

Wilderness Economics Must Look Through the Windshield, Not the Rearview Mirror

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[Editor's Note: It may seem incongruous to address economics in a "Soul of the Wilderness" column. But economic values are always at the heart, if not the soul, of any wilderness designation debate. Economic arguments are often misapplied to wilderness, as Tom Power explains in this "Soul of the Wilderness" column. Dr. Power's analysis and point of view draw upon historical and current experience in the western United States, but may be increasingly applicable to developed economies worldwide. --John C. Hendee]

PROPOSALS TO EXTEND OFFICIAL WILDERNESS CLASSIFICATION to new lands are regularly criticized on economic grounds. Regardless of justifications on ecological, cultural, and moral grounds, wilderness designation is always perceived as having significant negative economic consequences based upon two arguments or assumptions:

- 1) Wilderness designation is criticized as prohibiting the ongoing expansion of an area's economic base by locking up natural resources that are central to local, basic industries. Thus, in that direct sense, wilderness impoverishes an area and constrains its economic development.
- 2) Wilderness designation is criticized as being done primarily to provide free recreational opportunities to a relatively small number of primitive backcountry users. Thus, the gain to this tiny minority, given all the back country already available, is tiny, while the economic losses to the majority are substantial. So, the argument goes that this type of land management can only make the population collectively poorer.

Both of these arguments or assumptions are false as are the economic conclusions drawn from them. They conflict with empirical, economic evidence. Once these errors in economic argument are corrected, it becomes clear that substantial additional wilderness protection can contribute directly to the economic well-being of local residents and to the vitality of their economy.

The View Through the Rearview Mirror--and the Windshield

Historically, our natural resource industries, farming, ranching, food processing, mineral extraction and processing, forest industries, and commercial fishing represented the "core" of most areas' economies. In the earlier periods of our development these economic activities clearly were the "base" of the economy that directly or indirectly supported almost all other economic activities. But throughout this century there have been profound changes taking place in the U.S. economy. These extractive industries have gone through periods of both dramatic boom and serious collapse and depression. Meanwhile, our overall economy has dramatically expanded and diversified. As a result, the economy has been steadily transforming itself in ways that have significantly reduced the importance of extractive industry. While 85% of employment was tied directly to extractive activities in 1810, less than 5% of employment is provided by those natural resource industries today (see Figure 1). Even on our "last frontier," the western states, economic activity has moved dramatically away from reliance upon these natural resource industries. That transformation has important implications for public economic policy.

The transformation of our economies away from heavy reliance upon extractive natural resource use is well underway and it will continue. The important point from a public policy perspective is not whether this trend will continue or whether it can or should be stopped. It will continue, and it cannot and should

not be stopped. The important issue is for public economic policy to recognize where our economies are now, and where they will almost certainly be in the future, and to focus public economic policy upon obtaining the most benefits for all citizens from the new economy that is emerging. To do this, we have to resist the natural tendency to guide public policy by the "view through the rearview mirror." We need to "look through the windshield" and see where we are going.

Most of us tend to think about our communities in terms of the history we share with them, implicitly assuming that the present in some fundamental ways is like the past, and that the future will be so too. Grade school geography classes, reinforced by the mass media throughout our lives, encourage this view: Pittsburgh is driven by steel production, Milwaukee is driven by beer production, Detroit is driven by automobile production, and the West is correlated with irrigated agriculture, desert ranching, mineral extraction and processing, and timber harvesting. Whatever the historical truth of these assertions, they have little or nothing to do with current economic realities and are even less relevant to the emerging future economies.

Such a backward looking "rearview mirror" approach to public economic policy will at best be ineffective, and a waste of public effort and political energy. More likely, that backward-looking approach will actually damage the economic well-being of residents because it misunderstands what is important to them. We need to look clearly at where we are now, where we are being carried by ongoing changes in the economy, and where these trends will carry us into the future. This will not be easy. Political influence follows public perceptions of economic importance. It is politically important for the economic interest groups that have dominated the West's economy in the past to encourage the public to believe that their importance has not diminished. This, combined with the tendency to base current perceptions on past experiences, will encourage exactly the type of rearview mirror approach to public economic policy that needs to be resisted.

Public economic policy must directly face "the view through the windshield" fact that extractive natural resource industries will not be a primary source of economic vitality in the future. More likely, they will be a source of instability and decline. This reduces significantly the opportunity costs associated with protecting natural landscapes for their nonextractive values. In addition, because new economic activity is increasingly "footloose" and follows peoples' pursuit of high quality living environments, protecting natural landscapes actually protects a significant part of the new economic base that is emerging.

The Economic Functions of Wilderness

Wilderness is often presented as a "free good" demanded by a tiny minority of backcountry recreationists and commercial outfitters. This is a distorted caricature of the purpose of wilderness and the broad range of benefits that wilderness provides. By drastically narrowing the assumed purpose of wilderness, this approach ignores most of the substantial economic benefits associated with protected wildlands. Given that the vast majority of U.S. citizens will never enter a wilderness area to engage in backcountry recreation, the overwhelming support for wilderness protection would be inexplicable if such backcountry recreation were the primary function of wilderness.

