

The Definition of Wilderness Character in “Keeping It Wild” Jeopardizes the Wildness of Wilderness

**A critique of the interagency strategy to monitor trends
in wilderness character**

Prepared by

**David Cole
Ed Zahniser
Doug Scott
Roger Kaye
Kevin Proescholdt
George Nickas**

September 2015

This article was written out of a profound concern that the Interagency wilderness character monitoring strategy, known as “Keeping it Wild 2: An Interagency Strategy to Monitor Trends in Wilderness Character Across the National Wilderness Preservation System (KIW),” diminishes and jeopardizes the preservation of *wildness*—the most distinctive and important value that distinguishes Wilderness from other lands, and in so doing poses a grave threat to Wilderness. The article explains these concerns in details and makes important recommendations.

In criticizing the KIW protocol, the authors in no way suggest that the program of comprehensive wilderness monitoring should cease. The program has heightened awareness of the need to preserve wilderness character, and it appropriately monitors many of the conditions to be protected in wilderness to understand whether these conditions are improving or degrading. For those reasons it should be continued, but with important changes to address the concerns expressed herein.

DAVID COLE is a retired scientist who conducted extensive research on wilderness stewardship for over 25 years with the Forest Service.

ED ZAHNISER, who lobbied on the early wilderness bills on Saturdays in the late 1950s, edited Howard Zahniser’s Adirondack writings as *Where Wilderness Preservation Began*.

DOUG SCOTT is a long-time congressional lobbyist and advocate for wilderness and author of several books on wilderness, including *Our Wilderness: America’s Common Ground*.

ROGER KAYE is an author and wilderness coordinator for the US Fish and Wildlife Service in Alaska.

KEVIN PROESCHOLDT is conservation director for Wilderness Watch in Minneapolis, Minnesota.

GEORGE NICKAS is executive director for Wilderness Watch in Missoula, Montana

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“We must remember always that the essential quality of wilderness is its wildness”
---Howard Zahniser

Introduction

For those who care passionately about the stewardship of wilderness—as we do—nothing is more important to get right than the definition of wilderness character. Since the central mandate of the Wilderness Act is to preserve wilderness character, the future of our wilderness system is dependent on how wilderness character—something that is not explicitly defined in the Act—is interpreted. For the past decade we have voiced concerns over misinterpretation of wilderness character in agency monitoring protocols, the most recent of which is “Keeping It Wild 2.” (KIW2)(Landres et al. 2008, in press).

KIW2 defines wilderness character as “a holistic concept based on the interaction of (1) biophysical environments primarily free from modern human manipulation and impact, (2) personal experiences in natural environments relatively free from the encumbrances and signs of modern society, and (3) symbolic meanings of humility, restraint, and interdependence that inspire human connection with nature.” We have little problem with this. However, this conceptual definition is not used either in the KIW2 monitoring framework or as a guide to making wilderness stewardship decisions. Instead, to give practical meaning to wilderness character, KIW2 states that wilderness character should be defined as five separate qualities: untrammeled, undeveloped, natural, outstanding opportunities for solitude or a primitive and unconfined type of recreation, and other features of scientific, educational, scenic, or historical value. These five qualities include all the attributes mentioned in the Sec. 2(c) definition of wilderness in the Wilderness Act. They are considered to be equal in importance and often in conflict with each other (Landres et al. 2008, in press), making the concept of wilderness character internally contradictory rather than a single coherent stewardship goal.

We disagree. The purpose of the mandate to protect wilderness character above all else is to focus the attention of wilderness stewards on preserving the “essence” of wilderness—those qualities that are most unique and distinctive about wilderness and make it “a contrast with those areas where man and his own works dominate the landscape”. It is about differentiating the most important things to protect from the many other things that ideally might be protected in wilderness. For this purpose, wilderness character must be defined as a coherent whole, in a manner that is not internally contradictory. It cannot be broken down into separate qualities.

We believe that wilderness character is fundamentally about wildness and that it should be defined as the degree to which wilderness is free from deliberate human modification, control, and manipulation of a character and scope that hampers the free play of natural ecological processes.

The five-quality KIW2 definition confuses wilderness character with a list of all the things we value in wilderness and would like to protect and preserve. By making all wilderness values a part of wilderness character, and treating all those values as equal in importance, this definition negates the intended purpose and meaning of wilderness character. Most onerously, it undervalues the importance of protecting wildness. Wilderness character cannot be protected above other wilderness attributes and values if all attributes and values are included in the definition of wilderness character and wildness cannot be emphasized when it is just one of many values that managers might protect.

