

Harnessing the IRA to Support Western Agricultural Landscapes



NRCS and its partners are helping farmers, ranchers, and forest landowners in the Nation's most arid landscapes of the West respond to resource management challenges from two major threats to water supply: increasing demand for water and climate change impacts.

Increasing demand by all users for a limited supply of water is stressing many communities across the West. Impacts of a changing climate, especially the increasing frequency and intensity of drought, are already being experienced across the West and are projected to worsen.

The Inflation Reduction Act (IRA) has provided additional funding for the Natural Resources Conservation Service (NRCS) to implement Climate-Smart Mitigation Activities through several of our programs and strategies that address climate change and build resiliency.

The Inflation Reduction Act (IRA)

IRA represents the single largest investment in climate and clean energy solutions in American history. It provided an additional \$19.5 billion over five years for climate smart agriculture through NRCS conservation programs.

Additional funding through the IRA will help farmers, ranchers, and forest owners implement new or additional conservation activities on their lands, with a focus on Climate-Smart Mitigation Activities that can increase storage of carbon and reduce greenhouse gas emissions and may also help to address drought and other climate-related stressors.

Climate-Smart Mitigation Activities

Agricultural producers play a critical role in fostering a healthy environment by incorporating conservation practices and activities to a planned system that provides multiple benefits, including addressing natural resource concerns and responding to climate change, while sustaining agricultural productivity. Certain conservation activities,

categorized as **Climate-Smart Mitigation Activities**, can contribute to climate change mitigation by increasing carbon storage in soil and plant communities and avoiding, capturing, or reducing greenhouse gas emissions to mitigate climate change.

For example, adding perennial crops to a rotation on 100 acres of land in Baca County, Colorado may increase soil carbon inputs from higher levels of plant residue and remove around 25 metric tons of CO₂ from the atmosphere, or the equivalent of removing five gasoline-powered cars off the road for a whole year. Similarly, intensively managed grazing on 100 acres of rangeland may increase soil carbon and reduce soil nitrous oxide emissions by three tons of CO₂ equivalent per year, the equivalent to reducing the emissions generated from driving an average gasoline-powered car for around 7,000 miles.

These Climate-Smart Mitigation Activities can lead to direct, quantifiable climate change mitigation benefits, including increased carbon sequestration, reduced greenhouse gas emissions, or both. Additional practices may be needed to facilitate the management or function of Climate-Smart Mitigation Activities to achieve the mitigation benefits. These facilitating practices may not have quantifiable mitigation benefits themselves, but they may be an essential part of the system and provide other co-benefits.

Climate-Smart Agriculture and Forestry (CSAF)

Climate-smart agriculture and forestry is an integrated approach that enables farmers, ranchers, and forest landowners to respond to climate change by reducing or removing GHG emissions (mitigation) and adapting and building resilience (adaptation), while sustainably increasing agricultural productivity and incomes.

Conservation Systems Provide Multiple Benefits

Using conservation practices on Western cropland as a part of a planned system to achieve multiple desired benefits may require a combination of several conservation practices, including Climate-Smart Mitigation Activities



and other facilitating practices. These systems may also provide climate change adaptation benefits such as building healthier soils to buffer fields against volatile weather, conserving water to improve drought resilience across the farm or ranch, and reducing water losses from canals, reservoirs, and other irrigation water infrastructure to build resilience across the agricultural landscape.

For example, a system including Conservation Crop Rotation (328), Cover Crop (340), Residue and Tillage Management, No-Till (329), Irrigation Water Management (449), and Nutrient Management (590) may help improve soil moisture and irrigation water management, which builds resiliency to current levels of agricultural drought while at the same time reducing greenhouse gas emissions, which helps mitigate the risk of future droughts becoming more frequent or intense.

A planned system of practices can also be used to improve the resiliency of grazing lands in the West. Prescribed Grazing (528), Stream Crossing (578), Upland Wildlife Habitat Management (645), Fence (382), and Brush Management (314) may be used to manage rangelands for supporting diverse natural communities of native grasses, forbs, shrubs, and associated wildlife; protecting water flowrates and quality in streams and wetlands; and storing carbon for longer periods of time keeping it out of the atmosphere and mitigating the risk of future droughts becoming worse. Agricultural Conservation Easement activities are another way to mitigate the loss of carbon and protect water resources and other ecosystem services by conserving grasslands.

Boosting Our Work Through the Inflation Reduction Act

The IRA is providing unprecedented funding levels to support climate change mitigation through several of the existing programs that NRCS implements including the Environmental Quality Incentives Program (EQIP), the Conservation Stewardship Program (CSP), the Agricultural Conservation Easement Program (ACEP), and the Regional Conservation Partnership Program (RCPP). Activities supported by the IRA for their mitigation benefits can be implemented in systems that provide multiple benefits, including building climate resilience and addressing other resource concerns, such as water quantity, to advance both climate mitigation and Western water priorities.

Ongoing NRCS Conservation Opportunities for Western Landscapes

NRCS and its partners offer a wide variety of financial and technical assistance to help individuals, entities, and communities meet resource management challenges from threats to water supply in the Nation's most arid landscapes. Many of these opportunities are tailored to unique needs of Western landscapes, including Adjusted Gross Income waivers for water management entities to implement eligible water conservation or irrigation efficiency projects through EQIP. The new [Western Water and Working Lands Framework for Conservation Action](#) guides all NRCS investments, including EQIP, CSP, RCPP, ACEP, and other programs that help producers conserve water, address climate change and build drought resilience in the West.

Recent NRCS investments responding to these unique challenges related to water supply and drought include:

- ◆ [\\$41.8 million in conservation assistance to help agricultural producers in Arizona, California, Colorado and Oregon](#) alleviate the immediate impacts of drought and other natural resource challenges on working lands through the EQIP Conservation Incentives Contracts program.
- ◆ A \$25 million investment to help farmers and ranchers conserve water and build drought resilience in their communities through collaboration with the Department of Interior's (DOI) WaterSMART Initiative.
- ◆ A [new interagency working group](#) created by the Biden-Harris Administration's National Climate Task Force to address the worsening drought conditions in the West and support farmers, co-chaired by USDA with the Department of Interior.
- ◆ Contributions to the [National Water Reuse Action Plan](#) which increase reuse of wastewater for agriculture and conservation.
- ◆ \$17.6 million investment to help irrigation districts, groundwater management organizations, and other water management entities conserve water by modernizing infrastructure through EQIP funding.
- ◆ \$8 million in investments through the Conservation Innovation Grants program to demonstrate innovative water conservation including water reuse technologies and managed aquifer recharge.
- ◆ 186 properties enrolled in the Agricultural Conservation Easement Program to protect land from the threat of conversion to an impervious surface, a land use with higher risk of increased water runoff and pollution.

