Farm Bill Conservation Programs: An Economic Impact Analysis

The Nature Conservancy (TNC) commissioned BW Research to study the estimated economic impacts of federal agriculture and conservation investments. Specifically:

Agriculture Improvement Act of 2018 (Farm Bill) and Inflation Reduction Act (IRA) funding committed from FY2019 – FY2024 to producer financial assistance contracts under the Environmental Quality Incentive Program (EQIP), Conservation Stewardship Program (CSP), and Agricultural Conservation Easement Program (ACEP), and to projects under the Regional Conservation Partnership Program (RCPP).

This report evaluates the effects of those funds on the U.S. economy from 2019 to 2029. To analyze the economic impacts, BW Research aggregated investments for the four programs between 2019 and 2024, resulting in \$21.7 billion in obligated financial assistance. This report outlines the effect of these conservation investments on national employment, Gross Domestic Product (GDP), Employee Wages, and Tax Revenue for local, state, and federal governments.

Key Findings

The \$21.7 billion in obligated financial assistance from the 2019-2024 Farm Bill and 2023-2024 IRA funds for EQIP, CSP, ACEP, and RCPP create an impact of:

- More than 46,700 jobs supported annually for 10 years, totaling 467,400 job-years. This represents about 21.6 jobs for every million dollars from the federal government.
- About \$3.4 billion in annual GDP (Value Added), a return of \$1.59 in GDP for each federal dollar invested.
- More than \$1.9 billion in annual employee wages for 10 years.
- Nearly \$213 million in annual local, state, and federal tax revenue for 10 years.

Investments from the federal government are shown below.

Program	Federal Financial Assistance (\$ Billions)			
EQIP	\$9.72			
CSP	\$6.10			
ACEP	\$2.20			
RCPP	\$3.65			
Total Investment	\$21.67			

 TABLE 1. TOTAL OBLIGATED FINANCIAL ASSISTANCE BY PROGRAM, 2019-2024

About 45% of the federally obligated funding assistance dollars from the Farm Bill and IRA between 2019 and 2024 are for EQIP. The CSP represents more than a quarter (28%) of all the federal funds, while RCPP represents 17% and ACEP is about 10% of the federal investments analyzed.

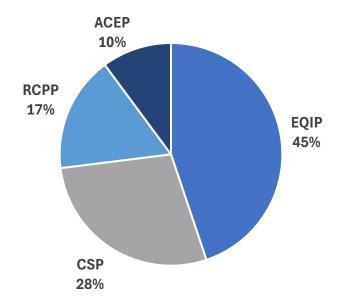


FIGURE 1. FEDERAL FUNDING DISTRIBUTION BY PROGRAM, 2019-2024

The \$21.7 billion in conservation assistance across the U.S. supports over 46,700 annual jobs, on average, for 10 years. For context, this number of jobs is equivalent to about 5% of the total number of farmers, ranchers, and agricultural managers across the nation.¹ About 22,400 of these 46,700 jobs are in activities directly related to the programs. The U.S.

¹ 856,600 jobs in 2023. Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Farmers, Ranchers, and Other Agricultural Managers, <u>https://www.bls.gov/ooh/management/farmers-ranchers-and-other-agricultural-managers.htm</u>.

economy would also benefit from an additional \$3.4 billion in GDP and over \$1.9 billion in wages annually until 2029. Investments spurred by these conservation policies would generate additional tax revenue for the federal government of nearly \$137 million annually, accompanied by \$30 million in tax revenue to local governments and \$46 million for state governments. For further details on the types of economic impacts, please see Appendix A: Industry and Occupation Definitions.

TABLE 2. ANNUAL IMPACTS BY IMPACT TYPE, 2019-2029

	Jobs	GDP	Employee Wages	Taxes	
Direct	22,365	\$1,256,534,079	\$834,548,875	Local	\$30,334,937
Indirect	9,817	\$761,434,512	\$424,483,407	State	\$45,555,996
Induced	14,553	\$1,418,794,801	\$689,561,433	Federal	\$136,938,026
Total	46,735	\$3,436,763,392	\$1,948,593,716	Total	\$212,828,959

The 46,700 jobs generated by these programs are in the following six industry categories:

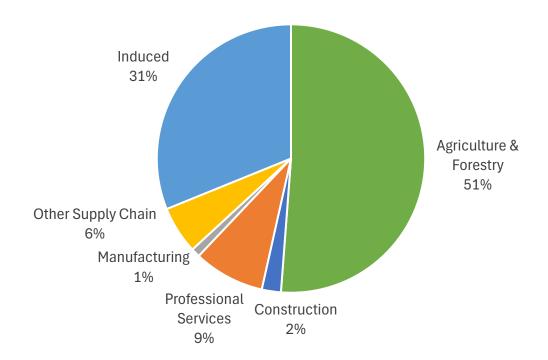
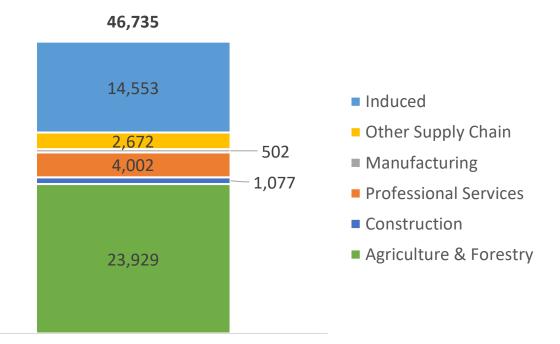


FIGURE 2. TOTAL JOBS BY INDUSTRY

Investments from these conservation programs are expected to support over 23,900 jobs in Agriculture & Forestry, 4,000 jobs in Professional Services, and 2,700 jobs in Other Supply

Chain² industries yearly, on average. The economic impact of this financial assistance is also expected to support close to 14,600 induced jobs due to the increased economic activity and the additional worker income flowing through local economies.





Among the direct and indirect jobs generated by the policies, or jobs created in the Agriculture & Forestry, Construction, Professional Services, Manufacturing, and Other Supply Chain industries, direct and indirect job impacts are distributed across seven occupational categories:

- Production/Manufacturing
- Installation or Repair
- Administrative
- Management/Professional
- Sales
- Farming and Forestry
- Other.³

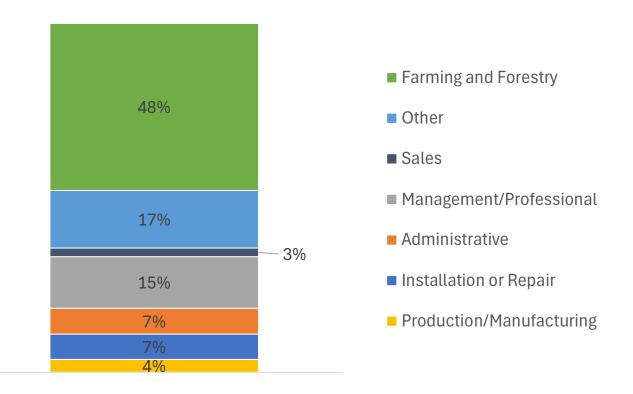
² Includes Distribution, Information, Retail and Wholesale Trade, and Utilities workers, among others.

³ The "Other" occupational group includes employment in transportation and material moving occupations, and community and social service occupations, among others.

We omit induced impacts in the occupational analysis and capture only the 32,200 annual direct and indirect jobs to best highlight activities most directly related to the programs analyzed in the report.

Most of the jobs generated from conservation assistance are in Farming and Forestry and Other occupations. About 15,400 are in Farming and Forestry occupations, and about 5,300 are in the Other occupational group. There are also about 4,700 jobs in Management/Professional occupations annually.

FIGURE 4. OCCUPATIONAL DISTRIBUTION OF JOBS



Methodology

BW Research analyzed conservation investments to understand their impacts on jobs, GDP, wages, and tax revenue in the U.S. and a set of individual states. Economic impacts were estimated using custom IMPLAN Input-Output models. These models use industry multipliers that estimate the flow of initial investments through local, state, and national economies.

BW Research used obligated financial assistance funds from the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) <u>databases</u> by program as model inputs. ACEP obligations with Farm Bill funds in FY 2024 were unavailable, so the Research Team estimated these values using averages from obligations in previous years. These funds do not include agricultural producers' share of costs, technical assistance funding, or any private match funding. The programs and amount of federal obligated financial assistance are shown below from both Farm Bill and IRA sources.

Financial Assistance							
(\$ Millions)	2019	2020	2021	2022	2023	2024	Total
EQIP	\$1,330	\$1,331	\$1,371	\$1,409	\$1,579	\$2,696	\$9,716
CSP	\$1,172	\$1,913	\$535	\$629	\$840	\$1,016	\$6,105
ACEP	\$318	\$379	\$320	\$333	\$381	\$466	\$2,197
RCPP	\$0	\$329	\$378	\$225	\$1,125	\$1,591	\$3,649
Total	\$2,819	\$3,952	\$2,605	\$2,597	\$3,925	\$5,768	\$21,666

The funds were allocated using a mix of IMPLAN industries related to conservation work, focusing on farming, forestry, and environmental science industries. This industry allocation was initially derived from a World Resources Institute study on reforestation and fire management⁴ but have been altered to match the activities in the programs studied here.

IMPLAN Code	Industry description	Allocation
16	Commercial logging	21.0%
15	Forestry, forest products, and timber tract production	21.0%
463	Environmental and other technical consulting services	16.0%
13	Poultry and egg production	12.0%
3	Vegetable and melon farming	12.0%
60	Maintenance and repair construction of nonresidential structures	9.0%
19	Support activities for agriculture and forestry	9.0%

⁴ https://publications.wri.org/new-climate-economy-rural-america

Appendix A: Industry and Occupational Definitions

Economic impact analysis outputs show three types of economic effects:

Direct Effects: economic impacts associated with the initial investment or activity. For this research, direct jobs range from conservation laborers working to implement measures to scientific, engineering, and administrative employees.

Indirect Effects: include all the supply chain impacts resulting from the initial direct economic activity. An example of an indirect job is a new worker at an equipment supplier to handle the increased demand for tools resulting from the initial investment.

Induced Effects: result from increased household spending and direct and indirect workers spending their wages in the local economy. An example of an induced job is a new worker at a local restaurant because conservation workers have new disposable income and eat at this local restaurant.

Employment outputs are split into the following six industry groups:

- Agriculture & Forestry
- Construction
- Professional Services
- Manufacturing
- Other Supply Chain⁵
- Induced

Direct and indirect employment is further split into the following occupational groups, defined at the 2-digit Standard Occupational Classification (SOC) level:

- Production/Manufacturing: occupations in SOC 51
- Installation or Repair: occupations in SOC 37, 47, 49
- Administrative: occupations in SOC 43
- Management/Professional: occupations in SOC 11, 13, 15, 17, 19, 23
- Sales: occupations in SOC 41
- Farming and Forestry: occupations in SOC 45
- Other: occupations in SOC 21, 25, 27, 29, 31, 33, 35, 39, 53

⁵ Includes Distribution, Information, Retail and Wholesale Trade, and Utilities workers, among others.