

Local Economic Importance of Designated Wilderness

Evidence in the Literature

BY NEAL CHRISTENSEN

As we approach the 50th anniversary of the passage of the 1964 Wilderness Act, the public and federal land management agencies continue to search for a better understanding of the benefits and costs of inclusion of new areas within the National Wilderness Preservation System (NWPS). There are numerous U.S. federal lands considered suitable for inclusion in the NWPS. Forest Service lands that are potential candidates for future Wilderness designation are managed as Inventoried Roadless Areas under the Roadless Rule of 2001, Wilderness Study Areas that have been designated by Congress for further study, and Proposed Wilderness Areas that were identified through formal planning efforts. The U.S. Fish and Wildlife Service and the National Park Service manage suitable areas as Proposed Wilderness Areas. The U.S. Fish and Wildlife Service and the Bureau of Land Management also have a number of Wilderness Study Areas identified by Congress. Formal designation of these lands as Wilderness under the 1964 Wilderness Act requires a decision by Congress to protect their long-term national interest for a broad set of wildland-related values.

Although federal wildland protection reflects national interests, the political power behind the decisions is often centered in local areas near the proposed wilderness (Bryner 2007). Although the 1964 Wilderness Act does not address economic values, political support for designation is critical to its success, and that support often depends on economic considerations. Local communities are particularly interested in economic information when evaluating potential wilderness designation decisions (Czech 2000; Bryner 2007). Decisions about increasing protection of federal public lands are often contentious in local communities, at least partly because of concern about possible negative economic effects of designation (Rasker 2006). Bryner (2007) compared wilderness

designation efforts across several decades in U.S. western states to determine the types of factors and supporting information that were most influential. He described local concerns as tending to be more narrowly focused on economic and local ecological considerations than on the broader national interests associated



Neal Christensen.

with the NWPS. These local concerns compel stakeholders and decision makers to consider local economies in comprehensive evaluations of the impacts of wilderness designation decisions in nearby communities.

Benefits derived from protected public lands generally accrue differentially to the public across geographic scales. Protecting the environment and providing rare opportunities for wilderness experiences, including solitude, potentially interest a wide national audience. Local communities may benefit economically from nearby wilderness through increased visitation and local expenditures as well as through the protection and enhancement of amenities related to quality of life. Quality of life is thought to be enhanced by amenities offered by nearby protected public lands, and these qualities are key to driving economic development by attracting people and businesses to a community (Buckley 2005; Rasker and Hansen 2000). Although direct economic contributions derived from local spending associated with wilderness visits are relatively small and highly variable by location and season, the overall potential local economic contributions of NWPS lands are substantial when consideration is given to a broader set of benefits (Bowker et al. 2005). Because commercial activities within designated wilderness are limited, and the

benefits of protected areas go beyond on-site activities, amenity-based economic contributions of designated wilderness to local communities are likely to far exceed those generated from local recreation visitor spending.

Marketing the Wildland Recreation Setting

The Wilderness Society (2009) describes designation of wilderness as the highest form of U.S. federal land protection, and this level of protection comes with increased national recognition along with a fairly standard list of allowable developments and uses. Tasci and Gartner (2007) describe tourism supply and demand within a marketing framework that considers destination image as a primary factor. This destination image is a result of brand recognition where visitors come to expect a certain type of recreation setting. Thus, a change in wilderness designation status could influence the destination image and have the potential to change both the perceived supply of and demand for a specific recreation opportunity in a specific wildland place. If recreation visits to a public wildland area increase because of an increase in its protection status, local economies could benefit from a wilderness “designation effect.” A designation effect would be characterized from a marketing perspective as a brand recognition or brand loyalty response. This type of response would contribute to an increase in visitation as a function of changing demand rather than a change in the actual supply of local wildland opportunities. There is conflicting evidence on whether or not this type of wilderness designation effect occurs.

A perceived change in the quality of a recreation setting and an increase in public awareness suggest that recreation use could increase, or the types of users



Figure 1 – This solo backpacking trip in the Bob Marshall Wilderness contributed little to the local economy. Photo by Neal Christensen.

could change as a result of designating a place as wilderness. McCool (1985) published one of the few comparison studies of the influence on recreation use before and after wilderness designation. The study at the Rattlesnake National Recreation Area and Wilderness in Montana found no evidence of increased use related to designation. The data actually showed a slight decline in wildland recreation use from 1977 (pre-designation) to 1981 (post-designation). Further refuting a visitation effect attributable to recognition or loyalty toward the NWPS, the study showed no increase in the percentage of first-time visitors to the area. McCool noted that recreation use patterns are inherently in flux, wilderness designation is only one of many potential influences, and trends influenced by designation may take a long time to manifest. He also observed that the process of wilderness designation circa 1980 generated extensive media coverage for a number of years prior to designation; this is often true of contemporary designation efforts as well

(e.g., Carrus, Cini, Bonaiuto, and Mauro 2009). McCool reasoned that media coverage prior to designation could result in a substantial “pre-designation” effect that dilutes the influence of the actual legislation.

