

The Apostle Islands and Pictured Rocks National Lakeshores on Lake Superior and Amenity-Supported Local Economic Vitality

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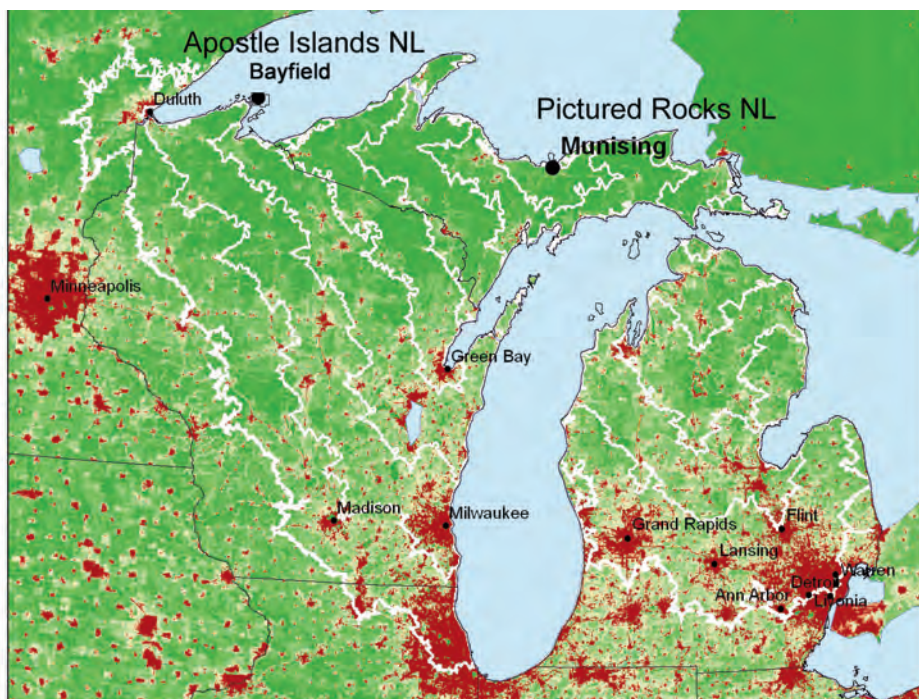
Introduction: Parks and local economic vitality

This study analyzes the various ways in which the Apostle Islands and Pictured Rocks national lakeshores on the south shore of Lake Superior affect the rural economies in which they are embedded. These national lakeshores are managed by the National Park Service.

Under the organic legislation establishing the national park system, these national lakeshore serve two functions: (1) “to conserve the scenery and the natural and historic objects and the wild life therein,” (2) “and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (16 USC sec. 1).

Providing on-going access to the public to enjoy unique, high quality, natural wonders that are permanently protected establishes a direct link between the national lakeshores and the local economy: the expenditures of visitors to the national lakeshores tend to stimulate local economic vitality as that money circulates through the local economy.

Figure 1. Location of Apostle Islands and Pictured Rock national lakeshores relative to major population concentrations. One hour travel time zones. Map by Paul A. Lorah, University of St. Thomas.



This potential for national parks to stimulate local economies was an explicit focus of federal government policy to expand the national park system when the establishment of these two national lakeshores was debated in the 1960s. At that time the Kennedy and Johnson administrations were concerned about regional economic decline and persistent poverty in several rural regions of the United States, including northern Wisconsin and the Upper Peninsula of Michigan. The federal government saw the establishment of national parks as a way of drawing economic activity into these lagging rural areas.

The dual purpose of national parks, the preservation of natural landscapes and facilitating access for visitors, can lead to perceived conflict between the obligation to protect and the obligation to provide access. This, in turn, can be translated into a conflict between the needs of the local economy and the need to permanently protect the national park's natural systems. Echoes of that potential conflict could be heard during the first decade of the 2000s, in the public debate over the classification of parts of Apostle Island and Pictured Rocks national lakeshores as wilderness areas where motorized activities would be limited.