In addition, wilderness designation is often presented as an "anti-economic" step because it purposely bans most commercial activities on the protected lands in the pursuit of what some see as cultural, ethical, or aesthetic objectives: dispersed, noncommercial backcountry recreation, and "nature experiences." This is a mistake. Lands with wilderness qualities are a relatively scarce resource that has significant alternative uses that satisfy important human needs and desires. In this sense wilderness designation represents a "classic" economic opportunity to allocate scarce resources to the pursuit of important human objectives. Wildlands provide a broad range of benefits that make the lives of people more satisfying and fulfilling in at least the same way that peoples' purchases in commercial markets do. One way of looking at those positive benefits of wildland preservation is outlined in Figure 2.

The figure divides the economic values associated with wilderness into several categories: on-site vs. off-site values, use vs. non-use (or passive use) values, recreational vs. non-recreational values, dollar expenditures vs. non-market economic values, and present vs. future values.

Each of these distinctions is important in evaluating the economics of wilderness protection. Often most of these values are ignored. When economic analysts do consider positive economic values for wilderness, they tend to focus exclusively upon the expenditures associated with commercial wilderness recreation. As the schematic in Figure 2 suggests, this represents a relatively small part of the "on-site use" values and an even smaller part of the total set of values that need to be considered. The following examples of the other wildland values outlined previously also need consideration.

1. Even though most U.S. citizens are not planning active use of wilderness areas, they support protecting wildlands. They explain this in terms of protecting part of our natural heritage for future generations (bequest values), leaving some parts of the natural world relatively unmodified by humanity (existence value), or protecting future options (option values). These are the non-use or passive use values economists have categorized and measured.
2. The scientific and ecological stabilization values associated with protecting pristine natural areas has been explicit from the beginning of the wilderness preservation movement. Unlike our national parks, wilderness is not primarily intended as a "pleasuring ground" for citizens.
3. Dollar expenditures in the pursuit of wilderness experiences are a measure of the cost of wilderness recreation, not a measure of the economic benefits associated with wilderness use. Mixing cost and benefits together does not usually help in economic analyses.
4. Protected landscapes provide numerous benefits indefinitely into the future. Analysis cannot only focus upon the present. As pristine natural areas become more and more rare, one can expect the economic values associated with wilderness to increase. Because they are unique, nonreproducible gifts of nature that we seek to protect, one cannot expect technology to expand or stretch the available supply or create close substitutes. For that reason, one can expect future wilderness economic values to rise relative to commodity values.
5. Because historical and current discussions of the economic value of wilderness have been almost exclusively focused upon on-site recreational use, more extended discussion of the off-site economic values associated with wilderness protection is required.

On-Site Vs. Off-Site Wilderness Economic Values

The impact of protected, natural landscapes extends far beyond the physical boundaries of those areas. Natural landscapes tend to define the character and quality of the surrounding physical and social environment. This is clear when wilderness areas protect water quality that then supports off-site fisheries or protect habitat that then supports off-site wildlife populations. But the range of influence is greater than this. Protected natural areas influence everything from scenic vistas to recreational patterns to patterns of human settlement.

This can be stated very directly: People care where they live. They care about the qualities of the natural and social environment that make up the living environment. They are willing to make sacrifices to obtain access to these natural amenities. High quality natural environments draw people and businesses to areas even when economic opportunities are otherwise quite limited (Power 1988 and 1996).

This is not an insupportable sweeping generalization. It is a fact that has had a dramatic impact on the pattern of settlement and economic activity in this country. If, for instance, one looks at the pattern of economic change in the nonmetropolitan areas of the United States over the last decade, one finds natural

amenities playing a very positive role. During the 1980s, the only group of nonmetro-politan counties that had above average population growth rates were "amenity" counties in which the natural and social environments supported both recreational and retirement development (Deavers 1989; Beale and Fuguitt 1990).

Designated wilderness appears to be associated with such attractive amenities. A review of all counties adjacent to federally designated wilderness reveals that the population growth rates in this set of nonmetropolitan counties has been two to three times that of all nonmetropolitan counties in the 1970s, 1980s, and first half of the 1990s (Rudzitis and Johansen 1989). This would suggest that whatever affect wilderness has on the local economy, it does not impoverish it in a way that makes living in the surrounding area less tenable. Surveys of recent migrants to these wilderness counties revealed that the presence of protected wildlands played a significant role in the location decisions of 60% of those newcomers. Moreover, 45% of existing residents indicated that the proximity of those wildlands was an important reason for their staying in the area. Over 80% of long-term residents and newcomers felt that the nearby wilderness areas were important to the county (Rudzitis and Johansen 1991). A recent statistical analysis of new residential construction and real estate transactions in western Montana showed that the closer a tract of land was to designated wilderness, the greater the intensity of new residential settlement (Jackson and Wall 1995).