There is some evidence of a designation effect on public lands outside of the context of wilderness that could inform the wilderness debate. Weiler (2005) found a considerable increase in recreation use resulting from changing the designation of eight federal properties from national monuments to national parks between 1979 and 2000. Weiler’s study found substantial and persistent increases in visitation at these parks. The study found an apparent market signaling influence from designation that provides information to new visitors, particularly those from farther away who do not rely on local knowledge to form the decision to visit. Evidence from Weiler (2005) suggests that many people plan recreation trips based on a general desire to visit national parks and that they also appear to seek out new national park experiences



Figure 2 – A home in Montana’s Boulder Valley near the Absaroka-Beartooth Wilderness. Residential land area grew at more than twice the rate in this county (Sweet Grass) as in all non-metro counties in Montana between 1980 and 2000 (Headwaters Economics 2011). Photo by Neal Christensen.

during these trips. Thus, evidence shows a potential for increased recreation use by new visitors to places that become newly designated national park units. National park designation attracts new visitors by providing information about recreation setting qualities and amenities through a market signal about a somewhat fungible type of recreation setting (i.e., brand recognition), and through the general popularity of the national park system (i.e., brand loyalty). Similarly, the National Wilderness Preservation System, because of its relatively uniform management practices imposed by the 1964 Wilderness Act, could also provide a market signal of a specific desirable type of wildland recreation experience. However, this type of designation effect has not been supported by empirical studies in the NWPS.

Community Characteristics and Amenity Benefits

Recreation visitation to the NWPS is not the only important factor contrib-

uting to healthy local economies dependent on wildlands. A case study of Doña Ana County, New Mexico, suggested that protecting local public lands had a positive economic influence and provided a competitive advantage over other communities, but that success was dependent on appropriate infrastructure and community capacity (Sonoran Institute 2006). Doña Ana County was found to be better positioned than many other amenity-rich communities to benefit economically from wilderness designation because of nearby commercial air service, a substantial amount of public land under a variety of management types, high numbers of service sector jobs with a good mix of producer and consumer services, and an educated population (Sonoran Institute 2006).

Further evidence of the positive amenity-based association between protected public lands and healthy local economies is found in a study examining the potential economic

contributions of designating a proposed 30,000-acre (12,141 ha) wilderness in central Oregon (Headwaters Economics 2007). That study found no empirical evidence or peer-reviewed literature suggesting that the designation of wilderness in any western U.S. county had been detrimental to a local economy. The study concluded that there is a positive relationship between protecting public lands and local community economic health. In general, this conclusion is supported by a number of studies that have found correlations between different types of local economic benefits and the presence of designated wilderness (e.g., Headwaters Economics 2007; Holmes and Hecox 2004; Kline 2006; Lindsey, Man, Payton, and Dickson 2004; Lorah 2000; Phillips 2004; Rasker and Hansen 2000).

Conclusions

Many proponents argue that wilderness designation proposals are generally worthy of support simply because some places should be protected from development. The National Wilderness Preservation System represents a national public good that was not created for the purpose of regional economic development. However, in a world involving trade-offs of scarce resources, successful proposals are increasingly required to also be economically justified. The presence of designated wilderness in the western United States has been positively correlated with population and economic growth, property value increases, and enhanced quality of life. New designation of wilderness may bring these types of benefits to more of the West, including communities where traditional extraction activities are declining. Local communities in the western United States may consider new wilderness designation to be a rural

economic development tool in the same sense that nature-based tourism is viewed as a conservation tool for protected areas throughout the world.

Local debate over proposed wilderness designation should consider the following points about the research described in this review:

- No evidence was found that designation has increased use, changed use patterns or changed types of visitors to wilderness.
- There is substantial evidence of positive local amenity-based economic contributions associated with the NWPS. There is also evidence suggesting that new additions to the system can improve local economies.
- No evidence has been identified showing overall negative economic impacts resulting from wilderness designation.

