interest groups in the region — the Greater Yellowstone Coalition (GYC) and the Blue Ribbon Coalition (BRC). We chose these groups because they represent vastly different constituencies, environmentalists and motorized recreationalists, respectively and, seemingly different values with respect to nature. The documents - press releases, newsletters, and editorials - represent all known public documents released by the both interest groups over six years. The requirement was that the document had to address one of three policy controversies: bison management, the Clinton Administration roadless initiative, and snowmobile use in Yellowstone National Park.

Each document was content analyzed for core policy beliefs; documents were read and coded for what kind of policy belief was found in the narrative. Coding is a methodological tool for systematically identifying patterns in the text. In this case, federalism, human/nature relationships, and type of science used in the narratives is language that is crafted to frame the issues in ways that produce desired political outcomes. As Deborah Stone argues, problems are defined strategically and are constructed by influential individuals or organizations as part of a political game. Problem definitions are embedded in narratives through the use of literary devices such as characters, plots, colorful language, and metaphors. As Stone points out, the ultimate goal is to define a political problem so that your side's stance appears to be in the public interest.

The first two policy beliefs were identified through strategic use of character casting. Those entities cast as heroes revealed what perspective of federalism a narrative held. For example, if the President was cast as the hero in addressing the issue then it showed national federalism; if it was local officials, then it was compact federalism. Those cast as the victim revealed the policy belief of human-nature relationship; if nature (i.e. bison) is the victim, then it shows a biocentric policy belief; if snowmobilers are the victim, then the narrative shows an anthropocentric policy belief. The scientific evidence cited in narratives was coded as one that offered a technical fix or one that had a conservation perspective. We developed a codebook to document what narrative elements were in each document. We did not use computers to scan the documents; rather, we trained graduate students to read and code each document. After they each read the documents individually, they then compared what they coded to ensure that the coding was accurate (called inter-coder reliability). We entered the data into a statistical program and were able to determine if there were statistical differences in policy beliefs between the two groups.

The research team found that the environmental group harbored the following core policy beliefs:

- national federalism policy belief;
- biocentric in their orientation of humans and nature;
- use of a mixture of conservation biology and technologically based science to support their desired policy outcome.

In statistical contrast stood the motorized recreation interest group. Their narratives held the following core policy beliefs:

- local or compact federalism policy belief;
- anthropocentric orientation of the human and nature relationship;
- exclusive use of a technological or anthropocentric science as evidence.

The importance of this work is that indeed policy narratives have embedded policy beliefs and that these beliefs reveal a statistically significant difference between groups. Thus, when the opposing coalitions talk about policy issues in the GYE, they do so through different lenses, and the battles between coalitions and their citizen audience become as much about what policy beliefs should be dominant as they are about the problem itself.

THE SCIENCE OF STORYTELLING PART II: NARRATIVE POLITICAL TACTICS

The next step in our research centered on whether policy narratives had embedded narrative strategies to try to influence policy outcome in the GYE. In politics, there are winners and losers. As E.E. Schattschneider describes, winners try to contain the policy issue by controlling the number of groups affected by the policy in order to maintain the status quo. Losers try to expand the arena of conflict to more groups to gain policy support. In other words, a coalition that perceives itself as losing will try and bring in other players to the coalition to build salience, and a coalition that perceives itself as winning will try to restrict participation. The net effect is to perpetuate the wicked nature of policy conflict.

In the policy studies literature, three political narrative strategies and tactics are identified: concentration of benefits and costs of proposed policy outcomes, condensation symbols, and policy surrogates. These are the theoretical constructs for which we developed a methodology.

The Basics of Narrative Content Analysis

The goals of a policy narrative include:

(1) constructing a group or coalition identity; (2) defining the group telling the story as heroic; (3) constructing victims that resonate with audience members; (4) constructing the narrative of the group as the public interest; (5) finding despicable villains that are opposed to the public interest; and (6) either trying to expand or contain policy conflict, depending on whether the group sees themselves as winning or losing.