In recent years, our concerns about the inappropriate KIW2 definition of wilderness character have grown, as those who developed it have promoted its use—not just as a monitoring framework—but as the basis for wilderness stewardship (Landres et al. 2011). Without meaningful public involvement, the agencies charged with wilderness management have incorporated the five-quality definition into their stewardship policy and guidance and it has been incorporated into stewardship decision making processes such as the Minimum Requirements Decision Guide (Arthur Carhart National Wilderness Training Center nd). Wilderness stewardship decisions based on an inappropriate definition of wilderness character are likely to be inappropriate and ultimately will harm wilderness. Of particular concern is the internally contradictory nature of the KIW2 framework, which makes it acceptable to trade-off degradation of a quality such as “untrammeled” for improvement in another quality such as “natural.” This gives managers almost infinite discretion in deciding which values will be protected and which will be compromised to achieve their goals.

In this article, we provide a more appropriate definition of wilderness character and a rationale for why wilderness character should be defined this way, arguing that our definition is more consistent with the Wilderness Act and better for wilderness than the five-quality KIW2 definition. We address concerns that some have raised with our approach and conclude with specific recommendations for moving forward in a manner that meets many of the goals of KIW2, despite the need to develop a more appropriate definition of wilderness character.

We do not offer recommendations for incorporating our perspective into improved wilderness character monitoring protocols. This reflects our belief that wilderness character is more useful as an overarching principle to guide stewardship decisions than something tangible that can be meaningfully assessed and monitored. When it comes to assessing the success of wilderness stewardship, it is better to monitor a range of wilderness conditions than to attempt to measure wilderness character itself. Fortunately, this is exactly what the wilderness character monitoring program has been doing. We applaud this effort and nothing we are proposing should detract from it. So-called

wilderness character monitoring should simply be recognized for what it is—a protocol for comprehensively monitoring conditions in wilderness—and labeled more appropriately.

An Appropriate Definition of Wilderness Character

Wilderness character is fundamentally about wildness. It should be defined as the degree to which wilderness is free from deliberate human modification, control, and manipulation of a character and scope that hampers the free play of natural ecological processes. Protecting wilderness character is about ensuring that wilderness remains untrammelled and undeveloped, without human occupation or domination. We do so by not allowing developments or manipulating wilderness ecosystems to any significant degree. Manipulations where the intent is more to remove evidence of humans than to intervene in ecological processes, such as restoration of an impacted campsite, are not a concern. Actions that seek to modify wilderness ecosystems significantly, such as a program of herbicide spraying or prescribed fire, are much harder to justify because they degrade wilderness character.

We are not alone in believing that wildness is the central quality of wilderness character. In 1953, Howard Zahniser wrote, “We must remember always that the essential quality of the wilderness is its wildness.” In that same paragraph, Zahniser stated: “we must not only protect the wilderness from commercial exploitation. We must also see that we do not ourselves destroy its wilderness character in our own management programs” (Harvey 2014).

More recently, Jack Turner wrote that “if we fail to incorporate wildness into what we mean by wilderness we simply define wilderness out of existence” (Burks 1995: 179). Doug Scott (Scott 2001-2002), in an article on wilderness character and the Wilderness Act, states that it is the word *untrammelled* that defines “the wilderness character (that) it is the duty of conservationists and land managers to protect,” a perspective repeated by Proescholdt (2008). Howard Zahniser’s son, Ed, concluded an article on wilderness character with the statement “The wilderness character of designated wilderness is its wildness (Zahniser 2014).

In 1963, Howard Zahniser discussed the stewardship implications of protecting wildness in an editorial that took issue with the Department of Interior’s Leopold Report on wildlife management in national parks. The report recommended that national parks be actively managed to restore their condition at the time they were first visited by white men, to present “a vignette of primitive America” (Leopold et al. 1963). Zahniser wrote that “... the board’s report poses a serious threat to the wilderness within the national park system and indeed the wilderness concept itself.” It “... is certainly in contrast with the wilderness philosophy of protecting areas at their boundaries and trying to let natural forces operate within the wilderness untrammelled by man.” He concluded the editorial: “With regard to areas of wilderness, we should be guardians not gardeners” (Zahniser 1963a).

