

Developing Wilderness Character Monitoring

A Personal Reflection

BY PETER B. LANDRES

The 1964 U.S. Wilderness Act has one, clear mandate to the agencies that manage wilderness: preserve the wilderness character of the area. But even though the Wilderness Act went into effect 42 years ago, and all four federal agencies that manage wilderness have policies that direct managers to preserve wilderness character, the agencies can't show whether they are preserving wilderness character or not.

In part this lack of accountability is a result of the deeply intangible values and benefits that are such an important part of wilderness character. These were the cornerstones that Howard Zahniser, principal author of the Wilderness Act, strove to preserve: that people would feel their connection to and interdependence with nature, that humility would grow from being surrounded by and immersed in the community of life, that people would be inspired. Although it may be hard for the agencies to monitor these intangible benefits, the agencies should be accountable for the more tangible outcomes of management decisions that affect wilderness character.

Over the past five years, a dedicated and passionate group of wilderness managers, agency staff (mostly Forest



Peter B. Landres. Photo by Nyssa Landres.

Service but also representatives from the three other wilderness management agencies), and scientists have labored to develop a new protocol to monitor wilderness character in wildernesses managed by the U.S. Forest Service. This work began when Jerry Stokes, who was then the Forest Service national wilderness program leader,

asked Steve Boucher, the agency's wilderness information manager, and me to cochair a Forest Service Wilderness Monitoring Committee. Our task was to craft a monitoring strategy to improve wilderness stewardship. As a team we debated, we listened, and we argued respectfully while working through excruciatingly detailed discussions: What is wilderness character? How does management affect it? Would our monitoring diminish the important intangible benefits of wilderness character? Can we develop a cost-effective monitoring protocol? How will line officers and staff use the information to improve wilderness stewardship?

Eventually, more than 50 people were actively engaged in developing this monitoring protocol, demonstrating close partnership between management and science staff. The protocol has been reviewed by more than 30 managers, line officers, and scientists, and it's been pilot tested in all nine Forest Service regions.

The protocol uses the statutory language of the 1964 Wilderness Act to identify four qualities of wilderness character that the agency has management responsibility for: "untrammelled," "natural," "undeveloped," and "outstanding opportunities for solitude or a primitive and unconfined type of recreation." Each quality is divided into one or more monitoring questions or goals to focus monitoring, and these are divided into one or more specific indicators. Indicators were chosen based on three criteria: They had to be meaningful across multiple scales to help improve individual unit wilderness stewardship and national wilderness policies; they needed to apply to at least half of the 407 Forest Service wildernesses; and data for the indicator had to be available within the Forest Service with no new field data collection, or available as an external national dataset. This last criterion was vital for several reasons, but most importantly because in this time of austere budgets a new monitoring program must be designed to be as cost-effective as possible. Also, using existing Forest Service data from

across the many staff areas with wilderness responsibilities, such as air quality, fish and wildlife, vegetation, engineering, range management, and recreation, helps integrate wilderness across the agency.

Monitoring wilderness character has many tangible benefits. First, it allows informed decisions about the effects of stewardship and actions on wilderness character, which is critical for about half of all line officers in the Forest Service who have responsibility for managing wilderness. Second, it provides accountability for the mandate in the Wilderness Act to “preserve wilderness character.” Third, it builds internal agency integration by making information from other program areas more accessible to wilderness managers, and vice versa. Fourth, it creates an “institutional memory” about the outcomes of wilderness stewardship decisions, allowing future managers to learn from the past.

There are also tangential benefits. Describing wilderness character in terms of the four qualities is already being used as an organizing framework in several NEPA effects analyses. Management staff involved in these analyses felt that this framework helped them document poten-

tial effects more quickly and accurately than before. This new monitoring protocol was also the impetus for a workshop of scientists and managers to develop a new social science research agenda to improve understanding about how management policies, decisions, and actions affect wilderness character in general, and the outstanding opportunities quality in particular.

On a personal level, just like a wilderness journey, this work has taken me on a path of challenge and discovery, frustration, humility, and eventually deep satisfaction. I’ve spent years working to define, then refine, then define and refine again the big picture and hundreds of details for this monitoring; the entire time has been a wonderful challenge full of discovery. Throughout these years there certainly were frustrating moments and times where I questioned if I should be putting so much time and effort into developing this monitoring. But I knew I should con-

tinue when I’d think about how our society is increasingly separated from nature, and how wilderness character is such an important touchstone for our interdependence with nature, for fostering humility and respect, for how we grow when we’re challenged.

Although I’m the one who received the award for this work, this work is not mine. The reality is that this monitoring was conceived of and developed by a team of people, both managers and scientists, who had one goal clearly in mind: to honor the letter and spirit of the Wilderness Act. I am deeply honored and humbled to have had the opportunity to work with such a wonderful group of people who could translate their years of on-the-ground experience into a tool to help managers preserve wilderness character for our children, for our future. **IJW**

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Chief's Excellence in Wilderness Research Application Award

Dr. Peter B. Landres received the 2005 Excellence in Wilderness Research Science Application Award, cosponsored by the U.S. Forest Service and IJW. His work in monitoring wilderness character based on the language in Wilderness Act was heralded by his colleagues and wilderness managers as central to a team effort—he provided both sustained leadership and the science base for this applied research effort. According to one of his colleagues,

Peter led an effort to develop a national protocol for monitoring changes in wilderness character in all 407 wildernesses managed by the Forest Service. Despite the recent 40th anniversary of the Wilderness Act, the phrase “protect wilderness character” has never been defined sufficiently for the purpose of determining whether or not, we as an agency, have been successful at managing for this core mandate of the Act.

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The monitoring protocol incorporates biophysical, social, and managerial aspects of wilderness into a cohesive assessment of wilderness character. The IJW Editorial Board is pleased to jointly recognize Dr. Peter Landres for this award and his leadership in developing a monitoring protocol to measure wilderness character—the heart of wilderness stewardship.