Characters (heroes, villains, and victims) are critical elements of a political narrative. Below are definitions and examples from two competing interest groups in the GYE surrounding the issue of snowmobile access to YNP- a motorized recreation group (MRG) and an environmental group (EG). We have written fictionalized quotes to give you examples of how the two opposing sides might portray their narratives.

▶ *HEROES:*
the group telling the story and allies of the group are heroes; they are the potential fixer of a problem.

MRG: "Our local communities are working hard to stop the Clinton madness."

EG: "We have many allies in Washington, DC working behind the scenes to help us stop the Bush administration from repealing the snowmobile ban."

▶ *VILLAINS:*
the group or person that is causing the problem (normally constructed as opposing the public interest); villains benefit from other groups' suffering.

MRG: "Environmental groups are working with their Hollywood friends to reverse the hard-won grassroots victories of our group."

EG:" Snowmobilers are going off-trail and harming rivers, plants, and wildlife."

▶ *VICTIMS:*
person(s) or things harmed by the villain and pay the costs of another group's actions.

MRG: "Local communities are harmed by the Clinton rule! I can see businesses closing in West Yellowstone."

EG: "Rangers are getting sick from snowmobile fumes and visitors complain that they cannot hear the wild sounds of Yellowstone over the noise snow machines."

BENEFITS AND COSTS. Winning groups seek to contain the issue by concentrating costs of the proposed policy solution (i.e., few carry the financial or political burden) and diffusing its benefits (i.e., many winners), whereas losing groups diffuse costs (i.e., many carry the burden) and concentrate benefits (i.e., few winners).

CONDENSATION SYMBOLS. Groups like to take complex issues and simplify them by attaching easily understood symbols to the policy issue. The goal is to make complex issues easy to remember. We empirically tested whether losing groups use condensation symbols more than winning groups, given that this strategy could expand the issue to larger constituencies. Examples of condensation symbols are environmentalists referring to YNP as a "motorized race course" or to elected officials as "corporate politicians."

THE POLICY SURROGATE. As Martin Nie and others point out, in wicked policy environments, groups complicate issues by linking them to larger issues. For environmental policy in the American West, this means that issues like bison management and snowmobile access are wrapped in larger controversies such as concerns about federalism and the fear of outsiders. We investigated whether losing policy narratives strategize by using policy surrogates to entangle policy issues in larger, emotionally charged debates. They would do so in an effort to gain a competitive advantage by expanding the scope of the policy issue.

Having identified tactics used in other political debates, we developed a second codebook to systematically identify policy strategies in political narratives. We collected eight years of the same prominent interest groups' policy narratives and content analyzed them for the three political narrative strategies. In contrast to our previous study that hypothesized the differences in core policy beliefs to be between interest groups, we hypothesized in this study that the differences in narrative political strategies would be between those who believed they were winning or losing in the policy battle. So, despite differences in core policy beliefs, we hypothesized that interest groups would use the same narrative political strategies to achieve policy success. Indeed, this is the case.

We found that part of the wicked policy environs is characterized by the two groups portraying themselves in their public documents as losing 68% of the time. Given this preponderance of losing narratives, the groups were far more likely to be expanding the arena of conflict through their narrative tactics than they were to be trying to contain the arena of conflict. Across all group policy narratives, those that posited themselves as losing used the following policy narrative strategies:

- Both interest groups *concentrate benefits* in order to construct a situation where it appeared that only a small group benefits from the status quo. For example, the Blue Ribbon Coalition argues that only environmental groups benefit from the banning of snowmobiles. Similarly, the Greater Yellowstone Coalition promotes the idea that President Bush ignored national interests in favor of the snowmobile industry.

- Both groups *diffused costs* when losing in order to demonstrate that many are harmed by the status quo. The Blue Ribbon Coalition tends to focus on how individual snowmobile users, communities, and the economy loses when snowmobile use is regulated. Likewise, the Greater Yellowstone Coalition argues that snowmobile use harmed a variety of factors including human health, wildlife, and visitors.