Our rationale for asserting that wilderness character should be defined as wildness, as opposed to all five of the wilderness values in the KIW2 definition, reflects our belief that wilderness character is the essence of wilderness—not everything about wilderness. It is also consistent with our belief that wilderness character must provide an internally consistent stewardship goal, rather than consist of separate qualities that conflict with each other, forcing stewards to choose which qualities of wilderness character to protect.

Wilderness Character is the Essence of Wilderness—Not Everything about Wilderness

Why should wilderness character be confined to the essence of wilderness, its unique and distinctive qualities, rather than everything in the Wilderness Act's definition of wilderness? The dictionary definitions of "character" include "a combination of qualities that make something unique or distinct" and "the main or essential nature that serves to distinguish" something. So, character can be either the main or essential quality or a combination of qualities. What is consistent in the varied definitions of character is uniqueness and distinctiveness and what is most unique and distinctive about wilderness is its wildness, particularly its untrammelled condition. Many public lands are undeveloped; many public lands are managed for native flora and fauna and the natural ecological processes that sustain them; many public lands are managed to provide primitive and undeveloped recreation, as well as solitude; and virtually all public lands are managed to protect other features of value. But outside wilderness, few public lands are deliberately administered with humility and restraint, as the last places that lie "beyond the control of human institutions and cultural imperatives" (Kammer 2013), as places where even the goal of restoring degraded ecosystems is not a sufficient justification for human control and manipulation.

Our perspective on wilderness character is influenced by a belief that Congress chose that phrase carefully. The Wilderness Act describes the conditions that define wilderness and that stewards are responsible for protecting: "primeval character and influence," lack of "permanent improvements or human habitation," "natural conditions," and "outstanding opportunities for solitude or a primitive and unconfined type of recreation." It states that wilderness areas may contain "ecological, geological and other features of scientific, educational, scenic or historical value." Having clarified these tangible qualities, the Act goes on to state that above all else agencies are to preserve the "wilderness character" of the area. Why did Congress not state the goal to be preservation of wilderness, which they defined in considerable detail, unless they meant the preservation of wilderness character to mean something more than simply preserving the list of qualities that define wilderness?

We must assume that when Congress said that managers must protect wilderness character they meant something more than that managers must protect wilderness. Otherwise the word "character" would be superfluous and the Supreme Court insists, as a basic principle of statutory interpretation, that statutes should be construed "so as to avoid rendering superfluous" any statutory language (*Astoria Federal Savings & Loan Ass'n v. Solimino*, 1991). Courts must "give effect, if possible, to every clause and word of a statute, avoiding any construction which implies that the legislature was ignorant of the meaning of

the language it employed” (*Montclair v. Ramsdell*, 1883). Since wilderness character must mean something different from wilderness, it is a mistake to assert that the definition of wilderness is the definition of wilderness character. To do so, as KIW2 (Landres et al. 2008, in press) does, strips wilderness character of its special and intended meaning.

Those who developed wilderness character monitoring take great pride in having elevated the importance of wilderness character. We agree that wilderness character has been elevated in importance and applaud this outcome. However, it is ironic that this has been accomplished by defining wilderness character in such a way that protecting it means nothing more than what protecting wilderness generally has meant for the past 50 years. A truly meaningful outcome would be elevating the importance of wilderness character defined in a way that focuses attention on protecting the essence of wilderness, which we believe is its wildness.

The Essence of Wilderness Character is Wildness

Assuming Congress intended the mandate to protect wilderness character to mean something more than simply protecting all the wilderness values mentioned in the Wilderness Act, why do we believe that essential something is rooted in the concept of wildness? There are multiple lines of evidence and reasoning. We have already noted that the most unique and distinctive attribute of wilderness—the greatest contrast between wilderness and other public lands—is its wild and untrammelled nature. To gain another perspective on Congressional intent, one can look to the statement of purpose, in Sec. 2(a) of the Wilderness Act, which speaks to ensuring that all lands are not occupied and modified by humans. Finally, one can look at how Congress defined wilderness as an ideal, before including in the definition the characteristics an area that qualifies for wilderness may have. To understand the definition of ideal wilderness one must understand the structure of the definition of wilderness in the Act and how that definition evolved over the years it took to pass the Act. Scott (2001-2002) provides a detailed discussion of points we briefly summarize here.

