Ecosystem Management: The Relationship Among Science, Land Managers, and the Public

John Freemuth
DEPARTMENT OF POLITICAL SCIENCE, BOISE STATE UNIVERSITY
Boise, Idaho

R. McGregor Cawley
DEPARTMENT OF POLITICAL SCIENCE, UNIVERSITY OF WYOMING
Laramie, Wyoming

A place is nothing in itself. It has no meaning, it can hardly be said to exist, except in terms of human perception, use and response.

—Wallace Stegner (1989:169)

Ideas are the very stuff of politics. People fight about ideas, fight for them, and fight against them. . . . Every idea about policy draws boundaries. It tells us what or who is included or excluded in a category. These boundaries are more than intellectual—they define people in and out of a conflict or place them on different sides.


Ecosystem management is one of the most intriguing developments in contemporary natural resource policy. On the one hand, it has the potential for ushering in a new era of management which rivals the changes brought about by the conservation movement at the beginning of the 20th century. Indeed, ecosystem management can be understood as an attempt to realize the call issued by Aldo Leopold (1949) in his famous essay, “Land Ethic.”

But on the other hand, initial attempts to implement ecosystem management suggest that it is a concept which has not generated public acceptance. In 1990, the United States National Park Service (USNPS) and United States Forest Service (USFS) proposed adoption of ecosystem management for the Greater Yellowstone Area (GYA). The authors of the proposal hoped to pro-
vide a new “vision” capable of resolving long-standing management issues in the GYA. However, the Vision (1990) document precipitated a major controversy which has led many observers to conclude that the process was a failure.

Elsewhere we have offered an assessment of the conflict over the Vision document (Cawley and Freemuth 1993). What we seek to do in this essay is explore what might be learned about the attempt at Yellowstone in the hope that it will help inform ecosystem management efforts as we move towards 2000. It is our contention that ecosystem management is, first and foremost, an idea about public land policy that assigns a new set of meanings for places in the federal estate. Not surprisingly, these meanings come into conflict with other, more established, meanings which have developed about those same places.

Viewed in this light, arguments over Yellowstone and ecosystem management fall into the realm of politics as defined above by Deborah Stone. This realm is not one many of us are familiar with because the politics which occur here are about ideas, discourse, and community. It is a dialogue that links our ideas about public lands to broader discussions about the type of society in which we should, or ought, to live. Hence, debates over ecosystem management will be contentious and highly emotional. But the character of these debates should excite us, not discourage us. This essay, then, seeks to link politics with place in a way that will help our discussions on ecosystem management as they develop into the next century.

YELLOWSTONE: VISION POLITICS

It is certainly not surprising that the Yellowstone area was chosen as the focal point for ecosystem management. It has always been a touchstone for natural resource pol-

icy both at home and abroad. Moreover, the full title of the document that set off the controversy—Vision for the Future: a Framework for Coordination in the Greater Yellowstone Area—was quite appropriate. Rather than a management plan, the document offered general principles intended to guide future management decisions. It was, therefore, an attempt to conceptualize how ecosystem management might be implemented.

At the heart of the Vision (1990:4-1) were three primary goals for the Yellowstone area: (1) conserve the sense of naturalness and maintain ecosystem integrity; (2) encourage opportunities that are biologically and economically sustainable; and (3) improve coordination. Nods were made to both the environmental and multiple-use communities. “Ecosystem management” was to be pioneered, but “opportunities for recreation and commodity development, including timber harvesting, grazing and mineral development will be provided on appropriate federal lands” (Vision 1990:3-1). While acknowledging that there would be “disputes and controversies over [the proposed] management direction,” the document also suggested that such conflicts were “part of the democratic process” (Vision 1990: 3-1).

In short, the Vision document proposed a view about the type of Yellowstone community that could exist, but recognized that the community contained diverse members with equally diverse views. The project, then, was to engage the Yellowstone community in a discussion that would produce a new meaning for the GYA. The question, therefore, is why this apparently well-intentioned effort precipitated open conflict punctuated with suspicion and acrimony.