- When losing in the policy debates, groups use *condensation symbols* to try to expand the policy issue to a larger audience by evoking an emotional investment in the policy issue. Here we found that the Blue Ribbon Coalition would often go after environmental groups directly labeling them as elites. Conversely, the Greater Yellowstone Coalition often defines the issue in terms of Yellowstone as a speedway.

- The *policy surrogate* is a narrative tactic that tries to expand a policy issue by connecting it to a larger and often highly contentious issue. Here, we found that the Blue Ribbon Coalition often focuses on federalism

(in essence, arguing for local control over federal dominance) and for democracy and grassroots policy. The Greater Yellowstone Coalition is more likely to focus on corruption and special interests and contrast industry with the importance of Yellowstone as the United States first national park.

Taken together, we learned that in the wicked policy environment stakeholders tend to portray themselves as losing and use consistent political narrative strategies in an effort to expand the arena of conflict. The persistence use of such narrative strategies further escalates policy conflict in GYE.

IS THE MEDIA A STORYTELLER?

Thus far, through our coding schemes we found that environmental and motorized recreation interest groups do generate narratives that harbor internally consistent policy beliefs that are statistically different from the other group. We have also found that these groups utilize similar political narrative strategies when they portray themselves as losing, despite having divergent policy beliefs. But what of other stakeholders in the GYE? What of the media?

The media is supposed to be objective, and yet there is often accusation of bias – both nationally and regionally. We wondered to what extent the media are a conduit for public opinion or a contributor or active participant in policy debates. To answer this question, we decided to test whether newspaper articles are policy narratives, with embedded policy beliefs and media framing strategies.

Due the national attention given to GYE issues, we designed a study to compare eleven years of media coverage of two GYE issues (wolf reintroduction and snowmobile access) in both national (*USA Today* and *New York Times*) and local (*West Yellowstone News* and the *Cody Enterprise*) news papers. We were able to rather easily obtain the national articles through a search using LexisNexis. However, since local newspapers do not have resources to create digital archives of past issues, we conducted archival research. This means that we went to local libraries and spent dizzying hours looking through



▲ PHOTO 10.4 Interest groups use the media as an inexpensive way to get their policy message out to a broader public. The question is - do the media serve as a conduit for various opinions on wicked problems or, does it act as a conductor of policy opinion by framing issues with a particular policy outcome in mind? (Buffalo Field Campaign)



▲ PHOTO 10.5 Under the Interagency Bison Management Plan, the Montana Department of Livestock has the authority to haze bison back into the Park boundaries using horses and helicopters. Some see this solution as better than slaughtering bison, others claim that the hazing is aggressive and provokes unnecessary anxiety and injuries to bison. (U.S. Fish and Wildlife Service)

microfiche and yellowed originals for coverage of the two policy issues. Archival research is a time-intensive process, and one reason most research focuses on national media coverage.

In tandem with collecting all relevant articles, we designed a new code book that would capture both policy beliefs and narrative framing strategies. To code for policy beliefs in media articles we utilized "source cues". These are the people and groups from whom journalists gather information; these source cues were identified and coded. We found that national newspapers had statistically higher rates of national based source cues; we concluded that, like the Greater Yellowstone Coalition, they possessed a national theory of federalism. Conversely, the local papers primarily depended on local source cues and hence, like the Blue Ribbon Coalition, exhibited a compact theory of federalism. Thus, we found that the local and national media, through their source cues, are active contributors to the GYE policy debate by harboring different core policy beliefs of federalism.

However, on the remaining two policy beliefs (human-nature relationship and type of science used), there were no statistical differences between national and local coverage. Similar to our work with interest group narratives, we coded whether the victim was anthropocentric (e.g., saving Yellowstone for humans) or biocentric (e.g., saving nature). Unlike their interest group counterparts, *both* the national and local papers portrayed the victims of the policy issues in anthropocentric terms. Also surprising was that the media cited science very infrequently, leading to an inability to interpret he quality of the science they used.

In terms of narrative framing strategies, the nationally and locally based source cues were coded for New West or Old West policy orientation. In other words, source cues tended to espouse a policy leaning, pro- or anti-snowmobile access and pro- or anti-wolf reintroduction. In turn, these policy leanings were grouped into two categories: Old West (pro-snowmobiling and anti-wolf) and New West (anti-snowmobiling and pro-wolf).