Despite these persistence of concern over a perceived conflict between landscape protection and local economic vitality, data from a variety of sources emerged over the last several decades suggesting that preserving natural landscapes, rather than depressing local economies, actually stimulates them. For instance, consider the impact of the strictest protection that a natural landscape can receive: classification as a national wilderness area. If counties containing such classified wilderness are compared to rural counties without wilderness, population growth rates for half a century have been two to six times faster in the wilderness counties, depending on which decade between 1950 and 2000 is used. Across all of those five decades population growth, primarily fueled by in-migration, has been almost five times faster.¹

The enhanced rural economic vitality in areas around protected landscapes, whether they are national parks, wilderness areas, identified national forest roadless areas, state parks, or just federal lands, suggests that some other set of economic forces is operating that overcomes the assumed negative impact of restricting use and commercial development of those landscapes, and generates a net positive impact. Investigation of these examples of rural local economic vitality, despite landscape preservation measures, has led to the conclusion that residential location choice based on the attractiveness of particular areas, has stimulated in-migration into certain areas in pursuit of what is perceived to be higher quality social and natural environments, what have come to be called local “amenities.”²

It is that possibility of amenity-supported local economic vitality in the regions surrounding Apostle Island and Pictured Rocks national lakeshores that this study explores. We consider several different pathways by which the unique natural landscape features protected by the national lakeshores may impact local economic vitality including the impact of:

- Temporary visitors drawn to the area and their spending.
- Part-time residents who facilitate visitation by owning a second home there.
- Retirees who choose an area for their new permanent residence because of the local amenities.
- Working-age households who relocate in the pursuit of local amenities that match their

preferences.

- Working-age households who choose to live in a preferred, amenity-rich setting while commuting to work elsewhere.

Trends in the regional economies since the establishment of the national lakeshores

As the Apostle Islands and Pictured Rocks national lakeshores were becoming realities in the late 1960s and early 1970, major changes were taking place in rural America. For the first time in the 20th century, the rate of population growth in rural areas exceeded that in large urban areas. Rural America was being repopulated as a result of net in-migration. That non-metropolitan “turn-around” took most demographers and economists by surprise. Although the post-World War II period had seen the suburbanization of America, those suburbs were growing around our large urban centers, continuing the concentration of population in those metropolitan areas. The rural “turn-around” was different. It represented an “ex-urbanization,” people shifting their residence from large urban areas to smaller cities or rural areas.

It was this shift in population that got demographers and economists thinking seriously about the “non-economic” motivations for residential location decisions. As with the move from center city to suburbs, the move to rural areas represented a move away from employment and other commercial opportunities. Clearly households were interested in a broader range of characteristics in choosing a residential site than just economic opportunity or transportation costs. The site-specific environmental qualities, both social and natural, associated with a place also had to be considered. From this came the increasing attention to local “amenities” as a source of local economic vitality.

As the Apostle Islands and Pictured Rocks national lakeshores were getting established in the 1970s, change was also taking place in rural northern Wisconsin, along Lake Superior, and the border with Michigan’s Upper Peninsula. One indicator of that change was the near doubling in the number of second homes during the 1970s. Across the counties south of Apostle Islands National Lakeshore (NL), and the Wisconsin counties southwest of Pictured Rocks NL, second homes grew by over 24,000, or 80 percent. Clearly change was afoot in the area.

Since 1969, both gateway counties, Bayfield, WI, for Apostle Islands NL, and Alger, MI, for Pictured Rocks NL, have seen significant economic vitality. Aggregate real income, per capita real income, and employment all grew significantly faster than for their home states as a whole. Population grew at about the same rate as the state. Rather than being economically depressed areas, these national lakeshore gateway counties led their states in economic expansion.

Whatever the impact of the creation of these two national lakeshores was on the local economies, that creation did not keep those rural economies from expanding significantly and out-performing the individual states in which they were located, as well as most of their neighboring counties. These relatively small National Park units were associated with enhanced economic vitality, just as communities adjacent to the much larger national parks have been. In that sense, the national lakeshores original advocates’ expectations of renewed economic vitality were fulfilled.