Part of the answer, of course, is that the Vision seemed to be flawed. Key ideas in the proposal, like
ecosystem and sense of naturalness, were given vague, almost contradictory, definitions. In consequence, the document fell prey to criticism from environmentalists who believed it failed to fully embrace preservation goals, and commodity users who believed it was a veiled attempt to abolish multiple-use activities in the GYA. However, to conclude that the drafters of the Vision document should have been more precise in defining their terms misses what we believe is the more important lesson to be learned from the controversy.

Ecosystem management is based on knowledge gained from the science of ecology. Ecology, in turn, is based on a holistic view of the physical world. It is not difficult, therefore, to understand why ecosystem management seemed to offer an ideal approach to the management of the GYA. At least since the early 1960s, there has been general agreement about the problems confronting the GYA. Legally and administratively, the GYA was understood to be a collection of places with different meanings and different management regimes. In consequence, management decisions tended to focus on specific resources or areas with little attention to how those decisions might affect the whole region.

What ecology offered, then, was a new way to conceptualize the problems of the GYA. Rather than a collection of places (area), it was an integrated place (ecosystem). It then followed that managers needed to change their approach from coordinating different management regimes to developing an integrated management regime. Viewed in this light, the ambiguity in the language of the Vision document was not necessarily troublesome. Indeed, the Vision document was about building consensus over new ideas, new principles. Once those ideas and principles were accepted, details like the exact boundaries of the Greater Yellowstone Ecosystem could be worked out.

Given the events since the publication of the original Vision document, it is fairly obvious that a consensus did not develop. It is our argument that the Vision process fell into disarray because land managers involved with it did not understand the dynamics of public discourse as a tool for developing consensus. To be sure, the drafters of the Vision document recognized the need for public input by developing a relatively sophisticated public involvement plan as a component of the overall Vision process. However, public input is not public discourse. A theorist Benjamin Barber (1984:136) explains, democratic discourse is a process in which "preferences and opinions earn legitimacy by forcing them to run the gauntlet of public deliberation and public judgement."

This brings us back to ecosystem management. For many professional resource managers, ecosystem management is nothing more than the application of sound scientific principles to resource management questions. As such, it is neither an opinion nor a preference, and its legitimacy has already been established. The problem, however, is that ecology and ecosystem are also ideas used in the policy dialogue to draw boundaries. At least since Aldo Leopold's time, ecology has symbolized an alternative, if not oppositional, approach to traditional resource management practices. Viewed in this light, ecosystem management is a preference or opinion that has not yet been legitimated by public deliberation.

What occurred at Yellowstone, then, was a showdown over the political legitimacy of ecosystem management. Consider, for example, Robert Barbee, Paul Schullery, and John Varley's (1991) thoughtful and spirited account of what when wrong
with the Vision process. In their view, the only players that openly endorsed the Vision document were the USNPS and USFS. But even that support was not complete: "though forest supervisors and park superintendents involved were strongly committed to the Vision, many staff members weren't" (Barbee, Schullery, and Varley 1991:84). Some local environmental groups endorsed the Vision process, but most of the national groups simply "bowed politely toward the process," while refusing to "jump in with both feet and take a major part in the dialogues" (Barbee, Schullery, and Varley 1991:82, 84). And then there were "commodity groups of many persuasions" who mounted a "powerful regional campaign" by convincing their members that the proposal represented a "giant landgrab, another Federal lockup" (Barbee, Schullery, and Varley 1991:82, 85).

In short, the Vision process submitted ecosystem management to public judgement which determined that the idea had not yet earned legitimacy. Aside from a relatively small group of agency personnel, the members of the Yellowstone community were either not interested in the principles of the Vision document, or openly hostile to them. To proceed with the proposal under these conditions, therefore, would be tantamount to turning control of the GYA over to a small group of resource professionals.

