

Protected Lands and Economics:

A Summary of Research and Careful Analysis on the Economic Impact of Protected Federal Lands

Spring 2017



Introduction:

The economic role of public land across the West has been an important topic for many decades. How western communities and counties can benefit from nearby federal lands as the region's economy evolves is a significant issue for local leaders, officials, businesses, and others.

This memo summarizes recent research on the economic impact of protected federal land in the West—such as Wilderness, National Parks, or National Monuments—to nearby communities, discusses the “best use” of specific federal lands, provides additional sources, and includes a short digest of peer-reviewed research and a short bibliography.

Summary:

While every county has its own set of unique circumstances, there is a large body of peer-reviewed literature that examines the relationship between natural amenities, land conservation, and local and regional economic well-being. Numerous studies by Headwaters Economics and others—carefully scrutinized to pass scientific muster and credibility—have concluded that protected federal public lands in the West, including lands in non-metro counties, can be an important economic asset that extends beyond tourism and recreation to attract people and businesses.

Today, for example, western counties with National Parks, Monuments, or other permanent protections on federal land support above average rates of job growth and are correlated with higher levels of per capita income.

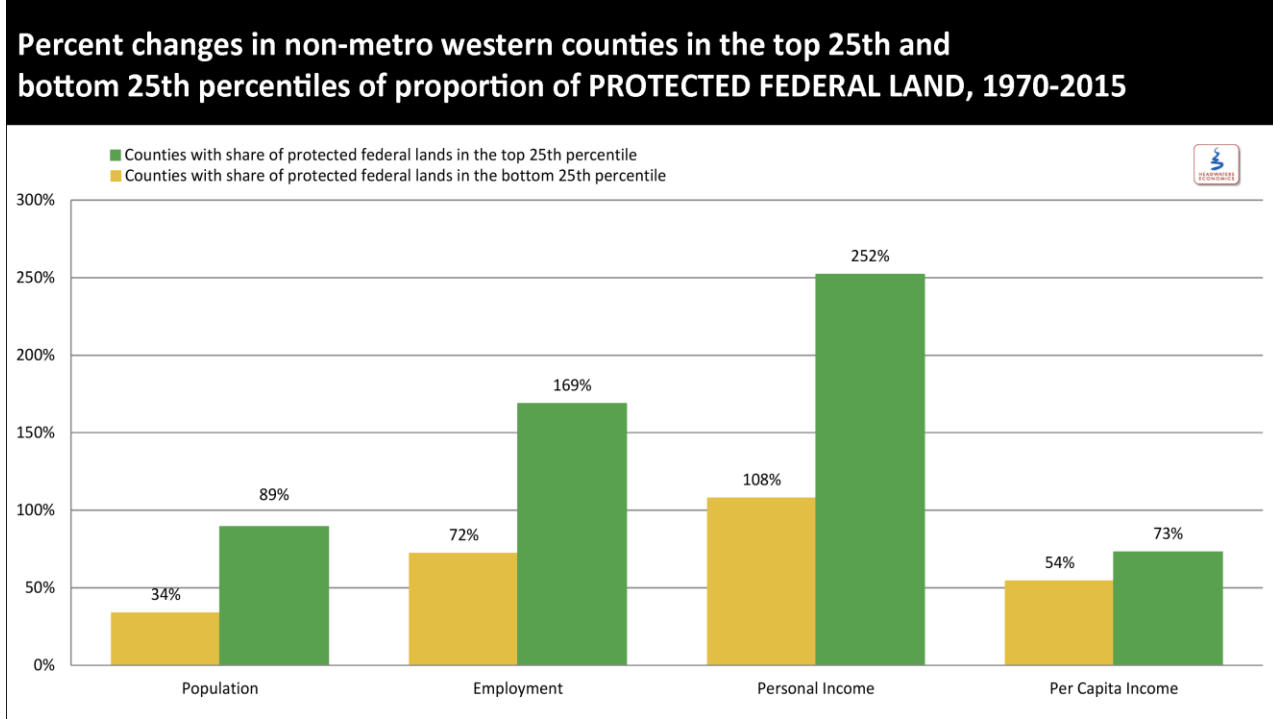
Brief Findings:

The economy of the West has changed dramatically in recent decades. Service industries that employ people in a wide range of occupations—from doctors and engineers to teachers and accountants—are driving economic growth and now make up the large majority of jobs in both metro and non-metro areas. At the same time, non-labor income, which consists largely of investment and retirement income, is the largest and fastest-growing source of new personal income in the region.

These changes help explain how the economic role of public land in the West has shifted. Increasingly the value of protected public land is linked to recreational opportunities as well as the natural amenities and scenic backgrounds they provide which stimulate “amenity migration,” drawing entrepreneurs and attracting a skilled workforce across a range of industries.

