

Natural Resources Conservation Service

Climate-Smart Agriculture and Forestry Mitigation Activities and Inflation Reduction Act Funding Frequently Asked Questions

Questions our customers and partners may have:

1. How can agriculture be part of the climate solution?

Agricultural producers, ranchers, and forest landowners play a critical role in environmental stewardship. The Inflation Reduction Act provides historic investments to support producers in adopting climate-smart practices that can sequester carbon and reduce key greenhouse gas emissions like nitrous oxide, methane, and carbon dioxide. These practices include nutrient management, cover crops, reduced tillage, tree planting, forest stand improvement, and livestock management.

2. How long will Inflation Reduction Act funds be available?

Inflation Reduction Act funds began in fiscal year 2023. Most of the program funding will be available in the first four years with implementation on conservation practices expected to take several years to complete. All conservation practice implementation with Inflation Reduction Act funding must be finalized by September 30, 2031.

3. What is the significance of Climate-Smart Agriculture and Forestry Mitigation Activities for implementing Inflation Reduction Act funding?

The conservation activities on the <u>NRCS Climate-Smart Agriculture and Forestry Mitigation</u> <u>Activities List</u> can provide climate change mitigation benefits. These activities are eligible to receive funding through the Inflation Reduction Act because, based on scientific literature, they are expected to directly improve soil carbon; reduce nitrogen losses; or reduce, capture, avoid, or sequester carbon dioxide, methane, or nitrous oxide emissions associated with agricultural production. The Inflation Reduction Act provides \$19.5 billion in additional funding to existing conservation programs already popular with producers, like the Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), Agricultural Conservation Easement Program (ACEP), Regional Conservation Partnership Program (RCPP) and Conservation Technical Assistance (CTA), to implement climate-smart mitigation practices. Inflation Reduction Act funds may also be used for facilitating practices that support the management or the function of Climate-Smart Agriculture and Forestry Mitigation Activities.

4. What is considered a "Climate-Smart Mitigation Activity"?

A Climate-Smart Mitigation Activity is an activity (conservation practice or enhancement) that, when implemented appropriately, can result in reductions in greenhouse gas emissions or increases in carbon sequestration. They are included in the <u>Climate-Smart Agriculture and</u> <u>Forestry Mitigation Activities List</u>.

5. How does NRCS estimate the impact of Climate-Smart Mitigation Activities?

NRCS uses methodologies such as those used in <u>COMET-Planner</u> to quantitatively estimate the potential mitigation benefits of a practice and determine the potential impact of these Inflation Reduction Act investments.

6. What is the process NRCS uses for adding or removing practices on the Climate-Smart Agriculture and Forestry Mitigation Activities List?

Each year, NRCS considers and evaluates the practices on the Climate-Smart Agriculture and Forestry Mitigation Activities List. Throughout the year, NRCS receives feedback from partners and staff, which is used to identify practices for consideration to be removed or added. Using this feedback, the NRCS Climate Office works with subject matter experts, including the NRCS National Discipline Leads (such as the National Agronomist, National Environmental Engineer, and National Air Quality Specialist), to review feedback and literature and prioritize practices that would be most suitable for consideration. Evaluation teams, composed of employees across NRCS and an external-to-NRCS USDA participant, evaluate the practice based on the identified criteria and available scientific literature for the practice. Climate-Smart Agriculture and Forestry Mitigation Activities are evaluated against two main criteria: (1) The activity must result in a direct impact on net greenhouse gas emission reduction or removal within a given scope as supported by the scientific literature, and (2) NRCS must have a science-based methodology for quantitatively estimating mitigation benefits using available NRCS activity data. Evaluation team recommendations for removals or additions are then presented to NRCS leadership for final approval for the next fiscal year. The NRCS Climate Office will continue to refine this approach to be sure it is both science-based and incorporates locally led feedback where possible.

7. Why was Upland Wildlife Habitat Management (Code 645) removed from the Climate-Smart Agriculture and Forestry Mitigation Activities List?

Upland Wildlife Habitat Management (Code 645) was historically included as a Climate-Smart Agriculture and Forestry Mitigation Activity due to a nominal mitigation benefit associated with improvements to and establishment of vegetation plantings for improving upland wildlife habitat. Currently, this practice is limited to management activities that are not included in other practices, such as habitat monitoring and management. As such, it would currently not be used to establish vegetation (other than seasonal, typically annual cover). While Upland Wildlife Habitat Management (Code 645) may guide the implementation of certain other practices, it is not the practice through which implementation occurs and to which mitigation benefits could be attributed. Vegetation establishment components previously under Upland Wildlife Habitat Management are currently implemented instead under Wildlife Habitat Planting (Code 420) or Conservation Cover (Code 327), which are currently recognized as Climate-Smart Agriculture and Forestry Mitigation Activities.

8. Under what circumstances will IRA funds be used to fund irrigation activities?

Several irrigation practices were added with the expectation that when implemented consistent with their specified narrative, they can result in energy savings that, in most cases, would lead to emission reductions. In order to provide the expected emissions reductions, these practices are only applicable when changes are made to an existing system that is powered by a fossil fuel-based energy source. The practices are not to be used for implementation of a new irrigation system and must not result in increased irrigated acres. Planners must take into account local energy sources when planning the practice as a Climate-Smart Agriculture and Forestry Mitigation Activity to ensure that the existing system is powered by a fossil fuel-based energy source.

- **9.** What is the difference between climate change mitigation and climate change adaptation? Climate change mitigation addresses the root causes of climate change, while adaptation focuses on resilience to the consequences of climate change. Mitigation is making the impacts of climate change less severe by preventing or reducing the emission of greenhouse gases into the atmosphere. Adaptation is the process of adjusting to the current and future effects of climate change. While the Inflation Reduction Act requires funds to be used for climate change mitigation activities, some of those same practices may also support adaptation. Through its conservation programs, NRCS also provides support to producers to help them adapt to the climate change impacts they face, such as increased drought, extreme weather, or seasonal shifts.
- 10. Why aren't all conservation activities eligible to receive Inflation Reduction Act funding? While all conservation activities provide important benefits to address natural resource concerns, not all practices provide the climate change mitigation benefits required by the Inflation Reduction Act. Under the law, only conservation activities that have climate change mitigation benefits are eligible to receive Inflation Reduction Act funding. Farm Bill funding is available for conservation programs to help producers implement conservation activities that may not meet Inflation Reduction Act requirements.
- 11. How can interested producers apply for Inflation Reduction Act funding assistance to implement Climate-Smart Agriculture and Forestry Mitigation Activities? Producers can apply at their local USDA Service Center at the NRCS office at any time. However, to be considered in the current ranking period, producers should apply by their state's ranking date. Any applications received after the ranking date will be kept on file and will be considered

during future funding rounds. Every producer has a part to play when it comes to reducing greenhouse gas emissions, regardless of the size or type of operation. Whether a new or an existing NRCS client, all producers are encouraged to apply.

12. Does the Inflation Reduction Act have its own sign-up deadline?

No. Since the Inflation Reduction Act is simply providing additional funding to already existing conservation programs, Inflation Reduction Act funding is administered through those conservation programs (i.e., Environmental Quality Incentives Program, Conservation Stewardship Program, Agricultural Conservation Easement Program), and adheres to their state program ranking dates (as mentioned in question 11).

13. Can Climate-Smart Agriculture and Forestry Mitigation Activities only be implemented using Inflation Reduction Act funds?

No. All conservation practices and activities are eligible to receive funding through NRCS's conservation programs. The Inflation Reduction Act provides additional funding to these programs to be used only for climate-smart mitigation activities. However, Climate-Smart Agriculture and Forestry Mitigation Activities could also be funded through existing Farm Bill funding through these programs. This results in more climate-smart mitigation practices being implemented. Since NRCS receives far more applications than there is available funding, Inflation Reduction Act funds are helping more customers meet their conservation goals while also helping mitigate climate change.

14. How do I apply for conservation program assistance?

The first step is to contact your <u>local USDA Service Center</u>. There you will work with USDA employees who will walk you through the application process and visit with you about your conservation goals for your agricultural operation. More information about what to expect and how to prepare for your visit is <u>available here</u>. All interested applicants are encouraged to apply, regardless of operation size, location, or what is produced. There is additional assistance available for <u>beginning farmers and ranchers</u>, <u>historically underserved producers</u>, and <u>veterans</u>.

15. Where can I go for more information?

As with any conservation assistance, visit your local <u>USDA Service Center</u> to meet one-on-one with an NRCS conservation planner. Information about the Inflation Reduction Act is available on the <u>NRCS Inflation Reduction Act page</u>. More details about climate-smart activities – including short videos featuring producers implementing these activities, as well as the list of activities and descriptions – are available on the NRCS <u>Climate-Smart Mitigation Activities page</u>.

Questions you may have (FOR INTERNAL USE ONLY):

1. What is a facilitating practice (also referred to as a supporting practice)?

A facilitating practice is a practice that facilitates or supports the management or the function of another practice but may not achieve the desired outcome when applied on its own. For example, Tree and Shrub Establishment (Code 612) may need facilitating practices such as Tree/Shrub Site Preparation (Code 490) or Access Control (Code 472) for the Tree and Shrub Establishment practice to be fully successful in providing climate mitigating results. Facilitating practices are eligible for Inflation Reduction Act funding when they support a Climate-Smart Agriculture and Forestry Mitigation Activity in providing climate change mitigation benefits.

Resources: Primary and facilitating (supporting) practices are discussed in the <u>National Planning</u> <u>Procedures Handbook</u> (NPPH), Title 180, Part 600. NPPH, 600.25 Step 5 – Formulate Alternatives, <u>Conservation Planning Fact Sheet: Primary and Facilitating Practices</u> and a <u>training</u> <u>video</u> further explaining the fact sheet.

2. What does it mean to be a "provisional" activity?

Provisional activities and their associated enhancements are added to the <u>Climate-Smart</u> <u>Agriculture and Forestry Mitigation Activities List</u> under the premise that they *may* provide benefits, and a quantification methodology will be evaluated during the fiscal year. Practices may be removed from the mitigation activities list in a subsequent fiscal year if quantification is not possible. Provisional activities are eligible for Inflation Reduction Act funding.

3. What does it mean if a practice is listed with a specific implementation?

This means the practice is considered a mitigation activity <u>only</u> when implemented in the specified way. These are described in the <u>Climate-Smart Agriculture and Forestry Mitigation</u> <u>Activities List for FY2024 fact sheet</u>.

4. What are the criteria for including a practice on the Climate-Smart Agriculture and Forestry Mitigation Activities List?

Climate-Smart Agriculture and Forestry Mitigation Activities were evaluated against two main criteria:

(1.) The activity must result in a direct impact on net greenhouse gas emission reduction or removal within a given scope as supported by the scientific literature.

(2.) NRCS must have a science-based methodology for quantitatively estimating mitigation benefits using available NRCS activity data.

Activities that meet both criteria are recognized as Climate-Smart Agriculture and Forestry Mitigation Activities. Activities that met the first criterion but did not sufficiently meet the second criterion may be added as "provisional" with the understanding that an NRCS method could potentially be identified or developed.

5. What is the process for adding practices to the Climate-Smart Agriculture and Forestry Mitigation Activities List?

NRCS receives feedback from partners and staff throughout the year, which is used to identify practices for consideration. Using this feedback, the NRCS Climate Office works with subject matter experts, including the National Discipline Leads for the recommended practices, to review feedback and literature provided and prioritizes practices that would be most suitable and ready for evaluation for the upcoming fiscal year. Evaluation teams, composed of four participants from across NRCS and an external USDA participant, review presented literature for the prioritized practices and evaluates the practice based on the identified criteria (see question #4). Evaluation team recommendations are presented to leadership for final approval of what will be added or removed. The Climate Office will continue to review and revise this approach to facilitate a process that is both science-based and incorporates locally led feedback and input where possible. To learn more about the process, please watch the September 7, 2023, ORC thematic Expanding Climate Solutions Overview.

6. How can NRCS employees provide feedback on the Climate-Smart Agriculture and Forestry Mitigation Activities List?

If you have a recommendation for the activities list, you may use the <u>Feedback and Questions</u> <u>Form</u> on the NRCS <u>Climate SharePoint site</u> to submit your recommendation along with supporting documentation throughout the year. If you need assistance with supporting documentation, please work with technical partner organizations, your state technical specialists, regional National Technology Support Center technical specialists, or the National Discipline Leads for the practice.

7. Do some climate-smart agriculture and forestry practices provide more climate change mitigating benefits than others?

Although all Climate-Smart Agriculture and Forestry Mitigation Activities are recognized as being able to provide mitigation benefits, these mitigation benefits vary across different practices, as well as with different implementations and geographies for a single practice. Planners are encouraged to use tools such as <u>COMET-Planner</u> to help look at different practice implementations and estimate potential benefits, although states and planners are not required to quantify these benefits since quantification is done at the national level. Resources such as the <u>Priority Data Layers Project</u> can also be used to understand relative mitigation potential of various Climate-Smart Agriculture and Forestry Mitigation Activities to support planning and outreach.

8. What was the rationale for adding or removing a certain practice to the list in FY24?

Practices are evaluated using the criteria explained in question #4. Activities that meet both criteria are added as Climate-Smart Agriculture and Forestry Mitigation Activities. Activities that met the first criterion but did not sufficiently meet the second criterion may be added as "provisional" with the understanding that an NRCS method could potentially be identified or

developed. If a practice is revised, or a review is requested by the national discipline lead for that practice, a listed practice may be removed if it is determined the practice does not meet the established criteria.

<u>The following practices were added as Climate-Smart Agriculture and Forestry Mitigation</u> <u>Activities in FY24 based on the identified mitigation benefits:</u>

- **336 Soil Carbon Amendment** can contribute to mitigation by increasing soil organic carbon, which increases carbon sequestration, reduces erosion, and improves nutrient use, resulting in carbon dioxide (CO₂) reductions and minor nitrous oxide (N₂O) reductions.
- **317 Composting Facility** can lead to reduced methane (CH₄) emissions from the increased higher temperatures and more aeration during composting, as compared to a liquid storage system.
- **338 Prescribed Burning,** although typically will cause an immediate pulse of GHG emissions, it will largely result in net mitigation benefits over the long term due to reduced risks and severity of catastrophic wildfire (a large source of GHG emissions), as well as potential benefits from increased carbon sequestration from maintained and enhanced plant community heterogeneity.
- **383 Fuel Break** can reduce the risk, spread, and intensity of wildfire due to excessive biomass accumulations, which can lead to reduced greenhouse gas emissions associated with wildfire.
- **384 Woody Residue Treatment** can reduce hazardous fuels and the risk of wildfire or improve above ground carbon storage and soil organic matter, which can lead to reduced GHG emissions from wildfire and increased carbon sequestration.
- **313 Waste Storage Facility,** when implemented as a Compost-Bedded Pack system, can lead to reduced CH₄ emissions resulting from the added carbonaceous bedding material and regularly tilling to promote composting, as compared to a liquid storage system. Must be implemented consistent with the specific narrative 01N Compost Bedded Pack waste storage facility a livestock agricultural waste storage fabricated structure where manure is composted within the animal housing.
- 367 Roofs and Covers, when implemented to capture biogas, can lead to reduced CH₄ emissions as biogas is captured and either flared or used as a natural gas substitute, as compared to an uncovered anaerobic lagoon or liquid storage system. Must be implemented consistent with the specific narrative 01N - Capture Biogas - Place a rigid, semirigid, or flexible manufactured membrane, composite material, or roof structure placed over a waste management facility to capture biogas and reduce odor.
- **592 Feed Management** can reduce enteric methane emissions through adjustments in animal feed and management, diet formulation, and feed additives that influence methane production during animal digestion. Must be implemented consistent with the specific narrative 03N Reduce enteric methane emissions from animal feeding operations by manipulating the quantity and quality of dietary nutrients, incorporating feed additives and feed ingredients, or adjusting concentrate to forage ratio in livestock and poultry diets to lower methane produced and emitted during digestion.

- **314 Brush Management** can be used to maintain or re-establish native perennial plant communities and associated carbon stocks and carbon balance equilibrium. Restoring reference perennial ecosystems may also reduce susceptibility to wildfire and increase resilience to disturbances such as wildfire that would result in even greater carbon losses. Must be implemented consistent with the specific narrative 03N Remove woody (nonherbaceous and succulent) invasive vegetation to maintain or enhance deep rooted native perennial grass and forb communities, leaving treated woody material onsite to mitigate above ground carbon loss.
- 315 Herbaceous Weed Treatment can be used to restore annual dominated plant communities to perennial dominated plant communities, which can result in increased soil organic carbon. Must be implemented consistent with the specific narrative 01N - Removal of herbaceous weeds to release desired deep rooted perennial species.
- 643 Restoration of Rare or Declining Natural Communities, when implemented to restore floodplain hydrology, can revitalize hydrologic conditions that limit the decomposition and extend the residence time of soil organic carbon and enhance organic matter input from regenerated riparian vegetation, leading to increased carbon sequestration. Must be implemented consistent with the specific narrative 01N -Restoration of streams and associated floodplains using low-tech structures (such as beaver dam analogs or other stickand-stone structures) to kick-start natural ecological and hydrologic processes required for maintenance of healthy and functioning streams and associated floodplains.
 - Several irrigation practices were added with the expectation that when implemented consistent with their specified narrative, they can result in energy savings that, in most cases, would lead to emission reductions. In order to provide the expected emissions reductions, these practices are only applicable when changes are made to an existing system that is powered by a fossil fuel-based energy source. The practices are not to be used for implementation of a new irrigation system and must not result in increased irrigated acres. Planners must take into account local energy sources when planning the practice as a CSAF mitigation activity to ensure that the existing system is powered by a fossil fuel-based energy source.

533 Pumping Plant, when implemented to replace existing pumps with highefficiency pumps, can increase pump efficiency, which in turn would result in energy savings that, in most cases, would lead to emission reductions. Must be implemented consistent with the specific narrative 02N - Replacing existing pumps with high-efficiency pump.

- 430 Irrigation Pipeline, when implemented consistent with the specified narrative, can enable more efficient water conveyance due to reduced seepage and evaporation, which in turn would result in energy savings that, in most cases, would lead to emission reductions. Must be implemented consistent with the specific narrative 01N Replacement of an earthen channel that is supplied by pumping water with a closed conduit, resulting in enhanced conveyance efficiency and reduced energy use.
- **441 Irrigation System, Microirrigation,** when implemented consistent with the specified narrative, can enable more precise and efficient water use which in turn would result in energy savings that, in most cases, would lead to emission

reductions. Must be implemented consistent with the specific narrative 2- Switching from higher to lower pressure irrigation system, resulting in enhanced application efficiency and reduced energy use.

442 Sprinkler System, when implemented consistent with the specified narrative, can enable more precise and efficient water use which in turn would result in energy savings that, in most cases, would lead to emission reductions. Must be implemented consistent with the specific narrative 02N - Utilization of variable rate irrigation (VRI) technology, switching from higher to lower pressure irrigation systems, and sprinkler head re-nozzling without increasing irrigated acres, resulting in enhanced application efficiency and reduced energy use.

<u>The following practice was removed as a Climate-Smart Agriculture and Forestry Mitigation</u> <u>Activity in FY24:</u>

 645 Upland Wildlife Habitat Management was historically included as a Climate-Smart Agriculture and Forestry Mitigation Activity due to a nominal mitigation benefit associated with improvements to and establishment of vegetation plantings for improving upland wildlife habitat. When NRCS transitioned to national payment schedules, scenarios under this practice were limited to management activities that are not included in other practices, such as habitat monitoring and management. As such, Upland Wildlife Habitat Management (Code 645) would currently not be used to establish vegetation (other than seasonal, typically annual cover). While the practice may guide the implementation of certain other practices, it is not the practice through which implementation occurs and to which mitigation benefits could be attributed. Vegetation establishment components previously under Upland Wildlife Habitat Management are currently implemented instead under Wildlife Habitat Planting (Code 420) or Conservation Cover (Code 327), which are currently recognized as Climate-Smart Agriculture and Forestry Mitigation Activities.

9. Where can NRCS employees find additional information regarding Climate-Smart Agriculture and Forestry Mitigating Activities and the Inflation Reduction Act?

Inflation Reduction Act Promotional Materials:

- <u>NRCS Conservation Programs and the Inflation Reduction Act (IRA) fact sheet</u>
- <u>USDA Investment in Improved Greenhouse Gas Measurement, Monitoring, Reporting and</u> <u>Verification for Agriculture and Forestry through the Inflation Reduction Act fact sheet</u>
- Harnessing the IRA to Support Western Agricultural Landscapes fact sheet
- Harnessing the Inflation Reduction Act to Further Support Forest Landscapes fact sheet
- Harnessing the Inflation Reduction Act to Further Support Grasslands fact sheet
- Harnessing the Inflation Reduction Act to Further Support Wetlands fact sheet

- <u>Climate-Smart Agriculture and Forestry (CSAF) Mitigation Activities List FY2024 fact sheet</u>
- <u>Climate-Smart Agriculture and Forestry fact sheet</u>
- <u>Climate-Smart Opportunities for Urban & Small-Scale Producers and Communities fact</u>
 <u>sheet</u>
- Marking One Year of the Inflation Reduction Act | USDA fact sheet

Websites:

- Inflation Reduction Act | Natural Resources Conservation Service
- Equity in the Implementation of the Inflation Reduction Act | Natural Resources Conservation Service
- <u>NRCS Climate-Smart Mitigation Activities</u>
- Inflation Reduction Act Investments in USDA Loan and Conservation Programs
 Farmers.gov
- IRA Assistance for Producers Who Experienced Discrimination in USDA Farm Loan Programs
 Farmers.gov
- <u>Climate-Smart Agriculture and Forestry | Farmers.gov</u>
- USDA Inflation Reduction Act
- USDA Climate Solutions

SharePoint Sites:

- Inflation Reduction Act Resources SharePoint page
- <u>NRCS Climate SharePoint page</u>
- NRCS Equity Home (sharepoint.com)

NRCS Thematic on "Expanding Climate Solutions Overview" on CSAF Activities

- View the September 7, 2023, Thematic <u>HERE</u>.
- Download the presentation "Expanding Climate Solutions CSAF Mitigation Activities List, Evaluation Process and State Input" <u>HERE</u>.