This assessment is based on the premise that the Yellowstone controversy represented a public deliberation. There is another possibility however. As Barbee, Schullery, and Varley argue: "Public sentiment did not have a great deal to do with the process. The American public, the owners of the parks and foresters of the greater Yellowstone area, played virtually no role at all" (1991:85). This is a reference, of course, to the fact that "attempts to hold hearings on the Vision in other parts of the country—far from intense local pressures—failed" (Barbee, Schullery, and Varley 1991:85).

Moreover, this view of the situation has recently received additional support. A fifteen-month investigation into "alleged improprieties in the directed reassignments" of Lorraine Mintzmyer and John Mumma by the Subcommittee on the Civil Service of the U.S. House of Representatives "revealed a conspiracy by powerful commodity and special interest groups and the Bush Administration to eviscerate the DRAFT Vision document" (U.S. Congress 1992:2). Some of the steps in this "conspiracy" were: "(1) closing previously planned national hearings to avoid anticipated positive public comment; (2) employing outside groups to 'rig' the appearance of negative public opinion at a few, select, local public meetings; (3) maneuvering the scientific interdisciplinary team out of the revision process, and (4) using the manufactured, negative, public comment to explain why the revision were allegedly necessary" (U.S. Congress 1992:11). It might be noted parenthetically that part of the evidence used to support these charges was Barbee, Schullery, and Varley's account.

Several issues emerge at this point. First, it seems to us that dubbing opposition to the Vision document a "conspiracy" is overstating the case. For example, Barbee, Schullery, and Varley note that the "governors of Montana, Wyoming, and Idaho wrote a joint letter criticizing the process" (Barbee, Schullery, and Varley 1991:82). In addition, the Wyoming Legislature passed a resolution opposing the Vision document. We seriously doubt that these actions were part of a conspiracy. The governor of Idaho, Cecil Andrus, a life-long Democrat and President Carter's secretary of the Interior, hardly strikes us as a likely
participant in any conspiracy of the Bush Administration.

Second, the suggestion that "negative public opinion" was "manufactured" simply demonstrates a lack of understanding about the Vision process and public land conflicts in general. The Vision document confirms that the idea of ecosystem management encountered opposition from the beginning. Barbee, Schullery, and Varley (1991) complain that "repeated meetings... with mining associations and other commodity extraction groups" led inevitably to the conclusion that "you can meet forever with opponents, and if they truly disagree with your position, you will not change their position." Finally, as noted above, anyone familiar with contemporary public land conflicts knows that ecology and ecosystem are political code words guaranteed to meet opposition from commodity user groups. In short, if negative public opinion was manufactured, the Vision document was what produced it.

Third, and perhaps more intriguing, the account by Barbee, Schullery, and Varley, as well as the Subcommittee's report, contain a view of the public which is problematic at best. On the one hand, if the national parks and forests are owned by the "American public," then how can there be "outside groups"? On the other hand, what criteria are used to determine that opponents of the Vision document, which included governors and legislators as well as commodity users, are excluded from the American public?

The point here, of course, is that the political boundaries in question were not between the "American public" and some other public, but rather between supporters and opponents of the Vision document. Stated differently, supporters understood that local hearings would be heavily populated by their oppo-

ents. The public input during the early stages of the Vision process made that abundantly clear. Their belief, then, was that hearings held in places outside of the region would be populated by interests sympathetic to the process. This brings us to our final concern.

If Barbee, Schullery, and Varley's assessment was an accurate reading of the political landscape, then it was not at all clear that hearings outside of the region would have produced different results. One of their key complaints was that national environmental groups expressed very little interest in the proposal. What is missing here, then, is evidence that these groups would have been more interested in the proposal had the hearings been held in some other location. At the same time, given the intensity of opposition to the proposal, there is every reason to believe that opponents would have been "brought in by the busload" (Barbee, Schullery, and Varley 1991:82) wherever the hearings were held.