Rural counties in the West with more federal lands or protected federal lands [performed better](#) on average than their peers with less federal lands or protected federal lands in four key economic measures. As Figure 1 shows, from 1970-2015, population, employment, and personal income on average all grew significantly faster—three times more rapidly or more—in western rural counties with the highest share of federal lands compared to counties with the lowest share of federal lands. Per capita income growth was slightly higher.

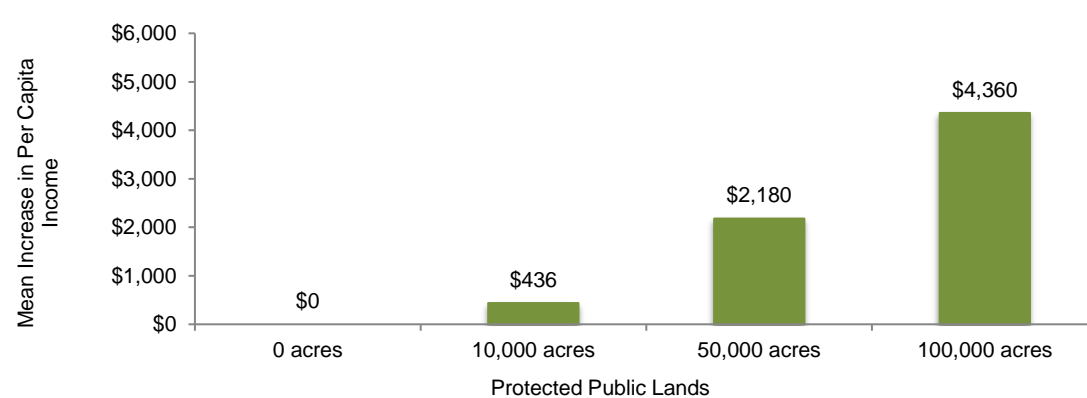
Figure 1:



Source: <https://headwaterseconomics.org/public-lands/federal-lands-performance/>

In addition to job creation, Headwaters Economics found a similar relationship between the amount of protected public land and **higher per capita** income levels. As Figure 2 shows, in 2010 western non-metro counties had, on average, a per capita income that was \$436 higher for every 10,000 acres of protected public land within their boundaries. In other words, if counties A and B were identical in every way, but county A had 50,000 acres of protected public land and county B had none, one would expect income in county A to be \$2,180 higher per person.

Figure 2: Avg. Increase in Per Capita Income from Protected Public Acreage, Non-Metro West, 2010



Source: Rasker, R., P.H. Gude, M. Delorey. 2013. The Effect of Protected Federal Lands on Economic Prosperity in the Non-Metropolitan West. *Journal of Regional Analysis and Policy*.

Every County Has Specific Challenges and Contexts

Because of differences between counties, and among different types of land protection and uses, sweeping declarations about the economic impact of protected public lands in all counties should be scrutinized carefully. Each county will have specific circumstances and some have sustained more traditional resource economies.

It is important to note that natural amenities are not the only element needed for economic success. Other factors such as access to markets and education levels also are important. How local leaders combine these assets along with investments, marketing, and policy decisions will play a significant role in determining future economic prosperity.

Related Resources:

Headwaters Economics has developed a number of resources to better understand local economies and the role of protected public lands.

- [**Socioeconomic Profiles:**](#) the Economic Profile System is free, easy-to-use software that provides detailed reports at the community, county, or state level.
- [**National Monuments:**](#) case studies and reports on the economic performance of communities adjacent to western national monuments.
- [**National Parks:**](#) description and interactive that lists the visits, spending, jobs, and income created in gateway communities for all of the National Park Service units.
- [**Protected Lands and Income:**](#) study and interactive showing the amount of per capita income explained by protected federal lands for each county in the non-metropolitan western U.S.
- [**Economists on Public Lands:**](#) more than 100 economists urged President Obama to “create jobs and support businesses by investing in our public lands infrastructure and establishing new protected areas such as parks, wilderness, and monuments.”
- [**West Is Best:**](#) this report finds that the West’s popular national parks, monuments, wilderness areas and other public lands offer its growing high-tech and services industries a competitive advantage.
- [**Library on the Value of Public Lands:**](#) contains numerous reports, case studies, bibliographies, tools, and research on the value of western protected public lands.

Sample of Peer-Reviewed Research

The following brief summary of peer-reviewed research on protected public lands may be useful to western communities working to promote a more robust economic future:

- Protected public lands can and do play an important role stimulating economic growth—especially when combined with access to markets and an educated workforce—and are associated with some of the fastest growing communities in the West (Rasker 2006).
- Natural amenities consistently are a positive factor contributing to population growth in both urban and rural areas characterized by proximity to public forest lands. (Garber-Yonts 2004).
- Public lands conservation is associated with more robust population growth and slightly higher net migration rates in counties with more protected lands (Lewis, Hunt and Plantinga 2002).

