



Employment Impacts of Conservation Spending

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Nature’s restorative power is particularly important at a time of rapidly growing unemployment and financial hardship. As a country, we have important decisions to make regarding how to use national funds — now, more than ever, it is important that we make budgetary decisions that not only improve quality of life and sustain the activities we care about, but also that create jobs. In the month of April 2020 alone, more than 20 million people lost their jobs in the U.S., resulting in an unemployment rate of 14.7 percent, the highest seen since the Great Depression.²

Conservation of land and water is generally an area with broad support, as nature appeals not only to lovers of natural beauty but also recreational enthusiasts, including hikers, park-goers, hunters, and anglers. Further, conservation creates jobs. For each \$1 million spent in conservation activities, between 17 and 31 jobs are supported depending on the industry where the investment is made, as shown in Table 1. Alternative uses of the funds would, in many cases, created fewer jobs, as we see in Table 2. For instance, Oil and Gas supports 8 jobs per \$1 million spending, while Aviation supports 8.4.

The Land and Water Conservation Fund (LWCF) is the primary federal grant program to conserve land and invest in state, local, and national parks, trails and natural areas. LWCF funds purchase of land, and directly invests in development of parks, trails, boat launches and campgrounds at the state and local level.³ LWCF has the potential to support thousands of jobs in communities throughout the country. For each \$100 million of LWCF funding, between 1,680 and 3,080 jobs could be supported.

The model used to estimate the number of jobs created by economic activities such as conservation and park use is an “input-output” (I-O) model, which captures production, sales, and supply chains throughout the economy. I-O models are built using purchase and sales data from businesses throughout the country, showing how they purchase inputs of goods and services and then sell their goods and services to consumers, to other businesses, to government agencies, and in some cases as exports. Input-output models are a standard tool used to study the economic impacts of spending changes and are included among the national accounts of many countries.⁴

In assessing the impacts of additional LWCF funding, the input-output model can be used to estimate the increased number of jobs needed to meet the increased spending in impacted industries. The LWCF leads to job creation through both purchases of land that can then be used for conservation or recreational activities and development of state and local park infrastructure. For example, as spending

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² U.S. Department of Labor, Bureau of Labor Statistics (BLS). “The Employment Situation – April 2020.” Available at <https://www.bls.gov/news.release/pdf/empsit.pdf>

³ For more details, see <https://www.lwcfcoalition.com/lwcf-programs>

⁴ For example, the Bureau of Economic Analysis in the U.S. releases a national set of input-output accounts, see <https://www.bea.gov/data/industries/input-output-accounts-data>.

increases to develop parks – for resurfacing fields, building trailheads, creating parking areas – jobs are created in construction as well as in the manufacturing industries that supply construction materials and the service industries used by parks and construction industries, such as food services, trucking, and accounting. More generally, “direct jobs” are created as funds are used to hire employees in the parks, conservation areas, or construction firms, and “indirect jobs” are created through the supply chain. “Induced jobs” are those that are created as the workers in direct and indirect jobs spend their earnings on housing, food, healthcare, education, and other industries.

Preserving land for conservation, reforestation, continued and enhanced biodiversity, as well as for various outdoor recreational activities, not only ensures continued access to nature for various species, including human nature enthusiasts, but also supports a variety of jobs. Funding conservation of land and water is one of the many solutions we need to recover the economy and our quality of life in the coming years.

Table 1: Conservation and related jobs per \$1 million spending

	Direct	Indirect	Induced	Total
Support Activities for Forestry ⁵	21.7	1.0	8.0	30.8
Forestry ⁶	11.1	4.4	7.7	23.1
Conservation lands (including parks and conservation areas) ⁷	10.9	3.7	6.0	20.6
Environmental and Technical Consulting ⁸	9.0	2.8	8.0	19.8
Hunting-Trapping ⁹	13.9	1.6	3.8	19.3
Fishing ¹⁰	11.5	1.4	3.9	16.8

Source: Calculated by author using IMPLAN 3.0 with 2018 U.S. national data

Table 2: Job creation potential of other areas, per \$1 million spending

	Direct	Indirect	Induced	Total
Road and Bridge Repair ¹¹	9.7	3.9	7.5	21.1
Finance ¹²	4.2	4.5	5.7	14.4
Solar power - design, manufacture, and install ¹³	4.5	3.2	5.2	12.9
Oil and Gas ¹⁴	1.7	3.1	3.6	8.4
Aviation ¹⁵	2.4	2.0	3.6	8.0

Source: Calculated by author using IMPLAN 3.0 with 2018 U.S. national data

⁵ “Support activities for forestry” is IMPLAN sector 19 and includes support activities for both agriculture and forestry. Forestry support includes forest restoration, forest thinning, forest management, and other related services.

⁶ “Forestry” is IMPLAN sector 15 and includes gathering, seeding, growing, harvesting, extracting, and other forestry-related activities.

⁷ “Conservation lands” is IMPLAN sector 501 and includes national, state, and provincial parks; conservation areas; bird sanctuaries; zoos and other animal parks; botanical gardens; nature centers; and other nature-based tourist attractions.

⁸ “Environment and Technical Consulting” is IMPLAN sector 463 and includes services for ecological restoration, environmental reclamation, environmental consulting, wetland restoration, and various other environmental and energy-related consulting services.

⁹ “Hunting-Trapping” is IMPLAN sector 18 and includes trapping, preserves for hunting and fishing, and game retreats

¹⁰ “Fishing” is IMPLAN sector 17 and includes all types of freshwater and saltwater commercial fishing activities

¹¹ “Road and Bridge Repair” is IMPLAN sector 62

¹² “Finance includes” 20% each: Nondepository credit intermediation and related (439); Securities and commodities contracts (440); Monetary authorities and depository credit intermediaries (441); Other financial investment activities (442); and Funds, trusts, and other financial vehicles (446)

¹³ “Solar” includes design, manufacturing, and installation activities, and is based on Garrett-Peltier 2017. It includes the following IMPLAN categories: 30% Construction of new power and communication structures (52); 17.5% each Fabricated Metal Mfg (236), Semiconductor and related mfg (307), All other misc electrical equipment and component mfg (339), and Environmental and other technical consulting services (463)

¹⁴ “Oil and Gas” includes 20% each: Oil and Gas Extraction (20); Drilling Oil and Gas Wells (35); Support Activities for Oil and Gas (36); Natural Gas Distribution (48); and Petroleum Refineries (154)

¹⁵ “Aviation” is IMPLAN sector 414