Subsection 2(c) of the Act contains two sentences that define wilderness. The first, “A wilderness, in contrast with those areas where man and his works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain” was the entire definition of wilderness in the original Wilderness Bill (Scott 2001-2002). In 1960, however, when a new version of the Wilderness Bill was introduced, a second sentence was added by Senator James Murray, who explained it was added “in response to requests for additional and more concrete details in defining areas of wilderness” (Scott 2001-2002). This sentence includes “undeveloped Federal land without permanent improvements or human habitation,” “imprint of man’s work substantially unnoticeable,” “outstanding opportunities for solitude or a primitive and unconfined type of recreation,” and other features of value. Following Murray, subsequent sponsors of new versions of the Wilderness Act (Senator Clinton Anderson and Representative John Saylor) stated that the first sentence describes the nature of wilderness as an ideal concept while the second sentence provides practical detail on areas that should be considered for wilderness designation (Scott 2001-2002).

The two sentences that define wilderness have different functions. The first sentence defines what wilderness should ideally be, what stewardship hopes to attain or maintain; the second sentence defines characteristics that wilderness lands may have. Where we differ from KIW2 is in our contention that the sentence that defines the ideal is more relevant than the second sentence to understanding what Congress considered the essence of wilderness to be—to an appropriate definition of wilderness character—lands where humans do not dominate, that are untrammeled and without human occupation.

Our perspective on which part of the definition of wilderness is central to wilderness character is not original. Although it is not official legislative history, many of us revere Howard Zahniser, author and chief advocate of the Wilderness Act, and look to his explanations to fully understand this law. In the only explicit statement of what wilderness character is, he explained at one of the final hearings on the bill:

In this definition the first sentence is definitive of the meaning of the concept of wilderness, its essence, its essential nature—a definition that makes plain the character of lands with which the bill deals, the ideal. The second sentence is descriptive of the areas to which this definition applies—a listing of the specifications of wilderness areas; it sets forth the distinguishing features of areas that have the character of wilderness.... **The first sentence defines the character of wilderness**, the second describes the characteristics of an area of wilderness (emphasis added) (Zahniser 1963b).

Wilderness Character Should be Defined in an Internally Consistent Manner

We agree with the KIW2 team that wilderness character is a holistic concept and that wilderness stewardship should be about preserving wilderness character as a whole, not simply one of its qualities. That is why we have developed a definition of wilderness character—with its emphasis on the complementary attributes of wildness, untrammeled and undeveloped—that is internally consistent. It also explains our concern with the internally contradictory nature of the KIW2 conception of wilderness character as five separate qualities that often conflict with each other. Wilderness stewards have a complex job that can involve deciding among competing wilderness values, but those choices should not be internal to the overriding principle guiding wilderness stewardship, the preservation of wilderness character.

Some might question how protecting wildness can be reconciled with the Act's direction to preserve natural conditions. Much has been written about the dilemma of choosing between maintaining wildness (untrammeled) and restoring naturalness (Cole 1996). Landres et al. (2008, in press) consider untrammeled and natural to be two separate often conflicting qualities of wilderness character. However, natural can be defined in multiple ways (Cole and Yung 2010). It can be considered equivalent to untrammeled and mean not deliberately controlled or manipulated by humans. Alternatively, it can be defined, as KIW2 does, to be equivalent to undisturbed rather than untrammeled. According to KIW2, natural conditions prevail where "ecological systems are substantially free from the effects

of modern civilization, ", where "for example, indigenous plant and animal species predominate, or the fire regime is within what is considered its natural return interval, distribution over the landscape, and patterns of burn severity."

Interpreting natural to mean undisturbed instead of untrammeled violates several rules of statutory construction. The "traditional tools" of construction require interpretation of an entire statute "as a symmetrical and coherent regulatory scheme," *Gustafson v. Alloyd Co.*, 513 U.S. 561, 569 (1995). As Kammer (2013) states, in an article on wildlife restoration in wilderness, "Terms in a statute should not be interpreted so as to create contradictions with other terms ... whenever it is possible to avoid them using another reasonable interpretation based on a plain reading." For the Wilderness Act, this means that "natural conditions" must be defined—as it can be—in a manner that supplements rather than contravenes the requirement that wilderness retain its untrammeled wildness. Kammer (2013) offers the following explanation for why untrammeled and natural should not be considered two separate qualities of wilderness character:

