

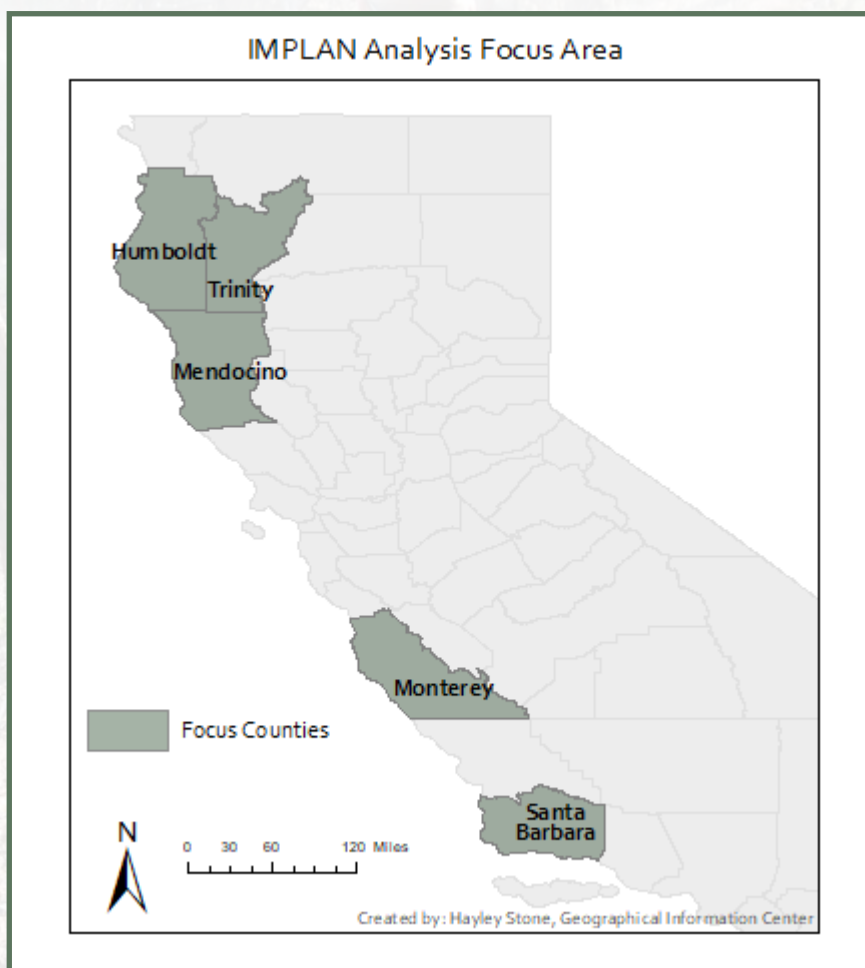
## Estimating the Economic Impacts of Potential Spending on Enforcement and Reclamation of Illegal Cannabis Grows

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### Problem Statement

"Illegal cannabis grows on California public lands, known as 'trespass grows' constitute one of the leading issues threatening California's wildlife and communities. Trespass grows, 90% of which are controlled by drug trafficking organizations (DTO's), contain copious amounts of illegal pesticides, rodenticides and herbicides. These toxicants contaminate water, poison wildlife, and pose a serious threat for widespread human exposure. These grows undercut the legal market, place rural and tribal communities at risk and threaten natural resource economies, and undermine the original purpose of our public lands." (<https://www.cropproject.org/>)

New legislation designed to address this problem will be introduced into the United States House of Representatives. The Trespass Grow Reclamation (TGR) legislation seeks to provide funding for eradication, remediation and additional federal law enforcement.





# Estimated Impacts of TGR Spending

We use the IMPLAN input-output modeling framework to estimate the economic impact of expenditures provided in TGR legislation. One dollar of TGR spending will generate more than one dollar in local economic value through what is commonly called the “multiplier effect.” The IMPLAN framework accounts for transactions within and between industries and institutions, resulting in estimates of how TGR expenditures are distributed and multiplied within the economy.

