Thoughts on Planning and Management of the Nation's Public Forests

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Contemporary thinking about natural resource management, at least at the advanced level, recognizes ideas about "perfection" and "perpetuity" in nature as human constructs. It further acknowledges that humans are an inextricable part of ecosystems and that the debate is really about what that means both to humans and to the rest of nature.

Advanced-level thinking concludes that natural resource management planning in the control mode, i.e., the plan will control the distribution and densities of resources and human values for those resources, is not only demonstrably outmoded, it was never a realistic concept. That approach was totally naive about the stochastic nature of events, including events within human societies, which have always been major forces shaping ecosystems and always will shape both nature and humans.

Contemporary and future thinking should be aimed at forgoing the idea of control and focusing on *responsiveness*; i.e., management planning and implementation should accept the realities of an uncertain future and strive for guidelines to guide response to changes in ecosystems, knowledge, and values. That ecosystems and our knowledge of them are continuously changing is abundantly obvious in the scientific literature. Only the most uncritical minds believe that values have reached constancy for all generations yet to come.

It is rational to attempt to preserve as many opportunities as we can for the future. On the other hand, a priori knowledge of what will be defined as an opportunity in the future typically is not available. Furthermore, the likelihood of vision becoming reality has been shown by experience to be poorly predictable. What we must not do is draw boundaries that eliminate opportunities and suppress our abilities to respond to them as they develop.

Modern natural resource management, as in any other management area, begins with a *vision*. It must have vision or it has no starting place. In the past, boundaries for resources and their various levels of availability for human interaction were defined by the plan. Rather, boundaries should be seen as transition zones in time and space. Boundaries denote a fixed vision; transition zones denote a dynamically changing vision and an ability to be efficiently and effectively *responsive* to new events.

Of critical importance to all management organizations is that contemporary thinking should focus on *learning* as a part of planning and as a product of the implementation of those plans. Some authors assert that *knowledge is the most important product of adaptive management* (Bormann et al. 1999). This can be a somewhat complex idea when we combine this assertion with the postulate that knowledge is never complete. It becomes even more complex when we consider that this learning is about *learning how to learn to manage nature-human interactions* that are always changing and yet, this is the reality of humans and of nature.

Theoretically, at least, the consummate integration of planning and managing for changing ecosystems, knowledge of, and values for those ecosystems is called *collaborative adaptive management*. It envisions collaboration between scientists, managers, and citizens called "stakeholders." Theoretically, this paradigm provides for the *rich integration of scientific knowledge, management experience, and user values*. It is excellent theory, but few of the adaptive management prognosticators spend much time on the fact that all of these players are human and subject, in varying degrees, to being less than totally altruistic in their points of view.

While we stand at the threshold of opportunity to develop critically needed knowledge about managing human-land interactions, especially on wildlands positioned in the turbulence of the developed, suburban, urban landscape interface, how we do it in *a model that is inexhaustible as a source of knowledge* is our conundrum. Collaborative adaptive management appears to be a desirable approach, but can we rise to its challenges to structure the planning and management organization for learning in an atmosphere in which many of the players are not really hungry for knowledge, particularly when learning includes some unlearning?

How do resource managers bring the stakeholders into the process so that we can learn from them without conveying the idea that they are equal to trained professionals in terms of responsibility and authority in the process? How do we prevent a feeling of disenfranchisement among the stakeholders who could become totally uncooperative or, even worse, political adversaries? How can we get across to the stakeholders that their cooperation is vital to a win-win scenario? That is, they obtain access for recreational use and we learn from the process of integrating management of that use into our other concerns for the forest, e.g., commodity resources, biodiversity, water quality protection, and more. Collaborative adaptive management appears to be an approach that might be the most rewarding in terms of responsiveness and the accumulation of knowledge in a turbulent world.

Literature Cited

BORMANN, B.T., J.R. MARTIN, F.H. WAGNER, G.W. WOOD, J. ALEGRIA, P.G. CUNNINGHAM, M.H. BROOKES, J. BERG, AND J.R. HENSHAW 1999. Adaptive management. P. 505-534 in *Ecological stewardship: A common reference to ecosystem management*, Vol. III, Sexton, W.T., A.J. Malk, R.C. Szaro and C. Johnson (eds.). Elsevier Science, Ltd., Kiflington, Oxford, United Kingdom.

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