Whatever can be said regarding the continued merits of preserving the wildness or natural autonomy of protected areas at the expense of certain environmental values (such as biodiversity, ecological integrity, or resilience) which may be threatened by pervasive human influence—this is precisely what the Act requires. As Peter Landres and others wrote in 2000, the Act codified a strict nature-culture duality, one that strictly prohibits injections of culture into nature, such as those embodied in so-called 'ecological interventions' undertaken for the purpose of 'redress[ing] some of the "sins" of culture' and 'mak[ing] things right in our relationship with nature.' This is why Gordon Steinhoff recently concluded that "[t]he Wilderness Act does not present managers with conflicting requirements,' (Landres 1999) and that '[t]he dilemma [managers find] within the Act—to either maintain wildness or restore naturalness—arises only because "natural conditions" has been misinterpreted.' (Steinhoff 2010).

Wilderness character, defined as we suggest, provides a single coherent stewardship goal—most succinctly stated as the protection of wildness. That said, we consider wildness to be consistent with both the untrammeled and undeveloped qualities of KIW2 (Landres et al. (2008, in press) and even with naturalness, defined properly to mean not deliberately controlled or manipulated by humans. Our conception of wilderness character encompasses but should not be divided into these qualities. The other qualities that define wilderness, such as outstanding opportunities for solitude or a primitive and unconfined type of recreation are important characteristics of wilderness that should be protected to the extent that doing so does not have substantial adverse effects on wilderness character.

Wilderness Character and Wilderness Stewardship

We have heard concerns that our definition of wilderness character will lead to the dereliction of managerial duty and degradation of wilderness because it does not include all the conditions Congress mentioned in its definition of wilderness. It leaves out many of the wilderness attributes that wilderness stewards are supposed to protect. This concern

would be valid if the only responsibility of wilderness managers was to protect wilderness character. But this is clearly not the case.

Wilderness character does not define the entirety of the wilderness manager's job. Rather it establishes the relative importance of various management objectives, some of which conflict with each other. Wilderness managers are given a wide array of things to provide and protect, the most important of which is wilderness character. They are supposed to provide opportunities for various public purposes, such as recreation, research and education. They are supposed to protect wilderness qualities that are important but not central to wilderness character, such as rock art, paleontological features and populations of native flora and fauna that are stressed by everything from invasive species to landscape fragmentation, fire suppression and climate change. Where these can be provided for and protected without substantial adverse effect on wilderness character, managers are required to do so.

We have heard concerns that, with our definition of wilderness character, wilderness managers would be unable to actively manage wilderness. They would be unable to address recreation impact issues, remove developments such as stock ponds, remove non-native species or reintroduce extirpated species. Nothing could be further from the truth. While we advocate caution and restraint—particularly with the reintroduction of a species—such actions are entirely appropriate if they are not “of a character and scope that hampers the free play of natural ecological processes.” That said, wilderness stewardship founded on our definition of wilderness character—with its emphasis on protecting the wild and untrammeled—would be less active and interventionist than stewardship founded on the KIW2 definition. Our perspective is more at odds with the traditional management ethos—one that emphasizes doing things and in which there is no reward for inaction. It is more in line with the notion of National Park Service interpreter Freeman Tilden that we preserve things best through inaction and the assertion of wildlife biologist Adolph Murie that “administrators should be told that their success will be measured, not by projects accomplished, but by projects sidetracked” (Zahniser 2014).

Conclusions and Recommendations

One of the greatest challenges to keeping wilderness wild is overcoming the impulse of managers to intervene—to assume that doing something will make things better. Congress directed wilderness stewards to step outside the traditional management ethos of manipulation and control and treat wilderness differently. They did so by making the protection of wilderness character the overriding principle of wilderness stewardship and equating protection of wilderness character with protection of wildness and untrammeled conditions. Our greatest concern with how KIW2 conceives of wilderness character is that it bolsters the innate desire of managers to act—to manipulate and control. By making protection of the wild and untrammeled just one of five qualities of wilderness character—rather than the overriding quality of wilderness character—it negates the strongest argument that can be made against constant action and intervention in wilderness.