The national papers used New West (pro-wolf, anti-snowmobile) source cues and the local papers used Old West (anti-wolf, pro-snowmobile) source cues. Likewise, national papers use New West descriptors of the wolf such as "noble", "culturally precious", and a "cuddly favorite"; in contrast, local articles highlight Old West descriptors of the wolf such as "strong predator", "the AIDS virus", and "abusive and arrogant". Such descriptors found in media accounts reveals a narrative strategy meant to influence public opinion.

Again, the major question asked in this phase of our investigation is whether the media is simply a conduit of information (reporting multiple policy preferences in newspaper accounts) or whether they are a contributor in the policy debate (constructing policy stories that harbor consistent policy beliefs and narrative framing strategies). We found a nuanced policy landscape. Rather than the view of the media as either an advocate or a conduit we found a mixed role for both national and regional newspapers. They are a contributor in particular instances and a conduit in others. We conclude that the media is a factor in the wicked policy environs of the GYE by offering often incomplete policy narratives with a strong dependence on framing but poor use of science in their coverage.

As political scientists, we study power, democracy, policy change, and policy gridlock. While more traditional political scientists would approach knowing Yellowstone through a study of institutions, legal matters, or public opinion, we choose to study the core of politics the fragmented, messy, and ever-evolving political world found in the language or narratives used by political actors. So what have we learned?

At each step of the way, our research is grounded in current theory to learn more about the wicked policy process. To build knowledge through research requires knowing and testing the discipline's theory. In this case, we were able to find evidence for theoretical assertions that had never been tested in real world application. Second, our research is an example of how the process is iterative in nature. In other words, building knowledge consists of small steps that build on one another to

continue to fill in the picture of the phenomenon under study - in this case wicked policy problems. Research rarely follows a linear path and ours certainly did not. We jumped from advocacy groups, to media studies, and now intend to study elected officials and bureaucratic agency workers as policy actors. Third, our research is necessarily systematic and transparent. These are critical aspects of any research, so that others can repeat the study and either confirm or deny our findings. Additionally, while most data comes in the form of numbers, our data comes in the form of words. Given the subjective nature of interpreting words, it is all the more crucial to be systematic and consistent. Finally, all research must answer the "so what" question. So what if there are different coalitions using narratives to make the GYE policy arena a wicked one? So what if the media participates in these policy battles? So what if the GYE has a changing culture? This is where it is critical that we place our results in the larger context of democracy. To do so gives import to our work beyond the boundaries of the GYE policy environs.

Our studies have confirmed the wickedness of the GYE policy environs. All stakeholders are losing or at least think they are losing power and thus view politics as a zero-sum game. Policy marketing is equivalent to soft drink commercials where Pepsi never acknowledges or discusses the positive attributes of Coca-Cola. Instead, policy making, just like niche marketing, is a competitive game with winners and losers. Both sides have power but neither side can dominate the other. Often, the goal of each coalition is not to win but rather to keep the other side from winning.

Interest groups ground their policy narratives in fundamentally different policy beliefs and use narratives to expand the arena of conflict. They use provocative metaphors and characterize their opponents in the most unflattering terms possible. Specific issues like bison management or snowmobile regulation are quickly wrapped up in larger cultural issues, such as "rugged individualism" or federalism. The media, likewise, gets involved in this game. The national media sees Yellowstone as a national issue and the local media sees it as a local issue. Both sets of media use descriptors and metaphors that reflect their respective policy interests.