Although the public purposes of places protected under the 1964 Wilderness Act, and subsequent designation legislation, do not include local economic development, potential local economic impacts remain a fundamental consideration in the evaluation of trade-offs in both designation and management of public wildlands. This article has focused on understanding protected areas from an economic viewpoint with the intent of providing managers and the public with understanding of current literature on the NWPS's economic contributions to local communities. The economic evidence is overall positive, but sparse and inconclusive. There is a need for further research to better document impacts on local economies due to wilderness designation – especially studies that can compare areas before and after designation.

Wilderness designation debates may tend to focus on local economic

benefits, and those benefits can be substantial. However, decisions affecting public lands within the NWPS are held to a high standard of responsibility to first and foremost protect their natural condition as established by the 1964 Wilderness Act and specific enabling legislation for each designated wilderness. Wildland-based tourism and amenity migration offer an economic opportunity and local justification for protecting special wildland places. However, the management priority for units of the NWPS in the United States must be to protect the public purpose of these places as repositories for natural conditions rather than to enhance the economic health of local communities.

References

- Bowker, J. M., J. E. Harvard III, J. C. Bergstrom, H. K. Cordell, D. B. English, and J. B. Loomis. 2005. The net economic value of wilderness. In , ed. H. K. Cordell, J. C. Bergstrom, and J.M. Bowker. (pp. 162–80). State College, PA: Venture Publishing.
- Bryner, G. 2007. Designating wilderness areas: A Framework for examining lessons from the states. In , comp. Alan Watson, Janet Sproull, and Liese Dean (273–80). September 30–October 6, 2005, Anchorage, Alaska. Proceedings RMRS-P-49. Fort Collins, CO.: U.S. Forest Service, Rocky Mountain Research Station.
- Buckley, R. 2005. Social trends and ecotourism: Adventure recreation and amenity migration. 4(1): 56–61.
- Carrus, G., F. Cini, M. Bonaiuto, and A. Mauro. 2009. Local mass media communication and environmental disputes: An analysis of press communication on the designation of the Tuscan Archipelago National Park in Italy. 22(7): 607–24.
- Czech, B. 2000. Economic growth, ecological economics, and wilderness preservation. In , comp. Stephen F. McCool, David N. Cole, William T. Borrie, and Jennifer O'Loughlin (194–200). May 23–27, 1999, Missoula, Montana. Proceedings RMRS-P-15-VOL-2. Ogden, UT: USDA Forest Service, Rocky Mountain Research Station .
- Headwaters Economics. 2011. Economic profile system-Human dimensions toolkit, summary county profiles. Retrieved September, 2011 from www.headwaterseconomics.org/eps-hdt.
- . 2007. Bozeman, MT: Headwaters Economics; Produced for the Oregon Natural Desert Association.
- Holmes, F. P., and W. E. Hecox. 2004. Does wilderness impoverish rural regions? 10(3): 34–39.
- Kline, J. K. 2006. Public demand for preserving local open space. 10(7): 645–50.
- Lindsey, G., J. Man, S. Payton, and K. Dickson. 2004. Property values, recreation values, and urban greenways. 22(3): 69–90.
- Lorah, P. A. 2000. Population growth, economic security, and cultural change in wilderness counties. In , comp. Stephen F. McCool, David N. Cole, William T. Borrie, and Jennifer O'Loughlin (pp. 230–37). May 23–27, 1999, Missoula, Montana. Proceedings RMRS-P-15-VOL-2. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.
- McCool, S. F. 1985. Does wilderness designation lead to increased recreational use? 83(1): 39–41.
- Phillips, S. 2004. Science and Policy Brief. Washington, DC: The Wilderness Society.
- Rasker, R. 2006. An exploration into the economic impact of industrial development versus conservation on western public lands. 19(3): 191–207.
- Rasker, R., and A. Hansen. 2000. Natural amenities and population growth in the Greater Yellowstone Region. 7(2): 30–40.
- Sonoran Institute. 2006. The potential economic impacts of wilderness in Doña Ana County, New Mexico. Tucson, AZ: Sonoran Institute.
- Tasci, A. D., and W. C. Gartner. 2007. Destination image and its functional relationships. 45(4): 413–25.
- The Wilderness Society. 2009. Wilderness – The highest form of land protection. Retrieved August, 2011 from www.wilderness.org.
- Weiler, S. 2005. A Park by any other name: National park designation as a natural experiment in signaling. FRB of Kansas City Working Paper No. 05–09. Retrieved August 2011 from SSRN: ssrn.com/abstract=876959.

NEAL CHRISTENSEN is a social scientist with Christensen Research Company, P.O. Box 1780, Missoula, MT 59806, USA; email: neal@ChristensenResearch.com