None of this economic growth adjacent to wilderness is likely to be good for the natural areas we seek to protect. This underscores the fact that the economic problem that wilderness protection creates is the opposite of the one usually suggested. The economic problem we need to be focusing upon is how to keep attractive natural environments from being destroyed by the growth they stimulate, not how to fight economic depression caused by protecting natural areas and wilderness.

This, of course, is not to say that the mere presence of classified wilderness will guarantee stability and growth in surrounding communities. But clearly the general pattern is the opposite of claims that wilderness designation impoverishes local communities. In areas where a mining boom has gone bust or a major local employer has shut down, the local economy is obviously gone bust is not a solution. Damaging the environmental resources that support a diversification away from the unstable and declining extractive industries only compounds the depression that over-reliance on extractive industry has created. Protecting the quality of the living environment at least lays the base for future, diversified economic development. The resiliency of nonmetropolitan economies with high quality natural environments is shown in the Pacific Northwest where over the past 15 years lumber mills have regularly shut down either because of weak markets or inadequate timber supply. In almost 60% of the towns that lost mills, population actually increased. Interestingly, the communities in states with the largest average decreases in mill employment have actually experienced the largest population growth (Harris 1995).

An Economic Development Strategy

The assertion that the quality of the living environment is important in the economic development of a local area, is neither new nor should it be controversial. Clearly, the climate and desert environment of Arizona has been important in attracting and holding human populations. In fact, the use of the term "amenity" to capture the role played by local environmental qualities in economic development was first coined by an economist seeking to explain the rapid growth of Florida and southern California in the 1950s (Ullmann 1955). As with Arizona, people were moving to where there was no obvious "industry" in order to pursue particular environmental qualities, and then industry followed the population. The shift of our urban populations from city centers to suburbs also can only be explained in terms of the pursuit of higher quality living environments than urban centers were capable of providing. In fact, the distribution of attractive natural qualities across the landscape is a major determinant of the distribution of residential development across that landscape (Mueller-Wille 1990). The point is that people care where they live, and they decide where to live based on their preferences for living environments.

This is important to the future development of our nonmetropolitan areas. In the competition to attract both new residents and new businesses, the quality of the natural and social environment is going to be

important. Wilderness protection, by granting permanent protection to those landscapes that are most unique in a region, can be an integral part of such an economic development strategy.

People care where they live. They put considerable effort and expense into the pursuit of preferred living environments. As people make these choices, economic activity shifts with them because when they move they bring both labor supply and markets for goods and services. Retirees are the most obvious example of this. The current "resettlement of the West" is the most recent example of how peoples' pursuit of higher quality living environments also stimulates economic activity. Thus, protected landscapes have economic impacts far beyond their borders because they provide the high quality environmental backdrop that makes an area an attractive place to live, work, and do business. In that sense, the protected landscapes become an important part of an area's economic base and economic vitality. This is the reason that wilderness counties tend to show such dramatic economic vitality.

To put this in somewhat more technical terms, wilderness protects core natural areas that provide flows of valuable goods and services to surrounding areas, thus enhancing the livability and quality of life in those wilderness adjacent locations. Wilderness designation provides a long-run guarantee that those core natural areas and the environmental quality they support will be protected. Both the natural services provided by those protected areas and the guarantee of continued environmental protection are valuable to people. Their response through residential location decisions documents this aspect and supports local economic vitality.

Conclusion

The commercial extractive uses of wildlands being considered for wilderness protection are usually marginal at best, being tied primarily to the uncertain development of speculative mineral resources or the harvesting of timber from low-productivity, high-cost sites. This type of extractive industry does not offer rural areas a reliable source of additional jobs and income. It has become a shrinking part of almost all areas' economies that are also plagued by fits of boom and bust. The future of our nonmetropolitan economies lies elsewhere. A prosperous future will not be found in specializing in "more of the same," that is additional reliance on extractive industry. In most of our nonmetropolitan communities adjacent to these wildlands, recreation, retirement, and "amenity-seeking" immigrants offer a much greater hope for ongoing economic development than wishful thinking about the recovery of the extractive industries and speculative mineral bonanzas that, at best, will be boom and bust.

Wilderness protection does not impoverish communities by locking up resources. Rather, it protects the economic future of those communities by preserving high quality natural environments that are increasing in demand across the nation. Wilderness protection does not threaten the ongoing development of nonmetropolitan economies in any significant way. Rather, it lays part of the long-run basis for their ongoing development by providing attractive places to live, work, and do business. Because of this, the economic problem posed by protected landscapes is not how to maintain local economic health, but almost the opposite: How to keep the economic activity attracted to areas adjacent to wilderness from undermining the environmental quality that wilderness protection seeks to assure in the first place. IJW

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Data Sources for Graph: Historical Statistics of the United States, U.S. Bureau of the Census, and Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce.