U.S. Department of Agriculture
Natural Resources Conservation Service

NOTICE OF GRANT AND AGREEMENT AWARD

1. Award Identifying Number	2. Amendment Number	3. Award /Project Period	4. Type of award instrument:
NR233A750004G025		Upon final signature - 04/20/2028	Grant Agreement

5. Agency (Name and Address)	6. Recipient Organization (Name and Address)
USDA Partnerships for Climate-Smart Commodities c/o FPAC-BC Grants and Agreements Division 1400 Independence Ave SW, Room 3236 Washington, DC 20250 Direct all correspondence to FPAC.BC.GAD@usda.gov	PENNSYLVANIA ASSOCIATION 1631 N FRONT ST HARRISBURG PA 17102-2435 UEI Number / DUNS Number: V1BXZMX9JD25 / 956743405 EIN:

7. NRCS Program Contact	8. NRCS Administrative Contact	9. Recipient Program Contact	10. Recipient Administrative Contact
Name: ECHO DOMINGUES (b)(6)	Name: SUNDII JOHNSON	Name: Hannah Smith-Brubaker	Name: Hannah Smith-Brubaker

11. CFDA	12. Authority	13. Type of Action	14. Program Director
10.937	15 USC 714 et seq	New Agreement	Name: Hannah Smith-Brubaker (b)(6)

15. Project Title/ Description: Expands markets in the Eastern US for climate-smart dairy, grain, livestock, organic and specialty crops; supports farmer and rancher climate-smart practice implementation and monitoring

16. Entity Type: N = Nonprofit without 501C3 IRS Status (Other than Institution of Higher Education)

17. Select Funding Type

Select funding type:	☒ Federal	☒ Non-Federal
Original funds total	$55,000,000.00	$436,811.00
Additional funds total	$0.00	$0.00
Grand total	$55,000,000.00	$436,811.00

18. Approved Budget

Personnel	$7,345,855.00	Fringe Benefits	$2,488,313.30
Travel	$1,035,817.20	Equipment	$84,000.00
Supplies	$1,452,000.70	Contractual	$5,119,400.00
Construction	$0.00	Other	$37,474,613.80
Total Direct Cost	$53,087,863.00	Total Indirect Cost	$1,912,137.00
		Total Non-Federal Funds	$436,811.00
		Total Federal Funds Awarded	$55,000,000.00
		Total Approved Budget	$55,436,811.00

This agreement is subject to applicable USDA NRCS statutory provisions and Financial Assistance Regulations. In accepting this award or amendment and any payments made pursuant thereto, the undersigned represents that he or she is duly authorized to act on behalf of the awardee organization, agrees that the award is subject to the applicable provisions of this agreement (and all attachments), and agrees that acceptance of any payments constitutes an agreement by the payee that the amounts, if any, found by NRCS to have been overpaid, will be refunded or credited in full to NRCS.

Name and Title of Authorized Government Representative Katina Hanson, Acting Senior Advisor for Climate-Smart Commodities	Signature KATINA HANSON Digitally signed by KATINA HANSON Date: 2023.04.06 14:45:06 -05'00'	Date
Name and Title of Authorized Recipient Representative	Signature	Date 4/5/2023

NONDISCRIMINATION STATEMENT

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW., Washington, DC 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

PRIVACY ACT STATEMENT

The above statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. Section 522a).

Statement of Work

Purpose

The purpose of this agreement, between the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) and Pennsylvania Association for Sustainable Agriculture (Recipient), is to build markets for climate-smart commodities and invest in America's climate-smart producers to strengthen U.S. rural and agricultural communities.

Objectives

The objectives of this project are to support the production and marketing of climate-smart commodities by providing voluntary incentives to producers and landowners, including early adopters, to implement climate-smart agricultural production practices, activities, and systems on working lands; measure/quantify, monitor and verify the carbon and greenhouse gas (GHG) benefits associated with those practices; and develop markets and promote the resulting climate-smart commodities.

Budget Narrative

The official budget summarized below and described in the attached Budget Narrative will be considered the total budget as last approved by the Federal awarding agency for this award.

Amounts included in this budget narrative are estimates. Reimbursement or advance liquidations will be based on actual expenditures, not to exceed the amount obligated.

TOTAL BUDGET $55,436,811

PERSONNEL $6,678,050
FRINGE BENEFITS $2,262,103
TRAVEL $ 941,652
EQUIPMENT $84,000
SUPPLIES $1,320,000
CONTRACTUAL $4,654,000
CONSTRUCTION (usually n/a) n/a
OTHER $37,148,058 (includes PRODUCER INCENTIVES $22,618,000)
TOTAL DIRECT COSTS $53,087,863
INDIRECT COSTS $1,912,137
Recipient has elected to use the de minimis indirect cost rate (10% of MTDC).
TOTAL FEDERAL FUNDS $55,000,000

PERSONNEL $280,024
FRINGE BENEFITS $93,787
TRAVEL $0
EQUIPMENT $0
SUPPLIES $0
CONTRACTUAL $ $ 26,000
CONSTRUCTION (usually n/a) $0
OTHER $37,000
PRODUCER INCENTIVES $0
TOTAL DIRECT COSTS $436,811
INDIRECT COSTS $0
TOTAL NON-FEDERAL FUNDS $436,811

Responsibilities of the Parties:

If inconsistencies arise between the language in this Statement of Work (SOW) and the General Terms and Conditions attached to the agreement, the language in this SOW takes precedence.

RECIPIENT RESPONSIBILITIES:

Perform the work and produce the deliverables as outlined in this Statement of Work and attachments.

Ensure Paperwork Reduction Act (PRA) clearance is obtained prior to conducting data collection from producers or other project participants, including data collection performed by subrecipients.

Comply with the applicable version of the General Terms and Conditions.

Ensure that equipment purchased with Federal funds is used until no longer needed as described in the General Terms and Conditions and 2 CFR 200. If the residual value of the equipment is $5,000 or more at the time it is no longer needed, the recipient must request disposition instructions. The disposition instructions may direct the recipient to: 1) sell the equipment and return a proportionate share of the proceeds to the Federal agency; 2) transfer title to another eligible entity identified by the Federal agency; or 3) keep the equipment if desired and compensate the Federal agency for its proportionate share of the value.

Submit reports and payment requests to the ezFedGrants system as outlined in the applicable version of the General Terms and Conditions. Reporting frequency is as follows:

- Performance Reports: Quarterly
- SF425 Financial Reports: Quarterly
- Detailed Progress Report: Quarterly
  (The detailed progress report is in addition to the performance and financial reports referenced above and described in the general terms and conditions)
- SF429 Real Property Status Report: Due within 120 calendar days of the period of performance end date. Send as an attachment to email to FPAC.BC.GAD@usda.gov.

Expected Accomplishments and Deliverables

See attached Benchmarks Table and associated Project Narrative.

Resources Required

See the Responsibilities of the Parties section for required resources, if applicable.

Milestones

See attached Benchmarks Table and associated Project Narrative.

GENERAL TERMS AND CONDITIONS

Please reference the below link(s) for the General Terms and Conditions pertaining to this award:
https://www.fpacbc.usda.gov/about/grants-and-agreements/award-terms-and-conditions/index.html

Attachments:
Budget Narrative
Project Narrative
Benchmarks Table
Climate-Smart Practices List and Limitations
Data Dictionary
Climate-Smart Specific Terms and Conditions

Page 006

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 007

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 008

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 009

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 010

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 011

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 012

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 013

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 014

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 015

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 016

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 017

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 018

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 019

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 020

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 021

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 022

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 023

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 024

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 025

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 026

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 027

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 028

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 029

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 030

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 031

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 032

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 033

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 034

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 035

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 036

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 037

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 038

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 039

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 040

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 041

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 042

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 043

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 044

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 045

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 046

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 047

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 048

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 049

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 050

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 051

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 052

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 053

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Page 054

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Hannah Smith-Brubaker
PA Assoc. for Sustainable Agriculture, dba Pasa Sustainable Agriculture (Pasa)
1631 N Front Street, Harrisburg PA 17012; 814-349-9856; hannah@pasafarming.org

REVISED: Climate-Smart Farming & Marketing: Engaging in Community-Science and Practice from Maine to South Carolina

Short Description:

A collaborative effort of 20 farming and agroforestry organizations, serving over 20,000 small to mid-scale and underserved farmers who work over 250,000 acres of crop, pasture, and forest lands in the 15 states ranging from Maine to South Carolina. **These farmers are uniquely impacted by climate change and uniquely positioned to be part of the climate solution.** Driven by climate-smart initiatives, the project scope includes soil health and financial benchmark community science; peer-to-peer learning and support; expanded implementation of climate-smart practices; carbon benefits calculation and verification; and, income stream innovations that result in increased sales from farms and forest lands that use and promote climate-smart practices.

Partners:

Pasa Sustainable Agriculture (serving the Mid-Atlantic and Northeast US) humbly submits this proposal in partnership with Carolina Farm Stewardship Association (North and South Carolina), Community Involved in Sustaining Agriculture (Massachusetts), farmOS (national), Future Harvest (Chesapeake region); Maine Farmland Trust (Maine); Maine Organic Farmers and Gardeners Association (Maine); Northeast Organic Farmers Association (Connecticut, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont and in partnership with the Pocasset Pokanoket Land Trust on behalf of the Pocasset Wampanoag Tribe); OpenTEAM (national); Our-SCI/SurveyStack (national); Ramapough Culture and Land Foundation on behalf of the Ramapough Lenape Indian Nation, the Nanticoke Lenni-Lenape Tribe, the Nanticoke Lenni-Lenape Tribe, and the Powhatan Renape Tribe; with the additional support of regional agencies, farmers, and community members.

Project Management Capacity:

For Pasa's 30+ year history, we've been an organization of farmers cultivating environmentally sound, economically viable, community-focused farms and food systems. We manage multiple large federal grants and subawards annually and provide farmer stipends and relief payments. We promote climate-smart activities by conducting two of the largest and most respected farm-based research projects in the nation (Soil Health Benchmark Study[1] with more than 6

[1]https://pasafarming.org/wp-content/uploads/2021/03/Soil-Health-Benchmarks-Report-2021_Digital_Compressed.pdf

years and 200 farms voluntarily monitoring and improving their soils; Financial Benchmark Study[2] comparing detailed financial records of vegetable farms at a variety of scales; annually hosting a successful conference with thousands of attendees (majority-farmer); hosting nearly 100 workshops and webinars each year; and, running three Department of Labor & Industry registered farming apprenticeship programs, actively training the next generation of climate-smart farmers. Pasa's own field-based staff have many years of experience implementing and providing technical assistance for climate-smart practices, including cover crops, no-till, soil health improvements, agroforestry practices including alley cropping, riparian buffers, and many others. We market climate-smart commodities by directly connecting farmers with buyers through the national Buy Fresh Buy Local brand, our FoodShed Mapping tool, and consumer marketing and education events. Our robust internal systems and protocols result in regular consulting for peer organizations. 72% of our board farms and 58% of our staff currently or previously have farmed. Collectively, the partners on this project represent more than 200 years of experience serving farmers (see individual letters of support for more information on partner project capacity).

Meaningful involvement of small and/or historically underserved producers:

We highly encourage you to review the many, many farmer letters of support we received for this proposal. Approximately 17,400 of the 20,000 farms we collectively serve with our partners are small-scale, and we reach more than 3,600 farmers who identify as BIPOC and 10,600 as women. **Through this project, we will serve a minimum of 250 farmers who identify as women, 50 who identify as BIPOC, 200 beginning farmers, and 50 veterans.** We want to make certain this grant opportunity breaks the record for accessibility, relevance, and meaningful impact for small and historically underserved farmers and forest landowners (or lessees with secure long-term leases). Pasa's membership of 7,500 reflects a younger, more diverse farming population than the farming population at large: they report to be 53% female, 25% veterans, 32% under 35, 20% immigrant or first-generation, 18% BIPOC, 57% have farmed less than 10 years, and 87% have annual farm sales under $350,000 (smallholder). While the majority of the farmers in this project are small-scale and highly diversified, 13% are mid to large-scale or not diversified. We also have a considerable number of Amish and Mennonite farmers being served through our organizations.

Meaningful involvement of underserved/minority-focused partners:

The historically underserved farmers we work with are our primary partners. While nearly every organizational partner on this proposal supports historically underserved farmers, Future Harvest, Pasa, NOFA-MA partner the Pocasset Pokanoket Land Trust on behalf of the Pocasset Wampanoag Tribe; and NOFA-NJ partner the Ramapough Culture and Land Foundation, on behalf of the Ramapough Lenape Indian Nation, the Nanticoke Lenni-Lenape

[2]https://pasafarming.org/wp-content/uploads/2021/08/financial-benchmarks-for-direct-market-veg-farms_2021-report.pdf

Tribe, the Nanticoke Lenni-Lenape Tribe, and the Powhatan Renape Tribe; are either BIPOC-led or directly and intentionally serve BIPOC farmers and farm workers.

We acknowledge that "climate-smart" practices are, in essence, indigenous practices.[3] With the forcible removal of indigenous communities, especially along the east coast of the United States, loss of knowledge and experience with indigenous growing practices serve as additional harm to food sovereignty. Through this project and under the guidance of Chief Vincent Mann of the Ramapough Lunaape Nation Turtle Clan, indigenous farmers from multiple East Coast tribal nations will learn from other Indigenous farmers, deepening their knowledge and opening markets.

Compelling Need:

Climate Scientist and Pasa keynote speaker, Dr. Rattan Lal[4] estimates soils globally could sequester 1.8 to 4.4 gigatons of carbon each year for the next 50 to 100 years with the implementation of regenerative agriculture practices. This has enormous implications for all of us, not just farmers. According to the Natural Resource Defense Council, "each 1% increase in soil organic matter," achievable on farms through intentional soil health improvements, "enables retention of an additional 20,000 gallons of rainfall per acre."[5] This is rainfall that would be impacting entire communities downstream. **It's a compelling story, "Purchase my strawberries, asparagus, and chicken because I implement climate-smart practices that build soil organic matter and soak up more rain, which lowers insurance rates because you'll be less impacted by flooding from extreme weather."**

This proposal will serve farmers along the east coast of the United States. In most cases, their sales market is direct, as farmers retain more of the sale dollar (due to the absence of mid-chain engagement)[6]. Especially in times like the COVID pandemic when distribution systems are highly disrupted, there is vast potential for an ever-growing direct-sales customer base. Chatham University and Pasa surveyed farmers to get at the impacts of the pandemic on their economic performance.[7] "Initial forecasts predicted severe financial losses for small and midsized farmers as the COVID-19 pandemic disrupted usual market channels nationwide. [However]…farms that were able to increase direct-to-consumer sales maintained or increased their total revenues." The realities of a changing climate will have similar impacts. Large, monocropping systems that are hard-hit by extreme weather can't serve the local customer the way a highly diversified farm can. However, in the broader marketplace, that local farmer has to compete against many market challenges including other types of farms and commodities being much more highly subsidized. **The climate-smart designation provides a market advantage that encourages expanded implementation and continued maintenance of practices, even beyond the life of this project.**

---

[3] https://vimeo.com/468344064
[4] https://pasafarming.org/speakers/dr-rattan-lal/
[5] https://www.nrdc.org/experts/lara-bryant/organic-matter-can-improve-your-soils-water-holding-capacity
[6] https://sarep.ucdavis.edu/sustainable-ag/direct-marketing
[7] https://www.foodsystemsjournal.org/index.php/fsj/article/view/1037

The National Agricultural Statistics Service recently released highlights from the 2020 US Local Foods Survey[8]. From this, we know that US direct farm sales is a $9 Billion industry. Our project includes 4 of the top states in the nation for direct farm food sales (Pennsylvania - $600M, New York - $555M, Maine - $342M, and Massachusetts - $254M). Regionally, the northeast has the most farms engaged in direct sales of food at 26,707 farms: 9 of the 15 states in this project account for $2.5 Billion in sales alone.

These farms stand to create replicable successful climate-smart models for farms across the nation. Collectively, these farms own or lease 2,500,000 acres of farmland and many are early adopters of ecologically-sound farming. They identify as sustainable agriculture farmers, across a broad spectrum that includes conventional no-till row crop farmers, organic produce farmers, regenerative pasture-based livestock farmers, and many others uniquely situated along this spectrum.

Climate-Smart Practice	Currently Implement	Would Implement
Agroforestry	31%	52%
Reforestation	24%	50%
Cover Cropping	72%	19%
Cropland Tree Planting	29%	48%
Low or No Till	65%	23%
Improved Soil Health	77%	90%
Improved Forest Soil Health	14%	58%
Manure Management	44%	19%
Nutrient Management	53%	36%
Managed Pastures	32%	29%
Planting for Carbon Sequestration	17%	67%
Soil Amendments	37%	58%

Pasa recently conducted a survey with 120 respondents (Pennsylvania farmers pictured at left) **regarding their existing practices and/or willingness to expand to new climate-smart practices.**

These farmers are already willing and interested, so we believe USDA investments climate-smart practices won't evaporate when contracts are up, or commodity prices fluctuate. They are more likely to become permanent improvements.

We were thrilled to learn that 100% of our farmers already implement at least one climate-smart practice *and* are highly interested in implementing several more climate-smart practices immediately.

While the vast majority of our farmers are interested in this project from a climate stewardship commitment, as you will see in the accompanying farmer letters of support, farmers recognize it makes economic sense to install climate-smart practices, even if a minority may not fully embrace that climate change is largely impacted by human activity.

Through this project, as with all our services, we aim for solutions to be voluntary, flexible, and led by producers. We meet farmers where they are and, together, we take grassroots approaches and create grassroots solutions.

[8]https://www.nass.usda.gov/Publications/Highlights/2022/local-foods.pdf

We've learned that the most powerful tool for farmer change is peer-to-peer learning and the right balance of technical and financial support.

Financial Benchmark Study: Pasa conducts a Financial Benchmark Study for direct-market vegetable farms, concluding that more profitable farms have more than 20% revenue from "other enterprises'', like agroforestry, and increasing revenue per acre is one of the main pathways we uncovered for farms to increase their income. We see enormous potential for the Financial Benchmark Study to inform this project, providing farmers and their peers with the ability to monitor, verify, track, and compare climate-smart commodities through the supply chain and then connect those efforts to specific financial changes, offering small to mid-scale and traditionally underserved farmers with an enormous market advantage. We offer farmers simple and effective farm financial record-keeping tools that help farmers organize and interpret that information in ways that are both meaningful and valuable to all study participants, setting them up for long term success, including by tracking carbon benefits and the corresponding sales numbers for farm-produced "climate-smart" products.

76% of farmers surveyed (N=120) expressed interest in our Financial Benchmark Study which provides a means for cleaning up farm finance management for transparent tracking of sales of on-farm products and also provides them with data analysis and reporting that compares them to their peers (anonymized) and they can easily gauge the impact of their climate-smart sales on their bottom line. While not a requirement for participation in this project, all farmers will be eligible and the tools of these studies provide excellent resources for farmers to utilize over the five years.

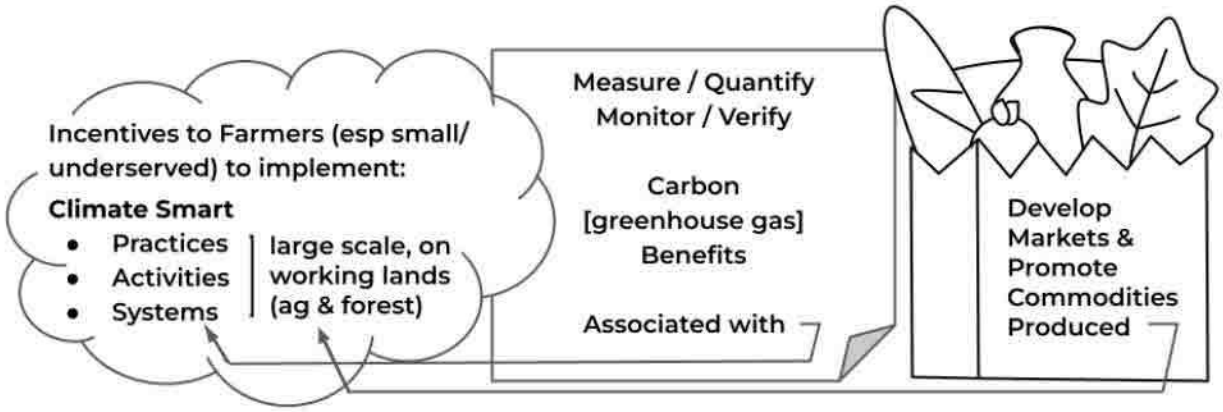
Soil Health Benchmark Study: Our Soil Health Benchmark Study is a community science project that began in 2016. Today, we have 200 farms participating in multiple states. The study lets farmers comprehensively assess the health of their soils, and see how their soil health data compares to the data of their peers. By identifying soil health benchmarks, this project gives farmers a much clearer picture of whether their sustainable soil health management techniques are achieving their intended results, or if there's room for improvement. Additionally, the participatory nature of this study provides farmers forums to discuss their soil health management strategies, and collaborate to develop innovative yet practical solutions to common soil health issues.

93% of farmers surveyed (N=120) expressed interest in participating in our Soil Health Benchmark Study which is an excellent entry point and foundation for participation in this project and provides farmers with data analysis and reporting that compares their results to that of their peers (anonymized).

To create early successes and build farmer cohorts, we will enroll an additional 300-550 farms in our Soil Health Benchmark Study throughout the 15-state region. A subset will participate in our Financial Benchmark Study, additionally adding capacity for tracking sales of climate-smart commodities. Pasa and partner technical service providers, state and federal conservation agency staff, and private consultants will all be leveraged. This approach will increase collaboration and reduce the overall cost to implement climate-smart practices, since the carbon benefits calculations, sales tracking, and marketing resources will be integrated into

reports and learning circles farmers are already connected to. And, 92% of the 200 farmers in our studies return annually.

Project Plan:



This project aims to build upon the internal capacity of local technical support at sustainable agriculture organizations across the 15-state region to directly serve farmers to implement climate-smart practices, galvanize consumer demand and open up new climate-smart markets.

Pasa will work with internal and partner TSPs to design farm-specific plans in close collaboration with the farmers to improve carbon sequestration / reduce GHGs, and increase economic benefits, while utilizing USDA's approved climate-smart practices. TSPs will provide guidance and approval for accessing implementation support and each local organization will approve plans for funding.

Pasa will be providing technical assistance through eleven internal technicians as well as working with contractors (we have reviewed and will comply with 3 CFR 200.320 as it relates to procurement), as described in the budget narrative. Additionally, each of our partners will be adding technical assistance positions to expand the number of staff available for on the ground assistance for farmers. This will substantially increase the number of historically underserved farmers and growers able to participate in our program and greatly extend our reach throughout the region. Pasa already uses this collaborative approach: we host train-the-trainer events to ensure that collection methods for our Soil Health Benchmark Study are consistent from Maine to Pennsylvania to South Carolina. We are confident that our increased internal capacity will serve the region well and result in an increase of Climate Smart growing practices for years to come.

Pasa will cover up-front implementation costs, provide marketing materials and training, as well as technical guidance and support. Based on current trends, which involve less intensive levels of support, we expect that each participating farm will realize an immediate economic boost of 3% with a goal of 5-20% over the life of the project. We also recognize that some climate smart practices take several years to show an impact and that many buyer relationships can take years to establish. Therefore, in the next section we estimate the longer-term benefits to growers who participate in this project.

We will accomplish these aims by:

- encouraging every farmer to see themselves as a valuable player in the global climate strategy and to have a deepened understanding of the economic and environmental benefits of climate-smart practices;
- demonstrating that farmers make excellent community scientists and enrolling any farmer who wishes our Soil Health and Financial Health research studies and peer-to-peer learning cohorts;
- advancing adoption of climate-smart practices on working farm and forest lands;
- improving access for farmers to comparatively monitor, verify, and analyze their own and peer farm-level carbon benefits;
- showing that farmers are highly motivated to contribute to and learn from an open-source data set;
- trace climate-smart carbon benefits through the supply chain, from farm to plate;
- promoting equitable participation of farmers including smallholders, early adopters, and those who have historically been underserved;
- supporting indigenous communities to teach traditional climate-smart practices to their peers;
- including farm types not easily translated into “commodity” types, such as diversified, specialty crop, urban and agroforestry-integrated;
- clearly identifying environmental co-benefits of climate-smart practices like water quality, soil health, and ecosystems resiliency;
- acknowledging the power of farmers to influence the purchasing decisions of their customers and increases markets for climate-smart commodities;
- and, catalyzing public-private partnerships to drive innovation.

These actions will lead to long-lasting impacts, far beyond this project as:

- partner organization will have increased capacity to provide technical support;
- farmers will have a regional network for peer-to-peer learning;
- more carbon will be sequestered than is happening currently;
- 1,275+ climate-smart projects, most involving multiple practices, will be implemented across the region, continuing to provide carbon benefits;
- farmers will have quantifiable metrics on economic and environmental benefits of climate-smart farming;
- buyers, including wholesalers, institutions, and consumers, will have increased access to and motivation to purchase from climate-smart farms; and

- increased interest in farm incentive-based climate-smart practice implementation.

Internal Controls:

In response to increased grant deliverables, resulting from multiple large federal grants and theassociated controls, Pasa is in the process of hiring a CFO. We project that we will have someone actively working in this role and supporting this project when this project begins.

Pasa is currently managing multiple federal grants over a million dollars each and has excellent financial controls in place to manage, track, monitor, and report on specific projects and their financials. Multiple steps of internal control and issue monitoring inform our system so that Pasa can respond as appropriate. Pasa works closely with our financial institution along with Pasa's external accountant, external financial advisor, and external auditor to ensure that our system meets or exceeds every expectation of the project's fiscal controls. Annually we demonstrate a clean single audit. We have already begun consulting with our auditor on this project with their commitment to aid Pasa in maintaining strong fiscal controls. We plan to use their expertise as a valuable thought partner on managing the funds and financial systems required by this project. Our auditing firm has extensive experience working with large budget nonprofit organizations and will help us set up controls based on the federal compliance supplement associated with this grant opportunity.

Pasa's organizational leadership is committed to this project. We have the expertise and experience to successfully manage the grant funds and implement the project. Our financial and grants management systems are highly automated. We have written accounting policies and procedures, as well as a written account of internal controls that meet the requirements associated with 2 CFR §200.302. Pasa holds a Platinum rating from GuideStar for transparency.

Hannah Smith-Brubaker, Executive Director: Having previously served as Pennsylvania Agriculture Deputy Secretary, Pasa Executive Director Hannah Smith-Brubaker has experience managing annual budgets (over $75M), running multiple large-scale federal grants, overseeing staff, and working closely with regulations, certifications, and farmers. While serving as Deputy, one of Hannah's key achievements was negotiating multi-million dollar Agricultural Conservation Easement Program deed terms after years of impasse between the Commonwealth of Pennsylvania and the Natural Resources and Conservation Service. Hannah lends credibility and insight in working daily with farmers, as she is one herself. Hannah manages a 75-acre organic vegetable farm that integrates pastured livestock and multi-functional agroforestry practices, among many other climate-smart practices. Hannah will be accountable for ensuring that all project activities are carried out in a timely, cost-efficient, and responsible manner and will provide oversight of project partners, ensuring that farmers remain the focus and primary beneficiary of the project.

Christina Kostelecky, Operations Director, is an experienced grant manager having written and successfully managed a $34M grant to provide COVID relief funding to 47,000 farm workers among others. Christina will oversee many aspects of this project including human resources, budgeting, programmatic, and strategic decisions.

Rachel de Vitry, Grants Financial Manager is dedicated to all matters of finance related to grants, specifically in terms of internal tracking and controls.

We will track milestones and deliverables using various project management tools including Salesforce, a world class Customer Relationship Management tool with robust privacy controls. Within Salesforce we'll track individual farm progress, quantitatively and qualitatively, and upload photographic evidence, as well as narrative reports. Additionally, a grants manager will regularly review deliverables and fiscal reports related to this project and provide support to the project manager and team. This feedback loop allows Pasa to be iterative and responsive to needs. We will consistently review and expand evaluation practices as the project evolves and new opportunities are identified.

Plan for Measurement/Quantification, Monitoring, Reporting, and Verification:

Pasa collaborates with another awardee, OpenTEAM, in developing in depth protocols and methodology for the data collection, analysis and evaluation technology associated with our soil health benchmark study. We will deepen that collaboration to additionally monitor GHG. We see this synergy as an excellent way to work collaboratively with another grantee and test in real-life scenarios. While OpenTEAM is working with USDA to develop protocols associated with GHG emission reduction calculations, our budget for working with OpenTEAM is for developer hours associated with our unique needs for data collection, farmer data peer-to-peer learning and sharing, and analysis associated with our project and not duplicative of what they will be doing for their own project.

In the first year, all GHG quantification will be estimated through the COMET-Planner evaluation tool. In year two of the project, OpenTEAM will measure GHG using the Range-C Monitoring Program and Crop-C Monitoring Framework. These programs were co-developed with 35+ scientists, practitioners, and USDA agency staff to be rigorous but accessible for monitoring carbon by Technical Service Providers and farmers.

By providing farmers with stipends, we'll empower our farmers to learn, measure, and increase their GHG reductions over time. Through our on-the-ground TSP staff and staff of our partners, we'll monitor and verify practice implementation, GHG benefits, and carbon sequestration. Pasa will implement a mobile-friendly database that allows all internal and partner TSPs to capture progress, tracking, and challenges in real time. This tool allows TSPs to photograph and annotate trouble areas, progress, and general activity on each farm they visit. This provides photographic evidence as well as a visual tracking mechanism for implementation over time.

Pasa implements data tracking through farmOS and SurveyStack which have standard and customizable data structures for environmental and practice monitoring to meet the production system-specific needs. Our farmers particularly appreciate that these tools integrate with Cool Farm, COMET-Farm, Cover Crop Explorer, and a customizable benchmarking data dashboard called the Farmers CoffeeShop. OpenTEAM is currently

working with USDA to expand the Modus soil standards[9], including soil health indicators. This integration will allow us to not only monitor, verify, and drive our carbon sequestration and greenhouse emission reduction data but will also include carbon benefits scores on farmers' annual reports. The goal is always to start conversations in the community, encourage knowledge sharing, and improve the information cycle. The end product is a participatory, peer-to-peer community built on comparable data and open discussion interested in adopting climate-smart practices. We will be measuring, monitoring, and verifying carbon/GHG data through these highly accessible tools.

Our farmers have proven, through their existing 7-year commitment to Pasa's Soil Health Benchmark Study, their willingness to provide documentation and share results. Farmers are eager to learn from each other and implement cost-effective Climate Smart farming solutions that increase their bottom line and attract buyers.

In summary, verification will be a combination of minute data comparison with our OpenTEAM partners as well as high level photographic evidence through field visits by farmers and TSPs throughout the region.

The specifics on the OpenTEAM protocols that we will build off of:

Pasa will be partnering with Open TEAM for the Measurement, Monitoring, Reporting and Verification (MMRV) aspects of our proposal. We will be utilizing the protocols as outlined in the OpenTEAM MMRV plan for ACTION for CSA (Alliance to Catalyze Transition Incentives through Open Networks for Climate Smart Agriculture). OpenTEAM's MMRV partnerships: California State University - Chico, CARCD, Carbon A-List, Green America - Soil Carbon Initiative, OpenTEAM Field Methods Working group (More than 30 other members including the Pasa Sustainable Agriculture community), Point Blue Conservation Science, University of California - Davis.

OpenTEAM is facilitated by Wolfe's Neck Center for Agriculture and the Environment and is a community-driven, soil and climate-focused initiative. OpenTEAM and its more than 45 members, including large food companies, foundations, research universities, NGOs, government agencies, ag tech providers, and a diverse network of farming and ranching networks and organizations, have co-designed, built, and financed a free and open source digital equity toolkit that provides a framework for universal access to agricultural knowledge responsive to the needs of producers, purchasers, governments, and markets. OpenTEAM convenes more than five active working groups and hundreds of skilled professionals in cross-disciplinary national and international teams. OpenTEAM serves as a technology steward, convener, and technical facilitator that also operates with an MOU to facilitate data open-source interoperability with USDA NRCS Systems such as CART and PODS.

[9] The defined terminology, agreed metadata, and file transfer format that has grown from a need to exchange, merge and trend agricultural testing data.

ACTION leverages national producer networks represented by Alliance members first across three regions: West with a focus on California (CA), Mountain and Midwest with a focus on Colorado (CO), and the Northeast with a focus on Pennsylvania. PLEASE NOTE that while the OpenTEAM proposal includes the Northeast, their proposal budget includes the development of the ACTION for CSA protocols and the Pasa Sustainable Agriculture budget includes development dollars specific to our farms' needs as well as to fund OpenTEAM Fellows who will be stationed within the partner organizations associated with our project, helping to implement the ACTION MMRV protocols. So, the work activities are not duplicative at the farm level. This model builds on the proven OpenTEAM framework for regional hub development and is designed to meet, adapt to, and advance each region's production type, markets and TSP landscape. The system has also been designed to be compatible and help support Local Working Groups and State Technical Committees, and national conservation cost accounting and prioritization feedback processes. OpenTEAM's system is concurrently being piloted by the National Conservation Planning Partnership (NCPP).

With ACTION, TSPs will be equipped with tools and training for common onboarding processes used to generate baseline MMRV and project plans to support Digital Certification. The common onboarding training enables TSPs to help producers use the same data to 1) Access transition incentive programs, 2) Generate RegenScore or compatible Environmental Asset Claims, 3) Help Buyers provide incentives to support Scope 3 emissions claims (cleared through the Environmental Claims Clearinghouse service), and 4) Support Digital Certification. ACTION will provide MMRV by expanding the capacity of existing TSP and equipping them with updated training and cutting-edge technological support systems. Verification and reporting of practice implementation will be tracked with a unique scoring system developed by R1A (see below). In-field monitoring of carbon associated with climate-smart management will be conducted on all 1000 projects using a collaboratively developed, scalable monitoring framework. This framework (The Range-C Monitoring Framework) was co-developed with 35+ scientists, practitioners, and USDA agency staff to be rigorous but accessible for monitoring carbon by TSPs and producers alike. A companion Crop-C Monitoring Framework will be developed and deployed as part of this project in a similar way. Fundamental development activities for the Range-C and Crop-C Frameworks supported by this proposal will bolster the success of other applications as well which are proposing to use the frameworks. A key component of data collection via monitoring and measurements is data storage and ownership. OpenTEAM has developed the Ag Data Wallet prototype with the AgStack/Linux Foundation, Digital Green, Our Sci and FarmOS to create a system that gives complete control and data sovereignty to producers while also maximizing the value of shared data through efficient, secure, and cost-effective management tools. The technology enables farm-level data portability, as well as interoperability across systems to enable the measurement, verification, and reporting of on-farm outcomes and the ability to aggregate data across projects from local to national scale.

ACTION's quantitative approach involves both ecological and financial disciplines to quantify both costs and economic and ecological outcomes. Point Blue Conservation will be leading the field sampling and modeling program consistent with current collaborative projects with the CSU COMET team, MadAg and other OpenTEAM members. Expected carbon gains

associated with all projects will be initially estimated using COMET-Planner. To verify these estimates, carbon stocks for each project will be monitored using the Range-C or Crop-C Monitoring Frameworks. These frameworks include flexible but rigorous protocols with minimum standards, fit-for-purpose design decisions, and a transparent inference scoring system.

The Standard Operating Procedures (SOPs) administered by TSPs during the baseline and planning process will also enable a unique, state-of-the-art scalable carbon monitoring system, including the Range-C Monitoring framework and the creation of the Crop-C monitoring framework. The framework, developed via a collaborative process, provides guidance for TSPs and land stewards on the selection of monitoring design, sampling protocols, and measurements, to detect the influence of management practices on carbon.

Pasa will partner with sustainable agriculture organizations, each with exemplary technical support capacity, to collect and aggregate farmer data and report on the benefits per farm, per project, and per dollar expended. Through soil testing and field records collected each year, we will also be able to calculate the benefits per commodity produced and the anticipated longevity of these benefits. All farms in our project receive regular on-the-ground support and follow-up in response to questions regarding their field records. This leads to deep trust in the integrity of our project and a better working knowledge of the farm. Our ability to connect farmers to other farmers with similar challenges or with desirable outcomes is a major benefit to our proposal.

We will be consulting the national and state-level practice standards for each practice to ensure that general guidelines are met and the appropriate resource concern is addressed. In cases where a state-level practice exists, we would follow that standard, making some modifications for unit pricing where necessary. We will also provide feedback to the state NRCS office on suggestions for modifications or improvements for wider practice adoption. In cases where there is no state-level standard, such as in Pennsylvania which has no practice standard for silvopasture, we will look to the federal standard. NRCS practices and codes include:

- **Soil Health, Code Numbers 327, 328, 329, 332, 340, 345,386, 393, 412, 484, 585, 601, 603 (inclusive of all CSP Enhancement Codes)**
- **Nitrogen Management, Code Number 590 (inclusive of all CSP Enhancement Codes)**
- **Grazing and Pasture, Code Numbers 512, 528, 550 (inclusive of all CSP Enhancement Codes) and (382) Fence, (516) Livestock Pipeline, and (614) Watering Facility, only in conjunction with the aforementioned grazing and pasture codes and/or where grazing practices include the hereinafter mentioned agroforestry codes.**
- **Agroforestry, Code Numbers 311, 379, 380, 381, 390, 391, 422, 612, 645, 650 (inclusive of all CSP Enhancement Codes)**
- **Restoration of Disturbed Lands, Code Numbers 453, 543, 544 (inclusive of all CSP Enhancement Codes)**
- **Irrigation Water Management, Code Number 449 (inclusive of the CSP Enhancement Code)**

We envision the possibility of converting land from annual crops to perennial pastures and installing permanent fencing such as through (382) Fence, (516) Livestock Pipeline, and (614) Watering Facility. We have received significant feedback from our farmers that they are much more successful at transitioning to permanent pasture for grazing with the addition of permanent perimeter fencing and we want to set them up for success. Permanent perimeter fencing will be used only as a supplement to other NRCS climate smart practices mentioned above and not as a stand alone practice. Whole farm plans that involve Fencing, Livestock Pipeline, and Watering Facility will need to prove the justification for this practice, along with the other farm practices to be implemented. Other disturbance below the plow zone is unexpected.

We will not be working with concentrated animal feeding operations. Should anyone request such funding, we will refer them to their local NRCS agent.