- Western non-metropolitan counties with protected federal lands had faster employment growth and higher per capita income. Counties that had more than 30 percent of the county’s land base in federal protected status increased jobs by 345 percent over the last 40 years. By comparison, similar counties with no protected federal public lands increased employment by 83 percent. In addition, in 2010, per capita income in western non-metropolitan counties with 100,000 acres of protected public lands was on average \$4,360 higher than per capita income in similar counties with no protected public lands (Rasker, Gude, and Delorey 2013).
- Traditional economic activities that anchored western economies now are “dwarfed in importance by service-sector and high tech industries, and the region’s scenic landscapes are increasingly valued more for the aesthetic and recreational amenities they provide than for their stocks of precious metals, timber, or forage” (Gosnell and Abrams 2009).
- Wilderness is associated with rapid population, employment, and personal income growth relative to non-Wilderness counties. Services jobs are increasingly mobile, and many entrepreneurs locate their businesses in areas with a high quality of life (Lorah and Southwick 2003).
- Protected lands, and creating new visibility for them through designations, also helps safeguard and highlight the amenities that attract people and businesses. Higher population growth occurred in counties with amenities, which included climate, topography, and water area (McGranahan 1999).
- While Wilderness recreation benefits to local communities are modest, the presence of Wilderness appears to draw residents and new economic activity, and has a substantial positive impact on local economies (Rudzitis and Johnson 2000).
- A study of 250 non-metro counties in the Rocky Mountains found no evidence of job losses associated with Wilderness and no evidence that local economies more dependent on logging, mining, and oil and gas suffered job losses as a result of Wilderness designation (Duffy-Deno 1998).
- Outdoor recreation is important to western economies. In New Mexico, for example, the Outdoor Industry Foundation (OIF) reports that active outdoor recreation contributes \$6.1 billion annually to the state’s economy, supporting 68,000 jobs. Nationally, OIF estimates an economic impact of \$646 billion from active outdoor recreation (bicycling, camping, fishing, hunting, paddling, snow sports, wildlife viewing, and trail-running, hiking, climbing), supporting 6.1 million jobs (Outdoor Industry Foundation 2012).
- For many seniors and soon-to-be retirees, protected public lands and recreation provide important aspects of a high quality of life. Non-labor sources of income already represent more than a third of all personal income in the West and will grow as the Baby Boomer generation retires (Frey 2006).
- Protected natural amenities—such as pristine scenery and wildlife—help sustain property values and attract new investment (Deller and Tsai 2001).

Research Cited:

Deller, S. C., T.-H. Tsai, et al. 2001. The Role of Amenities and Quality of Life in Rural Economic Growth. *American Journal of Agricultural Economics* 83(2): 352-365.

Duffy-Deno, K. 1998. The Effect of Federal Wilderness on County Growth in the Intermountain Western United States. *Journal of Regional Science* 38 (1): 109-136.

Frey, W.H. 2006. America's Regional Demographics in the '00 Decade: The Role of Seniors, Boomers and New Minorities. The Brookings Institution, Washington, D.C.

Garber-Yonts, B. E. 2004. "The Economics of Amenities and Migration in the Pacific Northwest: Review of Selected Literature with Implications for Natural Forest Management." USDA, Forest Service, Pacific Northwest Research Station, *General Technical Report*, PNW-GTR-617.

Gosnell, H. and J. Abrams. 2009. "Amenity Migration: Diverse Conceptualization of Drivers, Socioeconomic Dimensions, and Emerging Challenges." *GeoJournal*. 76(4):303-322.

Lewis, Hunt, & Plantinga. 2002. Public Land Conservation and Employment Growth in the Northern Forest Region. *Land Economics* 78(2): 245-259.

Lorah, P., & R. Southwick. 2003. Environmental Protection, Population Change, and Economic Development in the Rural Western United States. *Population and Environment*, 24(3): 255–272.

McGranahan, D. A. 1999. Natural Amenities Drive Rural Population Change. Economic Research Service. U.S. Department of Agriculture. Washington, D.C.

Outdoor Industry Foundation. 2012. *The Economic Contributions of Outdoor Recreation*. Southwick Associates.

Rasker, R. 2006. An Exploration into the Economic Impact of Industrial Development Versus Conservation on Western Public Lands. *Society & Natural Resources* 19(3): 191–207.

Rasker, R., P.H. Gude, M. Delorey. 2013. The Effect of Protected Federal Lands on Economic Prosperity in the Non-Metropolitan West. *Journal of Regional Analysis and Policy*.

Rudzitis, G. and R. Johnson. 2000. The Impact of Wilderness and Other Wildlands on Local Economies and Regional Development Trends. In: McCool, Stephen F.; Cole, David N.; Borrie, William T.; O'Loughlin, Jennifer, comps. 2000. Wilderness science in a time of change conference—Volume 2: Wilderness within the context of larger systems; 1999 May 23–27; Missoula, MT. Proceedings RMRS-P-15-VOL-2. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.

Contact:

Ray Rasker, Ph.D. Executive Director, ray@headwaterseconomics.org, 406-570-7044