

SUMMARY

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Economic Contributions of Land Conserved by the USDA Forest Service's Forest Legacy Program

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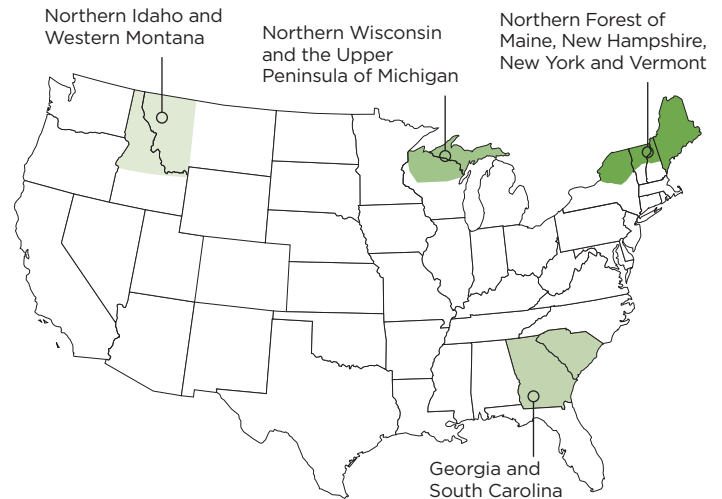
INTRODUCTION

The Forest Legacy Program (FLP) is a conservation program administered by the USDA Forest Service that seeks to protect traditional forest uses and intact working forest landscapes. The program awards grants that help pay for conservation easements and fee-simple land purchases that are then held by state agencies. Forests conserved using FLP funding not only provide environmental benefits but also must be managed to provide tangible economic and social benefits to the public.

We sought to quantify the economic activities that happen on FLP land in four areas of the country (Figure 1, Table 1), and to assess how these activities contribute to the economy of the multi-state region in which the projects are located. We used national, regional, and statewide data to estimate annual timber harvest volumes and wood utilization, value of maple syrup production and tree planting (where applicable), annual use and trip spending for fishing, hunting, and snowmobiling for each FLP property in the study areas. We estimated how economic activities on FLP lands contribute to the multi-state regional economy using IMPLAN. IMPLAN is an input-output software that models the direct, indirect and induced effects of economic activity on the greater economy of the multi-state region.

To better understand how the FLP works at the local level to benefit landowners and communities, we interviewed landowners and managers of forests conserved through the FLP in each study area.

Figure 1 | MAP OF THE STUDY AREAS



WE ESTIMATED HOW ECONOMIC ACTIVITIES ON FLP LAND IN FOUR AREAS OF THE COUNTRY CONTRIBUTE TO REGIONAL ECONOMIES

Table 1 | INFORMATION ABOUT THE FLP IN EACH OF THE FOUR STUDY AREAS*

| Study area | Completed projects | Areas conserved | Average total price/acre of easement or land purchase | Average % non-federal cost share |
|------------------------------------|--------------------|-----------------|---|----------------------------------|
| Northern Forest | 56 | 1,297,416 | \$298 | 34% |
| Northern WI/ Upper Peninsula MI | 12 | 265,502 | \$394 | 57% |
| GA/SC | 21 | 141,643 | \$2,304 | 60% |
| Northern ID/Western MT | 35 | 323,903 | \$713 | 40% |

*Includes projects completed before Fiscal Year 2018

\$279 MILLION estimated annual total value added to the economy of each multi-state region from economic activities on all FLP land in the study areas

RESULTS

- Table 2 shows the approximate contribution that FLP land in the four study areas has on the economy of the multi-state regions. While we only estimated economic activities from FLP land located within the study areas, these activities contribute to the economy of larger regions. Therefore, we modeled the contributions that these activities provide to the entire multi-state economy. Results are presented for employment and value added.
 - **Employment** is the average number of full and part-time jobs associated with the inputs.
 - **Value added** reflects the contribution that the inputs have on gross regional product. Value added includes wages, proprietor income, and total economic output minus intermediate inputs.
- The results show a snapshot of how estimated economic activities on FLP lands contributed to each regional 2016 economy. These results are approximate estimates for the entire multi-state region encompassing the study areas and should not be applied to any specific property or acre of land. For more detailed results including a breakdown of direct and secondary contributions, labor income and economic output see the full report.