▼ PHOTO 10.6 Managing bison in Yellowstone has been controversial since the Park's early days. In the 1920s, the wild bison population was augmented with domesticated animals. When the bison herd was determined to be too large, the herd was reduced through the late 1960s. Natural ecological processes are now used to determine bison numbers and distribution but the brucellosis issue has increased pressure to once again control bison numbers artificially. (Buffalo Field Campaign)





▲ PHOTO 10.7 Wilderness, multiple use, and recreation are all legitimate uses of public land in the Greater Yellowstone Ecosystem. Public land managers face a complex balancing act between managing for human enjoyment and preservation of natural ecological functions. Collecting meaningful public input on the future of public lands can be a significant challenge for land managers. (Jerry Johnson)

The issue with value-based conflict is that cultural values often anchor GYE groups to positions that appear to be, in fact, *opposed* to their fundamental interests. For example, in the bison controversy, it can be argued that the economic and power interests of ranchers were not served by the actions of Montana elected officials. They argue for local control over the killing and testing of Yellowstone bison in lieu of federal intervention. Local control led to an unintended consequence as the bison management program mobilized a wide-scale national reaction in favor of bison and against the rancher's own perceived interests. Similarly, environmental groups who vilify local ranching communities seem to be alienating potential allies for environmental preservation. A cultural value of New Westerners seems to be the need for amenities. Yet, population growth and the consequential subdivisions have resulted in serious water and land use concerns in the region.

Conclusion

If Yellowstone is our laboratory, then does this wicked policy environment exist outside of the region? We argue yes, and it is spreading, as policy narratives become political weapons in national policy wars. How to dismantle marketed discourses based on values and replace them with authentic discourses based on interests remains a perplexing dilemma.

A starting point for such cooperation would occur in the policy narratives of each group. Such narratives would focus less on policy beliefs and more on the mechanics of policy problems. Such narratives would focus more on interests and less on cultural beliefs and myths. They would not portray the groups writing the narratives as losers or victims; such narratives would seek to contain policy issues to a manageable size of stakeholders. It is possible to imagine a Yellowstone where politics becomes the art of the possible and through cooperation opposing coalitions both win. Maybe, the "other side" is not as evil as policy marketers like to portray them. Maybe, environmental preservation and economic sustainability are possible. Maybe, grizzlies, wolves, bison, elk, and humans can live with some accord. We could change the status quo first through the

construction of collaborative narratives then design non zero sum solutions. An important player in these policy battles is the collective citizenry who 'consume' these policy narratives. Citizens in the Greater Yellowstone Ecosystem and elsewhere live in competing social realities. They depend on mutually exclusive sources of knowledge and competing interpretations of that reality. The rise of policy marketing by entities is clearly a subtle manipulation of public opinion. When citizens examine policy conflicts, they, like the policy marketers that provide the information, often approach the conflict from diametrically opposed frames that fail to consider the values of the opposition and the larger context of Greater Yellowstone policy. However, we contend that it is possible and necessary for GYE citizens and others interested in the GYE to think and read critically and not be the subjects of policy marketers and their divisiveness. This is the democratic ideal of an informed citizenry.

Coding a Policy Narrative for Policy Beliefs

Below is a policy narrative from a hypothetical environmental nonprofit. Following the narrative is a code book similar to the ones we use in our work. Code the narrative, fill in the codebook and consider the following questions:
Was it difficult to code? Why?
How do your results compare with ours?
In what ways do you think this political narrative might contribute to the wicked nature of policy on the GYE?

- *TITLE:* Yellowstone as NASCAR: How the Bush Administration is Undermining American Democracy
- *FROM:* The Green Coalition

The Bush administration and corporate interests are working hard to overturn the Clinton administration's banning of snowmobiles from Yellowstone National Park. The Seattle-based Green Coalition is working with top elected officials and experts to stop this egregious abuse of power. Members of the U.S. Congress are taking notes of the administration's actions. For example, U.S. Representative Moss (D-NY)recently stated on the floor of the House of Representatives that the Bush administration has consistently neglected the will of the American people as well as scientific evidence proving the harm of snowmobile exhaust to park rangers. Furthermore, wildlife scientist Sally Randall argues that wildlife are unduly stressed by motorized recreation as they are chased off the road in the wintertime when their energies are low. The Green Coaltion, in conjunction with the Ecological Foundation of America, is also currently sponsoring a study to determine the impact of winter snowmobiling on plants. According to the Foundation, "snowmobiles harm plants by subjecting them to physical stresses."