We will likely be looking to convert vacant city lots and other underused spaces to agricultural production. We will not, however, convert existing woodlots or forested land to agricultural production unless it is a fully integrated practice such as silvopasture where livestock can be integrated into existing woodlots. We will minimize or prohibit tree removal wherever possible. It is also possible that a beginning farmer would secure land that is currently not in production but is zoned agricultural. We would not be able at this time to confirm whether this will occur.

Generation of verifiable greenhouse gas reductions and carbon sequestration:

We're excited to partner with leading open-source data platforms at the forefront of measuring and reporting on GHG reductions and carbon sequestration. FarmOS's motto is to "collect data once and use it many times". **Since farmers are already capturing important data points that matter to them, we'll be able to use that information to analyze and report back on their farm's ability to sequester carbon. Our farms are eager to verify what levels of reduction are probable and possible- setting us up to create highly replicable case studies from real working farms.**

We've seen many instances, particularly in the peer-learning cohorts affiliated with our Soil Health study, of a farmer willing to implement increased climate-smart practices when their neighbor has gone before them and shows documented proof of the results. Our team is well-versed in scientifically-rigorous methodology and data collection. Our technology partners will integrate customized tools like COMET-Farm to further enable verification of GHG reductions. Our TSPs will spend time on farms truthing the projects and their implementation.

The National Academy of Sciences estimates that regenerative agriculture can sequester 250 million tons of carbon dioxide in the U.S. annually.[10] This works out to approximately .25 tons per acre. This estimate is comparatively low to prevailing estimates of .5 tons/acre/year for GHG emissions overall. Grant partner OpenTEAM is using .5 in their work with USDA to standardize the calculation across farm type. As a starting point, we believe that farms in this

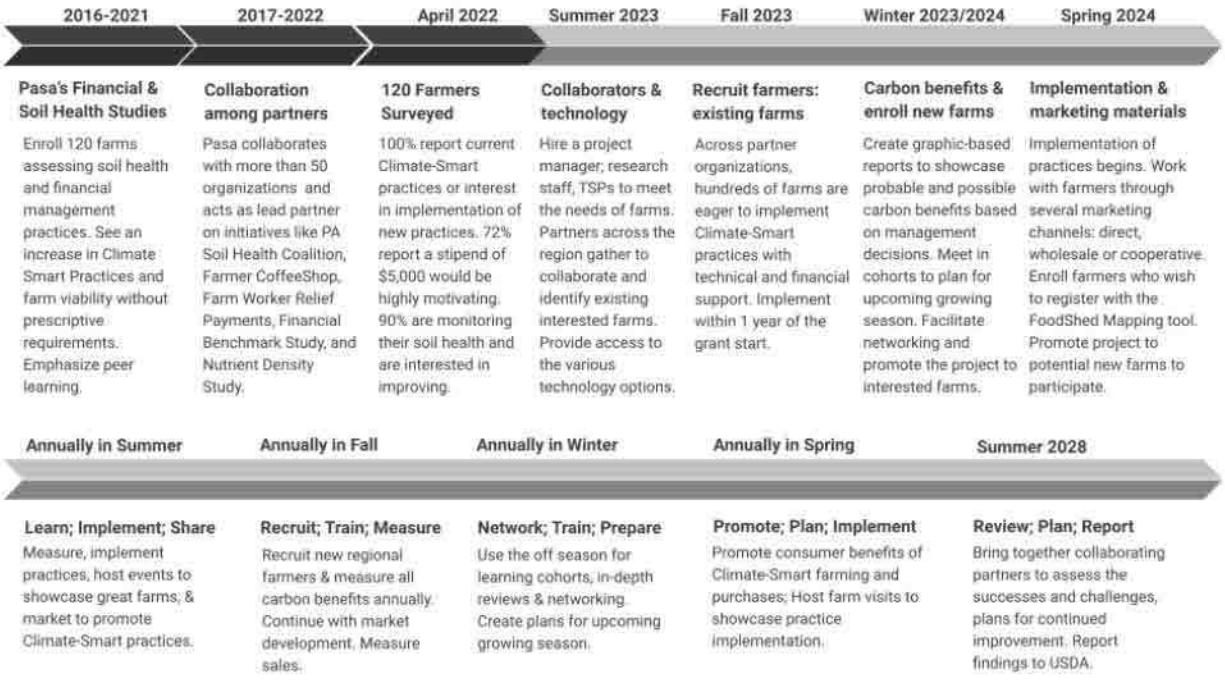
[10] https://www.nrdc.org/experts/arohi-sharma/nrdc-report-pathways-regenerative-agriculture

project stand to sequester approximately 367,500 tons of greenhouse gas emissions over the five years of the project. Pasa's farms average 135 acres. We are estimating an average of 75 acres per farm will be impacted in some manner by climate-smart practice implementation. Figuring 1,000 farms will be involved in some manner (from simple tillage reduction resulting from soil sampling data at no cost - to cover cropping at a nominal cost - to agroforestry at the maximum allowable project implementation cost) in the first year and up to 2,200 in subsequent years, we calculate 735,000 total acres at .5 tons/acre/year in reductions, totals 367,500 tons sequestered.

Please note: These are pre-baseline numbers which we expect to revise once the baseline is established. In our first year, we will establish benchmarks to provide more probable baselines for GHG calculations.

Year	# of farms	AVG Acres	Total Acres	Per Acre GHG	Subtotal
1	1,000	75	75,000	0.50	37,500
2	2,200	75	165,000	0.50	82,500
3	2,200	75	165,000	0.50	82,500
4	2,200	75	165,000	0.50	82,500
5	2,200	75	165,000	0.50	82,500
			735,000		367,500

Anticipated timeline:



Post-project potential, including anticipated ability to scale project activities, likelihood of long-term viability beyond project period, and ability to inform future USDA actions to encourage climate-smart commodities:

Over several years, climate smart practices will become fully integrated into management practices. Therefore labor and maintenance costs decrease and related benefits are realized. For example, riparian forest buffers and silvopasture take several years to become established and provide extra benefits like shade for grazing animals which can eventually convert to improved feed conversion rates, increasing animal weights. Therefore, within 5 years of implementation, Pasa expects an economic benefit of 5-20% for participating farms. The number of climate smart practices implemented during this project are likely to have increased and lasting impacts well beyond the five years of the grant term. Additionally, Pasa takes very seriously our commitment to provide feedback and information for future USDA climate smart funding that is inclusive, practical, and an effective use of federal dollars.

