

Economic Values and Contributions of Roadless Areas

Executive Summary

Inventoried Roadless Areas are similar to Wilderness areas in many respects, yet lack the protections provided to Wilderness areas. Although some protection was provided to Inventoried Roadless Areas (IRAs) by President Clinton's 2001 Roadless Rule, these protections have been continually challenged by industry and states, and conflicting judicial decisions have created uncertainty regarding how IRAs should be managed. Sound IRA management decisions are best made with full information regarding the economic values of the goods and services that may be derived from these areas. This report presents an analysis of the values provided by the lower 48 states' 41.9 million acres of IRAs, assuming they are maintained in their present roadless condition.

Benefits derived from IRAs may be classified into six categories: direct use, passive use, science & education, offsite, biodiversity conservation, and ecological services. We provide estimates for recreational use (a type of direct use) and passive use values of IRAs including existence values, option values, and bequest values. Because data and research are available for Wilderness areas but not for IRAs, we use estimates from the existing literature pertaining to Wilderness areas to develop estimates of the passive use value and recreational value of the 41.9 million IRA acres in the continental U.S. Using Wilderness visitation rates as the best proxy for IRA visitation likely results in conservative estimates since IRAs are more accessible and less remote than Wilderness areas. Key findings include:

- Inventoried Roadless Areas provide ample recreation opportunities including hiking, backpacking, mountain biking, skiing, bird watching, fishing, and hunting.
- We derived an estimated consumer surplus per person per trip of \$38 for single-day trips and \$85 for multi-day trips.
- Based on an estimated 11.4 million IRA visits during 2017, IRA recreation generated an estimated \$500 million of economic value to recreationists.
- We found an average passive use value across Wilderness studies of \$74, indicating the minimum amount the average household would be willing to pay annually to preserve all IRAs.
- Extrapolating this average household value to all US households (except those living in poverty) and accounting for distance to IRAs, yields an estimated annual passive use benefit of \$8 billion.

In addition to these economic benefits, roadless areas result in regional economic impacts and contributions. Visitors to IRAs spend money in gateway communities for supplies, meals, and lodging, which in turn results in the creation of jobs, income, and output. The economic contributions of IRA visitor spending represent the transfer of jobs and income to rural areas that often struggle to establish healthy economies. Using Wilderness visitation and spending as proxies for IRA visitor spending, we estimate the following regional economic contributions from IRA visitor expenditures:

Table ES1: Regional Economic Contributions of IRA Visitors for Selected States (Total Effects)*

| State | FTE Employment | Labor Income (\$Millions 2018) | Total Value Added (\$Millions 2018) | Output (\$Millions 2018) |
|---------------|----------------|--------------------------------|-------------------------------------|--------------------------|
| New Mexico | 500 | 16.38 | 25.13 | 47.90 |
| Oregon | 260 | 11.35 | 14.09 | 27.44 |
| Washington | 210 | 9.03 | 14.76 | 24.70 |
| Tennessee | 50 | 2.22 | 3.19 | 5.74 |
| West Virginia | 40 | 1.33 | 2.05 | 3.65 |

*Includes direct, indirect, and induced effects.

Likewise, communities adjacent to IRAs experience greater amenity migration impacts than those not near IRAs. When amenity migrants relocate to regions near IRAs, they bring businesses and transfer income with them and help raise property taxes. IRAs also provide for high quality ecosystem services that help communities avoid costs in water filtration while providing adjacent communities with greater amounts of drinking water, clean air, recreational opportunities, and cultural services.

IRAs are a critical component of protected public lands in the U.S. In total, roadless areas provide approximately \$8.5 billion in recreation and passive use benefits at a minimum. Roadless areas also spur substantial regional economic contributions in terms of employment, income, and output and make rural communities more attractive for amenity migrants. IRAs offer spiritual enrichment and provide a refuge for fish, wildlife, and all biodiversity. Keeping roadless areas undeveloped will protect the numerous economic values and contributions afforded by IRAs. These economic values and contributions should be fully considered when addressing policy decisions that may affect roadless areas.



Borah Peak IRA, Source: Evan Hjerpe