Based on the appropriations language, we assume TGR expenditures of \$10m allocated to a combination of law enforcement, consulting, training, and reclamation activities. Expenditures are assumed to be distributed evenly across five counties: Humboldt, Mendocino and Trinity Counties in far northern California, and Santa Barbara and Monterrey counties on the central coast. Similar impacts would be expected for other counties suffering from the same issue (e.g., Lassen, Plumas and Siskiyou), but magnitudes would vary with county characteristics. Twenty percent of the spending is allocated directly to employment at federal/local agencies, primarily to support law enforcement by the United States Forest Service (USFS) and BLM. Management and technical consulting services are assumed to account for 27% of the expenditures, including services such as identification and recruitment of remediation teams, technical and non-technical training, remediation project oversight, and technical services. Expenditures on reclamation activities and waste management were assumed to account for the remaining 53% of spending.

## Before



Source: Integral Ecology Research Center, [www.IERCecology.org](http://www.IERCecology.org)

## After



Source: Integral Ecology Research Center, [www.IERCecology.org](http://www.IERCecology.org)



Our estimates of TGR's impacts on total economic output are shown in Table 1. Economic impact is estimated and reported in three types: direct, indirect, and induced. Direct effects are generated by TGR expenditures, which generate additional impacts on employment and economic activity according to multipliers and other assumptions established by IMPLAN. By definition, the direct effect on output is \$10m, based on our assumption of spending in proposed TGR legislation.

We estimate the direct expenditure would support over \$5m in additional economic activity: \$1.1m in indirect impacts and just under \$4m in induced effects. Indirect impacts are generated by business-to-business purchases in the supply chain that take place as a result of the TGR spending. For example, trucking companies contracted to remove infrastructure and trash have an impact on fuel companies, auto mechanics, truck sales and tire supply firms. Induced impacts are generated when households spend the labor income generated by TGR expenditures.

While the largest impacts to output and employment occur in the sectors assumed to be directly impacted by TGR expenditures (e.g., support activities for agriculture/forestry, local/federal government employment and payroll, and management, environmental, and other technical consulting services), significant indirect and induced impacts are predicted across the wholesale and retail sectors of the impacted counties. Some sectors are expected to see large impacts. We predict over \$1.1m in indirect and induced activity in owner- and tenant-occupied dwellings and other real estate, and over \$400k of activity is predicted in the medical sector, including hospitals and offices of physicians. Businesses providing food and drink, including restaurants, bars, and food retail are also predicted to see impacts over \$400k.

**We estimate spending \$10m on reclamation of illegal cannabis grows would generate nearly 100 jobs, with indirect and induced effects generating 33 additional jobs**

Impact	Output
Direct	\$10,000,000
Indirect	\$1,107,222
Induced	\$3,958,109
Total	\$15,056,331

Table 1. Output Impact Estimates from TGR Spending

Impact	Employment	Labor Income
Direct	98.85	\$7,249,192
Indirect	7.64	\$388,915
Induced	24.87	\$1,226,932
Total	131.36	\$8,865,039

Table 2. Employment Impact Estimates from TGR Spending

Our estimates do not reflect the full range of impacts potentially provided by the reclamation of illegal cannabis grows, or the potential long-term benefits of increased law enforcement on federal public lands. Repairing damage caused by trespass grows and precluding new grow activity can provide long term value by, for example, reducing wildfire risk and improving water quality and wildlife habitat. Additional long-term economic benefits would be generated if reclamation leads to enhanced or restored recreation and/or tourism activities. These additional impacts can be large, but are outside the scope of our analysis and not included in our estimates.

# About CSU, Chico's Agribusiness Institute

The Agribusiness Institute is a component of the College of Agriculture.



## Mission

The institute provides agricultural business expertise in the areas of education, marketing, human resource development, management, and finance. Within this mission, there is focus on enhancing learning experiences, involving faculty in professional development activities, and serving the needs of agribusinesses in California and other Western States.

## Goals

- Providing management and economic information that will assist managers in agribusiness
- Develop educational programs for North State and regional interests
- Advising on financial management, market analysis, value-added agriculture, and e-commerce for agribusiness firms
- Through applied research, develop economic, management, and marketing information
- Support professional relationships between the College of Agriculture faculty and the agricultural community in order to improve opportunities for undergraduate students developing careers in agriculture
- Working with other groups at California State University, Chico, and other institutions to accomplish projects within the scope of the Institute

For more information about the Agribusiness Institute, please visit  
<https://www.csuchico.edu/ag/about/agribusiness-institute.shtml>  
or contact the ABI Director, Dr. Eric Houk at [Ehouk@csuchico.com](mailto:Ehouk@csuchico.com)

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