The Green Coalition has worked hard throughout the 1990s to eliminate snowmobiling. Our hard work paid off, but now it is all in jeopardy since President Bush is seeking to overturn what is commonly called the Clinton rule. Powerful, elite special interests who will benefit directly from this rule change back the Bush administration's efforts. Some locals, including a former city council member of a local community, however, believe that ending snowmobiling will actually help local businesses. If the administration is successful at overturning this rule, than other rules such as the Clinton Roadless Initiative may well be at stake. Such an overturning will give tremendous power to the new administration in undoing Clinton era environmental polices. This will harm innocents like fisherman and cross country skiers. In fact, American democracy is at risk.

Practice Codebook

Fill in the following codebook for the above policy narrative.

▶ *CORE POLICY BELIEFS*

1. Who are identified as the allies?

___ of national allies
who:
___ of local allies
who:

2. Who are identified as the victims of the problem presented?

___ nature, wildlife, ecosystem victims
who:
___ human victims
who:

▶ *NARRATIVE STRATEGIES*

3. Does the narrative take a stance toward the current situation?

___ positive or ___ negative
comment:

4. Are costs of the current problem (i.e., those who will pay for overturning of the Clinton rule) diffused or concentrated?

___ diffused costs or ___ concentrated costs
how:

5. Are the benefits of the current problem (i.e., those who will benefit from the overturning of the Clinton rule) diffused or concentrated?

___ diffused benefits or ___ concentrated benefits
how:

6. Are condensation symbols used in the narrative?

___ yes or ___ no
what were they:

7. Is there a policy surrogate?

___ yes or ___ no
what were they:

Answers to the Practice Codebook

Fill in the following codebook for the above policy narrative.

▶ ***CORE POLICY BELIEFS***

1. Who are identified as the allies?

__5__ of national allies

who: U.S. House Rep Moss, Sally Randall, and Ecological Foundation of America, the Green Coalition, and the Clinton Administration

__1__ of local allies

who: former city council member

2. Who are identified as the victims of the problem presented?

__5__ nature, wildlife, ecosystem victims

who: wildlife, exposed and unexposed vegetation, seedlings, shrubs

__4__ human victims

who: park rangers, the American people, fishermen, cross-country skiers

-- Questions 1 and 2 are constructed to measure two policy beliefs of this group. For each document, we calculate a core policy belief score, that represents a place on the continuum of -1.00 (Old West) to +1.00 (New West).
-- The coding of allies (heroes) is a measure of the stakeholder's policy belief of federalism. The score for this document is put into the following formula: # of national allies – # of local allies / total number of allies
-- Thus, the score for this document would be: (5-1)/6= +0.667 (nationalism; New West)
-- The coding of victims is the measure of the group's policy belief of the relationship between humans and nature. The score for this document is put into the following formula: # of nature and wildlife victims – # of human victims / total number of victims
-- Thus, the score for this document is (5-4)/9 = +0.111 (biocentric; New West)

▶ ***NARRATIVE STRATEGIES***

3. Does the narrative take a stance toward the current situation?

___ positive or __x__ negative

comment: the group is portraying themselves as losing

4. Are costs of the current problem (i.e., those who will pay for overturning of the Clinton rule) diffused or concentrated?

__x__ diffused costs or ___ concentrated costs

how: they are diffused. fishermen, skiers, other rules may be reversed, the American people, vegetation, democracy is at risk

5. Are the benefits of the current problem (i.e., those who will benefit from the overturning of the Clinton rule) diffused or concentrated?

___ diffused benefits or __x__ concentrated benefits

how: the benefits are concentrated, powerful special interests

6. Are condensation symbols used in the narrative?

__x__ yes or ___ no

what were they: Yellowstone as NASCAR; special interests

7. Is there a policy surrogate?

__x__ yes or ___ no

what were they: American democracy is at risk

-- This is a classic "loser's appeal" using a stymied progress story aimed at expanding the arena of conflict. While portraying themselves as losing, a group will tend to: diffuse costs, concentrate benefits, and use condensation symbols and policy surrogates.