	Percentage Change in Economic Indicators 1969-2006			
	Aggregate Real Personal Income	Per Capita Real Income	Employment	Population
	Apostle Islands: Bayfield County Wisconsin	147% 113%	96% 67%	110% 86%
Pictured Rocks: Alger County Michigan	186% 70%	65% 48%	69% 52%	16% 15%

Table 1. The relative economic performance of Apostle Islands and Pictured Rocks national lakeshores' gateway counties. U.S. Dept. Comm. BEA REIS data.

The role of the national lakeshores in the local economies

As discussions at the time these two national lakeshores were created made clear, one significant local impact of National Park units on the local economy is associated with visitors and their spending.

The national lakeshores, however, also play two important roles beyond that of attracting temporary visitors. First, they provide permanent protection to unique local landscape amenities that may make the area a more attractive place to live, work, and do business. Second, the very classification as a unit in the National Park System signals to a national audience the presence of a high quality and protected natural landscape feature.³ This draws people who are not familiar with an area to it where they discover not only something about the national lakeshore but also about the broader natural and social environment surrounding the national lakeshore. This, for a small number of visitors, may lead to further commitments to that place, including second homes or permanent residence.

People are not attracted to an area by just one feature or quality. It is the suite of qualities and experiences taken together that draw them. Although we have not tried to quantify it, these national lakeshores have played a vital role in drawing attention to the south shore of Lake Superior, and the amenities that northern Wisconsin and the Upper Peninsula have to offer. Visitation to these national lakeshores is a crucial part of this. But the economic impact does not end with the expenditures visitors to the national lakeshores make. The knowledge and understanding that visitors obtain about the lakeshores, as well as the gateway communities, and the other public recreation lands remain important into the future. That experience and knowledge will bring some of those visitors back, and some of the repeat visitors will become residents of the region, if not of the gateway communities. Like the initial visits to the national lakeshores, the national lakeshore is unlikely to have been the only thing drawing people back, but it is likely to be what introduced people to the area, and remains an important symbol of what the region has to offer residents.

For all of these reasons, the economic impact associated with visitor spending in the national lakeshores has to be seen as just one part of the overall contribution they continue to make to local economic vitality. But that visitor spending impact has been significant. Our estimate of the economic impact of visitors to Apostle Islands NL on the Bayfield-Ashland County economy was \$12.9 million at the beginning of 2008. Our estimate of the impact of national lakeshore visitor spending on the Alger County economy was \$7.7 million. The Apostle Island NL visitor spending was estimated to be 14 to 18 percent of all visitor spend-

ing in Bayfield and Ashland Counties. The Pictured Rocks NL visitor spending was estimated to be 59 to 67 percent of all visitor spending in Alger County.

Evidence of amenity-supported economic vitality in the vicinity of Apostle Islands and Pictured Rocks national lakeshores

We explored for evidence of amenity-supported local economic vitality in the area surrounding the two national lakeshores by a process of elimination. We first quantified the changes in total real (inflation removed) personal income received by residents over a nearly three-decade period, 1978–2006, after the establishment of these national lakeshores. We then analyzed the power of various changes in those economies to explain real income growth.

We began with the changes in real earnings in the traditional economic base: forest products and other manufacturing, mining, agriculture, and state and federal government employment. The popular view of these rural economies typically focuses on these sectors as the driving force of economic change, positive or negative. In Bayfield County which provides most of the access to the Apostle Islands, the traditional economic base contracted slightly, even though total personal income expanded significantly. In Ashland County, in which most of the Apostle Islands are actually located, changes in the traditional economic base explained about 30 percent of the change in personal income, when multiplier effects are included. For the two gateway counties combined, the change in the traditional economic base, even with multiplier impacts included, explained only 9 percent of the change in personal income.

For Alger County that surrounds Pictured Rocks NL, changes in the traditional economic base were more successful in explaining changes in the overall economy: With multiplier impacts included, all of the change in personal income could be explained by the changes in those basic industries.

We then considered the impact of the visitor economy, including the impacts of visitors to the national lakeshores, on the local economy. That visitor economy is clearly also part of the local economic base. For the Apostle Islands NL counties, the visitor economy, including multiplier impacts, explained about a quarter of the change in total personal income. For the Pictured Rocks gateway county, the visitor economy explained about a sixth of the change in total income.