In KIW2, Landres et al. (in press) state that wilderness character is a “holistic concept” that includes intangible values as well as the tangible, that actions based on wilderness character should reflect “humility and restraint” and involve “preserving wilderness as a whole” rather than “balancing trade-offs.” We could not agree more. However, over the past decade of applying their definition of wilderness character both to monitoring and stewardship, we see no evidence that this is the case. Rather than being holistic, wilderness character is divided in a reductionist manner into five qualities, each of which is monitored and evaluated separately. If monitoring data show that more qualities have improved than degraded, then wilderness character is said to have improved. To use a hypothetical example, in a wilderness where trammeling increased significantly, from a major ecological intervention, the trend in wilderness character would still be considered positive if there were improvements in two other qualities, perhaps protection of an historic lookout and providing more opportunities for primitive recreation by bridging a river.

A similar approach is taken to making stewardship decisions. For example, an analysis of effects on wilderness character is central to the framework the agencies have developed to assist managers in making decisions related to wilderness stewardship actions, the Minimum Requirements Decision Guide (Landres et al. 2011). This analysis is conducted by individually (rather than holistically) evaluating each of the five quantifiable qualities of wilderness character (none of which reflect the host of intangible values), deriving summary ratings based on trading off these qualities, as if they were of equal importance. This makes it easy to justify an action that degrades wilderness but benefits several of the values less central to wilderness character. In this manner, actions that degrade what is most unique and distinctive about wilderness are encouraged—not by managers abusing the process, but by managers following an inappropriate process based on a misinterpretation of wilderness character. The inevitable result is degradation of wilderness character and harm to Wilderness.

We agree with Landres et al. (in press) that the Wilderness Act defines wilderness using a diverse array of wilderness conditions and values, from untrammelled conditions to opportunities for solitude and various features of value. We also agree that the Act requires managers to strive to protect all these values, although it is not always possible to simultaneously maximize protection of all of them. However, we do not believe that it is necessary to include all these values in the definition of wilderness character in order to mandate their protection. In fact, by doing so they defeat the purpose of the concept of wilderness character, which is to identify the most distinctive and important of wilderness conditions and values, those to be given preference when it is not possible to simultaneously protect all values. Given our concerns, we have two important recommendations.

1. KIW2’s five-quality definition of wilderness character should be replaced with a definition centered on the concept of wilderness. We suggest defining it as the degree to which wilderness is free from deliberate human modification, control and manipulation of a character and scope that hampers the free play of natural ecological processes. This definition gives managers a single holistic and internally consistent overarching stewardship goal, based on protecting the essence of wilderness. The five qualities,

properly defined, can be maintained as a useful vocabulary for talking about the conditions wilderness stewards are required to protect, but everyone must understand that they are not all qualities of wilderness character. They vary in how central they are to wilderness character and should not be considered equally important. Since these five qualities of wilderness character have already been incorporated into agency policy, agency reports and plans and wilderness training materials, this must involve more than simply revising KIW2.

2. The program of comprehensive wilderness monitoring begun a decade ago (Landres et al. 2005) should continue. That program wisely monitors many of the conditions and characteristics to be protected in wilderness—not just wilderness character—to understand whether wilderness conditions are improving or degrading. As we have said repeatedly, our concerns with KIW2 are not the monitoring measures and techniques, it is with the assertion that what is being monitored is wilderness character. The protocol needs an accurate name, perhaps “wilderness condition monitoring.” The output of monitoring should be more appropriately referred to as trends in wilderness conditions, trends that reflect the success of wilderness stewardship, including the protection of wilderness character. Narratives that describe the special values of each wilderness (Landres et al. in press) can be retained, but they are wilderness value narratives—not wilderness character narratives. Again, wilderness character has been confused with the list of values that management wishes to protect in wilderness.

We recognize that neither of these changes will come easily. The five qualities of wilderness character are standard nomenclature and widely accepted. However, the future wildness of our wilderness system is at stake. With the changes we have recommended, the two goals espoused by the KIW2 group can still be accomplished. The concept of wilderness character can be given the attention it deserves and, through monitoring, the overall condition of the wilderness system and the effectiveness of stewardship can be assessed. More important, by defining wilderness character appropriately, wilderness stewards will be encouraged to exercise restraint and humility, better protecting the wildness of wilderness. The result will be a National Wilderness Preservation System that adheres to the ideals of the Wilderness Act, its authors and the intent of Congress.

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