In sum, it seems to us that the various accounts about what went wrong with the Vision process lead back to our earlier contention—the managers involved simply did not understand the dynamics of public discourse. Rather than trying to build a public consensus around the idea of ecosystem management, the Vision process was an attempt to play one part of the public against other parts. It is not surprising, therefore, why the document became the focal point of divisiveness and acrimony, replete with charge and countercharge about conspiracies.

So much for the question of Vision politics. Let us now turn to the question of what might be learned from this situation about the future of ecosystem management.

THE FUTURE?

We began this essay by suggesting that ecosystem management had the
potential for establishing a new era in federal land policy. Given the outcome of the Yellowstone controversy, this might seem to be an overly optimistic view. However, most of the major resource agencies have begun exploring the application of ecosystem management to their missions. Moreover, Interior Secretary Bruce Babbitt has announced his intention to establish a “National Biological Survey” that will undertake the task of mapping ecosystems and biological diversity in the U.S. It would seem, therefore, that our public deliberations over ecosystem management have not yet finished.

The question, then, is whether or not the Yellowstone controversy can instruct our future discussions about ecosystem management. We believe that it can. One of the most obvious lessons from the Yellowstone controversy is the need to develop a clearer definition of ecosystem management. This project requires attention to at least two issues.

First, we must clarify the process by which ecosystem boundaries are determined. Here is where our earlier comments about the politics of place become important. Admittedly, the existing boundaries of places on the federal lands (national parks, national forests, etc.) were established by a relatively arbitrary method which paid little attention to natural processes. Nevertheless, these places have meanings that the public recognizes and accepts. What needs to be articulated is how redefining these places in terms of ecosystems will affect established meanings.

A second and related point is that we also need to clarify the link between science and public discourse in ecosystem management. Science is certainly an important component of ecosystem management. But as Robert Keiter (1989:1003) reminds us science “cannot define a new ethic (or management priorities) in an area like Greater Yellowstone. Science attaches no significance or value to the many human interests that figure prominently in policy judgements about the public lands.” In short, we must develop definitions of ecosystems that harmonize science with the values people attach to places.

This brings us to another, perhaps more important, lesson of the Yellowstone controversy. At least since the early 1900s, land managers have been charged with the task of managing the federal lands following the dictates of their professional and technical expertise. What we must remember, however, is that the role of modern land managers was originally an opinion or preference that gained legitimacy by running the gauntlet of public deliberation and public judgement.

Indeed, Gifford Pinchot who served as the first chief of the USFS, and was a leading spokesperson for the conservation movement during the early 1900s, understood the need for public acceptance. Early in his training, Pinchot learned “a great truth” that helped “save the National Forests in America.” This lesson was that “in the long run Forestry cannot succeed unless the people who live in and near the forest are for it and not against it” (Pinchot 1947:17-18). The Yellowstone controversy suggests that much the same could be said of ecosystem management.

The federal lands, whether as national parks, national forests, or ecosystems, are owned by the American public. But they are also places in which local communities have developed. In consequence, management decisions are as much about defining the character of those local communities as they are about defining land-use practices. It would be misdirected, of course, to allow local desires to dictate national policy. However, it is not only misdirected but ultimately counterpro-
ductive to dismiss local concerns as somehow not part of the public discourse over national policy. What early conservationists like Pinchot understood was that major policy shifts required developing a discourse in which scientists, professionals, local publics, and national publics could find common meanings. It was not an easy task, nor did it occur overnight. Nevertheless, conservation did, at least for a time, define a consensus position about the management of the federal estate. To expect that the changes implied by ecosystem management will be realized without an equally lengthy and difficult effort is to doom the project to failure. Viewed in this light, Barbee, Schullery, and Varley offered important advice when they characterized the vision process as a first step in a "long, arduous, and probably painful campaign to change some fundamental aspects of resource management in our bioregion" (Barbee, Schullery, and Varley 1991:82).

REFERENCES