We then explored the role of new permanent residents on the Apostle Islands and Pictured Rocks gateway economies. Both Apostle Islands’ and Pictured Rock’s gateway

Table 2. The impact of economic changes on changes in total personal income in the Apostle Islands and Pictured Rocks gateway counties, 1969–2006. Calculated from U.S. Dept. Comm. BEA REIS data.

Counties	% of Change in Personal Income Explained by Changes in				Total Change Explained
	Traditional Econ Base	Visitor Spending	Non-Employment Income	Commuting Out to Work	
Apostle Islands Region					
Bayfield	-4%	30%	72%	27%	125%
Ashland	30%	23%	75%	-33%	95%
Bayfield-Ashland	9%	27%	73%	3%	113%
Pictured Rocks Region					
Alger, MI	103%	16%	73%	-12%	181%

counties experienced net in-migration of about 10 percent between 1980 and 2006. In addition, the role of income not associated with current employment, income such as investment and retirement income, has grown faster than the overall economy, and now makes up over 40 percent of total personal income in the gateway counties. In the Pictured Rocks area 75 percent of this “non-labor” income is retirement related. In the Apostle Islands area 60 to 70 percent of it is retirement related. We focused on this source of local income because it is relatively “footloose,” moving with people as they change their residential location.

The impact of these income flows not connected with current employment on the local economies appears to be substantial. In the Pictured Rocks area the growth in investment and retirement income was as great as the growth in the traditional economic base. In the Apostle Islands area where there was little growth in the traditional economic base the growth, the growth in retirement and investment income was many times that growth in earnings in the traditional economic base. In both areas, the growth in retirement and investment income, and other transfer payments, explained about three-quarters of the growth in total personal income.

Finally, we looked at the impact of people choosing to live in one county, while commuting out to work in another county. The attractiveness of a place as a residence, despite limited employment opportunities, can lead to a flow of income into the county of residence. In the primary gateway to the Apostle Islands, Bayfield County, for instance, over a quarter of personal income is the result of such out-commuting residents. Alger County, on the other hand, lost 12 percent of the earnings generated in the Pictured Rocks area as a result of workers living in other counties commuting in to work.

Conclusions

There is significant evidence of amenity-supported local economic vitality in the area surrounding the Apostle Islands and Pictured Rocks national lakeshores. Since the creation and development of these national lakeshores, their local rural economies have out-performed their state and surrounding county economies. The visitor economy, including visitors to the national lakeshores, have contributed significantly to this economic vitality, but other amenity-related changes have supported local economic vitality too. The increase in semi-permanent residents building second homes has been important. Net in-migration has also played a role. Retirement and investment income has increased significantly. In the Apostle Islands area, out-commuting to work has been important. The economic role of these National Park units has to be understood within this complex set of amenity-related changes, rather than being limited to only their role in attracting temporary visitors and their spending.

Endnotes

1. Gundars Rudzitis and Rebecca Johnson, “The Impact of Wilderness and Other Wildlands on Local Economies and Regional Development Trends,” in *Wilderness Science in a Time of Change Conference Proceedings*, RMRS-P-15-CD, ed. David N. Cole, Stephen F. McCool, William T. Borrie, and Jennifer O’Loughlin (Fort Collins, Colo.: USDA Forest Service, Rocky Mountain Research Station, 2000), 15, Table 1. Update from 1990–2000, personal communication from Gundars Rudzitis.

2. See the collection of essays in Gary Paul Green, Steven C. Deller, and David W. Marcouiller, eds., *Amenities and Rural Development: Theory, Methods and Public Policy* (Northampton, Mass.: Edward Elgar, 2005).
3. Stephan Weiler, "A Park by Any Other Name: National Park Designation as a Natural Experiment in Signaling." Research Working Paper (RWP) 05-09. Kansas City, Mo.: Federal Reserve Bank of Kansas City, (2005). Also see Stephan Weiler and Andrew Seidl, "What's in a Name? The Impact of National Park Designation," *Review of Regional Studies* 32:1 (2002), 97-111.