Table 2 | ESTIMATED TOTAL ANNUAL ECONOMIC CONTRIBUTIONS FROM FLP LAND IN THE STUDY AREAS*

| | Employment | Value added |
|---------------------------------------|------------|---------------|
| Northern Forest | | |
| Recreation | 282 | \$20,128,000 |
| Timber | 2140 | \$158,892,000 |
| Syrup | 140 | \$4,663,000 |
| Total | 2,560 | \$183,683,000 |
| Northern WI/Upper Peninsula MI | | |
| Recreation | 80 | \$3,878,000 |
| Timber | 475 | \$33,695,000 |
| Total | 555 | \$37,573,000 |
| GA/SC | | |
| Recreation | 40 | \$2,331,000 |
| Timber | 230 | \$21,017,000 |
| Planting | 10 | \$349,000 |
| Total | 280 | \$23,697,000 |
| Northern ID/Western MT | | |
| Recreation | 30 | \$1,247,000 |
| Timber | 530 | \$32,846,000 |
| Planting | 2 | \$108,000 |
| Total | 562 | \$34,201,000 |

* Value added is represented in 2018 dollars. Results include direct and secondary contributions.

CONCLUSIONS

- **\$140 per acre:** The average annual estimated contribution to gross regional product from timber harvesting, tree planting, maple syrup, hunting, fishing, bird watching and snowmobiling on FLP land in the study areas.
- **280-2,500 jobs per region:** These properties support hundreds of jobs in each study area.
- **\$350 per acre:** Average FLP funding used for conservation easement and fee-simple land purchases in the study areas. The up-front costs of conserving these lands ensures that the social, economic and environmental benefits that these forests provide continue in perpetuity.
- **34-60%:** The average percentage of the total project price that was covered by non-federal partners. The FLP requires that 25% of the total price be covered with cost-share, but for most projects that proportion is much higher. High investment amounts from local partners show that communities care about conserving working forests and that FLP support makes widely-desired forest management and conservation outcomes possible.
- **Future research** is needed to understand the full value of the program and program land. A cost/benefit analysis that monetizes the market and non-market values that the land provides and compares them to the full cost of the program could be used for this purpose.

\$140 PER ACRE average annual value added to the regional economy from economic activities on FLP land in the study areas

FOREST LEGACY PROGRAM CASE STUDIES

The Forest Legacy Program is versatile and is used to meet the needs of diverse landowners, objectives, and regions. Some FLP landowners are individuals or families, some are large forest management companies, and still others are state agencies or municipal government. FLP properties are managed for many uses and provide ecological, social and economic benefits to the public and the landowners.



Montana: Haskill Basin

Land: 3,000 acre conservation easement near Whitefish, Montana. Owned and managed for almost 100 years by the F.H. Stoltze Land and Lumber company.

Benefits: Contains 70-90% of the drinking water supply for the city of Whitefish, Montana. Contains miles of the Whitefish trail and is heavily used for motorized and non-motorized recreation.



South Carolina: Liberty Hill Wildlife Management Area

Land: 7,800 acre forest purchased fee-simple by the South Carolina Department of Natural Resources

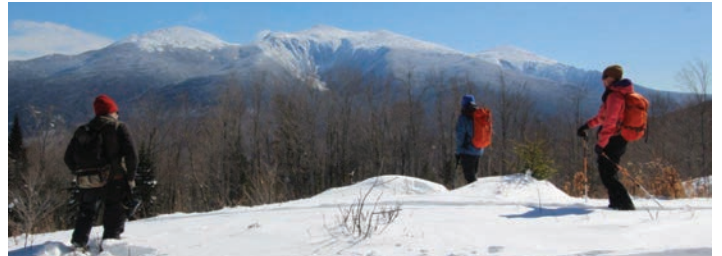
Benefits: Popular hunting and fishing destination managed for wildlife habitat. Thousands of hunters come here every year. Property contains 17 miles of shoreline on Lake Wateree, a public water supply.

Photo credits: (Cover) Kennon McClintock, Idaho chapter of the Nature Conservancy; (Back cover) Montana: The Forest Legacy Program; South Carolina: Donald Cockman; New Hampshire: John Scarinza; Michigan: Joe Hovel

New Hampshire: Randolph Community Forest

Land: 10,000 acre conservation easement in Randolph, New Hampshire near the White Mountain National Forest.

Benefits: Used by both year-round residents and summer residents of Randolph. Education programs and work days keep community members engaged. Managed for timber, maple syrup and recreation including skiing, hiking and hunting.



Michigan: Pilgrim River Forest

Land: 1,300 acre conservation easement owned by the Hovel family.

Benefits: The forest is managed for timber, recreation, water quality and wildlife habitat. The Pilgrim River provides critical breeding habitat for Lake Superior trout. A local land trust, the state of Michigan, and the local chapter of Trout Unlimited partnered with the landowners to conserve this forest.



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FOR MORE INFORMATION about the economic contribution analysis and to see more examples of FLP projects, please see the full report at www.familyforestresearchcenter.org/wp-content/uploads/2018/10/FLP-econ-full-report.pdf or the story map at <https://arcg.is/1C09qv0>

TO LEARN MORE about the program, visit the program website www.fs.fed.us/managing-land/private-land/forest-legacy