

A Common-sense Criterion in the Evaluation Of Wilderness

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Figure 1. Bar Canyon, BLM Las Cruces District.

The Wilderness Act of 1964 established “a National Wilderness Preservation System [NWPS] for the permanent good of the whole people, and for other purposes” (Public Law 88-577). The impetus for developing this act was a concern that increasing settlement and mechanization would leave “no lands designated for preservation and protection in their **natural** condition” (Public Law 88-577, emphasis added). Consequently, the act “immediately designated 54 wilderness areas, containing approximately 9.1 million acres of national forest lands” (Kahal, 2015; p. 9).

Additional efforts to identify potential wilderness were completed during the 1970s and 80s under the U.S. Forest Service’s (USFS) Roadless Area Review and Evaluation (RARE I and RARE II) and Federal Land Management Policy Act of 1976 (FLMPA, Public Law 94–579; BLM, 1978). The criteria of land to be included in recommendations to congress for wilderness consideration were “(1) generally appears to have been affected primarily by the forces of **nature**, with the imprint of man’s work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an



unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value” (Public Law 88-577, Sec. 2(c); emphasis added).

Aldo Leopold—often called “the father of wilderness”—defined wilderness as “a continuous stretch of country preserved in its **natural state**, open to lawful hunting and fishing, big enough to absorb a two weeks’ pack trip, and kept devoid of roads, artificial trails, cottages, or other works of man” (Leopold, 1992, p. 79; emphasis added). The USFS designated 755,000 acres that Leopold had described as the nation’s first wilderness—the Gila Wilderness in New Mexico. Leopold’s concept of wilderness contained the elements of size, naturalness, primitiveness, and outstanding opportunities for solitude and unconfined recreation.

Currently, the Bureau of Land Management (BLM) and USFS are engaged in an inventory process to evaluate lands under their jurisdiction as to having “wilderness characteristics” (Public Law 94-579; 36 C.F.R. Part 219). These agencies are inventorying lands that previously did not qualify for wilderness designation in other identification and recommendation processes, have been acquired, or were missed because of errors.

In reviewing the documents used for inventory of lands with wilderness characteristics, agencies are currently using more lenient criteria by which lands are selected for wilderness designation. Richard Johnson, former Gila National Forest Supervisor, noted that agencies struggle to define naturalness as it relates to wilderness (personal communication, 2009).

When evaluating the four descriptors of wilderness, the size criterion is basically a minimum of 5,000 stand-alone acres, which is easily identified.

The outstanding solitude or primitive and unconfined recreation criterion is much harder to define and identify. Outstanding solitude or primitive and unconfined recreation only requires one or the other and does not need both to qualify. Sight and sound references to civilization were part of the early inventories and eliminated many areas from wilderness consideration (Public Law 96-550, Sec. 105). Aldo Leopold also recognized the issue with solitude when he said, “There are degrees and kinds of solitude” (Leopold, 1989, p. 25).

The area being inventoried may also contain ecological, geological, or other features of scientific,

educational, scenic, or historical values. These values are in addition to the required criteria (size, naturalness, outstanding opportunity for solitude and primitive and unconfined recreation). They alone do not justify wilderness qualifications. I will not address these criteria any further, as they can be easily enumerated.

A potential weak link is in the “naturalness” criterion. *Is the imprint of humanity’s work substantially unnoticeable?* A lingering disagreement generally falls over the definition of a road, way, or two track. I suggest for clarity that the issue of naturalness should be made easy to define in order to eliminate controversy.

In a simplified sense, natural can be defined as things that exist in nature. Straight lines are one of the primary things in nature that are not natural. Chao (2017) made this point in her article “There Are No Straight Lines in Nature.” Needham (1884) recognized this concept when he reported, “In contemplating nature and the life-model, we are constantly reminded of the saying—theoretically a true one, perhaps—that there are no straight lines in nature” (p. 187). Straight lines are everywhere within the landscape, but they are not of nature.

STRAIGHT LINES AS A COMMON-SENSE CRITERION

Straight lines are contrary to nature—they are the product of humans. There are few examples of straight lines occurring in nature. Nature has a pattern, but it generally does not revolve around straight lines. Straight lines are generally from the handiwork of humans. Examples of human-made straight lines occurring in the landscape include fences, towers, corrals, pipelines, dams, dirt tanks, transmission lines, vegetation changes due to ripping the ground for pipelines, and roads.

Straight lines can come from roads (maintained or not), “two tracks,” or “ways” that are human-made and generally follow straight lines. The presence of the straight line is not dependent on whether the route is maintained or not. The persistence of the straight line is often permanent and can be seen from a distance. The final disposition of a road is very important in defining the boundary of a wilderness area because there cannot be permanent roads in a wilderness. Land areas be-

ing considered with “two tracks” and “ways” are included in the inventory because they are not mechanically maintained; however, the presence of their straight lines is detracting from the naturalness and must be recognized.

Straight lines are also used in detection of unnatural items. Aerial surveillance uses the detection of edges (straight lines) to detect human-made objects (Hazeldene and Price, 2017). Sonar detection looks for unnatural shapes (straight lines, geometric shapes) when looking for ships, submarines and other human-made objects in the ocean (Mosby, 2015). When looking at photographs, our eyes naturally follow lines (Shaw, 2017).

Humans like straight lines; however, in the natural setting that is the basis for wilderness, they should not be allowed. The straight line should become a primary reason for disallowing wilderness recommendations or including these areas to be classified as lands with wilderness characteristics.

Figure 1 was taken in an area being considered for wilderness and is being evaluated as lands with wilderness characteristics, but the area contains old road beds that can be seen from a distance. The area to be inventoried is only 423 acres and should not qualify based on acreage, as well as the unnatural line in the distance. The area also has other road beds, human-constructed trails, water bars, a rock house structure, barb-wire fences, and other human-made objects spoiling the area’s view shed.

The straight line detracts from the area’s naturalness and demonstrates that the presence of humans is not substantially unnoticeable. The roadbed has changed the topography and water flow, thus taking away from naturalness. This is easily recognized by casual observation and avoids the controversy of being maintained by hand or mechanical means or whether it is a road, two track, or way. This concept is an excellent way for citizens to get involved in providing meaningful input into the inventory and evaluation process. It will enumerate and document the presence of humans.

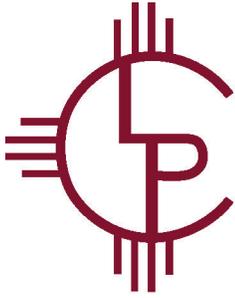
In honoring the concept and vision that Aldo Leopold had for wilderness, the agencies conducting “Lands with Wilderness Characteristics” inventories should include evaluation of straight lines in their recommendations when qualifying the lands for wilderness characteristics.

Today, over 50 years following the passage of the Wilderness Act of 1964, 765 wilderness areas are included in the NWPS and amount to over 109 million acres, or almost thirteen percent of federal land (Dietz et al., 2015). The question that now must be asked is, “How can there be new wilderness areas after extensive and repeated evaluations through time?”

“The father of wilderness,” Aldo Leopold stated that, “Wilderness is a resource which can shrink, but not grow...the creation of new wilderness in the full sense of the word is impossible” (Leopold, 1989, p. 169).

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