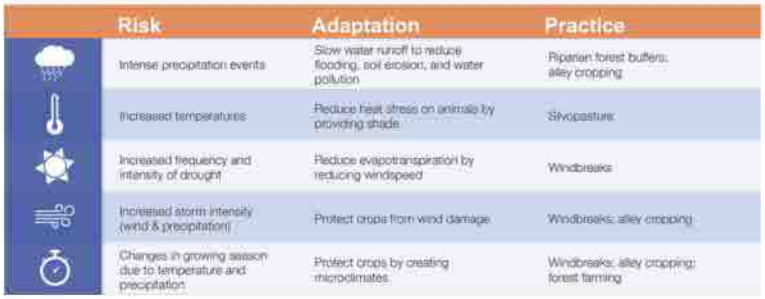
Farmers will:

- engage in soil testing to measure a comprehensive array of physical, biological, and chemical attributes, including changes in soil carbon;
- record field management activity, including tillage frequency and intensity, cover cropping, and inputs;
- work with their local TSP (hosted by Pasa or a partner organization) to develop a climate-smart practices assessment and implementation plan for their farm;
- implement climate-smart practices; and
- report on a number of financial indicators, including annual farm-produced commodity sales.

Farmers receive:

- subsidized soil health tests, analysis, and individualized reports, helping farmers set a course for carbon-beneficial farming practices;
- support from TSPs for planning and implementation of climate-smart practices;
- recommendations for continued progress on GHG reductions and future climate-smart practice implementation, beyond this project
- access to the OpenTEAM/FarmOS ecosystems and virtual Farmer's CoffeeShop;
- information and technical support tod improve their business model;
- a detailed benchmark report that shows how soil health and key financial indicators for their farm compare against similar farms
- connections to a learning community of farmers working to improve their business skills;
- financial support for practice implementation;
- scientifically rigorous monitoring and accounting, as well as tracking and verification reporting on climate-smart practice carbon benefit calculations;

- marketing support to direct target climate-smart-motivated wholesale, institution, and direct-to-consumer buyers
- graphic-based materials outlining the risks faced, adaptation strategies, and recommended climate-smart practices (see example image to right)[11]; and
- a broad peer network, across 15 states with regular in-person gatherings to compare and share.



Risk	Adaptation	Practice
Intense precipitation events	Slow water runoff to reduce flooding, soil erosion, and water pollution	Riparian forest buffers; alley cropping
Increased temperatures	Reduce heat stress on animals by providing shade	Silvopasture
Increased frequency and intensity of drought	Reduce evapotranspiration by reducing windspeed	Windbreaks
Increased storm intensity (wind & precipitation)	Protect crops from wind damage	Windbreaks; alley cropping
Changes in growing season due to temperature and precipitation	Protect crops by creating microclimates	Windbreaks; alley cropping; forest farming

In response to high demand, we will add both urban and agroforestry farmer cohorts. Managing soils on urban and rural farms is similar in the need to balance nutrients, pH, and water infiltration; it's also different in several ways. Urban farms often face highly degraded soils, toxic compounds, compaction, loss of organic matter, soil contamination, and low nutrient availability, and frequently involve imported soils with high rates of compost and/or media, where the impact of management may differ from traditional in-ground production. Understanding that relationship is critical to helping urban farms produce food in underserved communities. Pasa and several partners have long-standing relationships with urban farms who are eager to participate and implement climate-smart practices on their soils.

Agroforestry is the highest-rated practice among NRCS GHG and Carbon Sequestration Ranking[12]. Our agroforestry cohort will provide data to help us get at the probable and possible changes when converting cropland to perennial systems and converting bare riparian zones into multi-functional buffers. We will also work with farmers to enhance existing woodlots with supplemental tree and shrub nut and berry-producing species. 82% of our survey respondents say they're interested in expanding or implementing agroforestry practices.

The intersection of agroforestry and urban centers can be particularly impactful. "Food forests provide a wide variety of sustenance in a small space, and hit that double mark of community space and environmental improvement. Given all the intertwined benefits, it is no surprise that many are excited to implement forest gardens into urban settings."[13]

[11] Bentrup.G; MacFarland, K. (June, 2020). Agroforestry. U.S. Department of Agriculture, Forest Service, Climate Change Resource Center. www.fs.usda.gov/ccrc/topics/agroforestry
[12] https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/air/quality/?cid=stelprdb1044982
[13]https://www.fs.usda.gov/inside-fs/delivering-mission/deliver/agroforestry-urban-centers-benefit-people-and-chesapeake-bay

Examples of actual farmers' ideas of how the project could work for them:

Example Farmer #1 (current):	Example Farmer #1 (project engagement):	Example Farmer #1 (as a result of project):
• 6th year Soil Health collaborator • Participates in farmer learning cohorts • Utilizes the soil health marketing materials at a DC farmers market and to secure 5 NYC restaurant contracts and wholesales winter greens with Kimberton Whole Foods • Currently cover crops but would implement more climate-smart practices with the right amount of financial and technical support	• Works with TSP to develop a climate-smart implementation plan • Installs nut and fruit trees in pasture for sheep shade and fodder, erosion control and sequestration of carbon. Results in additional crops for sale and improved livestock feed conversion • Converts wettest fields to perennial pollinator habitat, increasing next field's yield • Marketing materials now include a carbon benefit calculation, fortifying sales	• Within 1 year, enhances existing, and installs additional, climate-smart practices • Within 3 years, contacted by 5 more restaurants who searched for climate-smart farmers through the FoodShed Mapping tool • Within 5 years, sells into a hazelnut and elderberry cooperative. • Regularly improves soil health via technical support and engagement in local peer learning circles

Example Farmer #2 (current):	Example Farmer #2 (project engagement):	Example Farmer #2 (as a result of project):
• Conventional no-till row crop farmer • Recently made the decision to transition to organic but wants to stay no-till • Recently enrolled in the Financial Health study and attended their first farmer learning cohort • Currently cover crops but would implement more climate-smart practices with the right amount of business planning, financial and technical support	• Compares notes on carbon sequestration strategies with no-till and low-till organic and conventional farmers with excellent soil health scores • Works with local TSP to develop a forest soil health plan to include grazing of invasive weeds, planting of curly willow to shade out weeds, as well as native trees and shrubs • After financial planning indicated promising markets, secures organic certification for row crops	• Within 1 year, installs additional climate-smart practices • Within 3 years, wholesales curly willow starts • Within 5 years, ID'd as "climate-smart" in the FoodShed Mapping tool as a micro nursery for tree saplings • Regularly improves financial health via engagement with peers through the Farmer's Coffeeshop, a benchmarking data dashboard

Plan to Pilot CSAF practices on a Large Scale:

Based on our experience with prior projects and historical rates of participation, we expect that 2,000 of the 20,000 farmers we serve will participate in this project and 500-750 will actually implement or enhance climate-smart practices on 60,000 to 122,000 or more acres, and we will verify and support them to sell to climate-smart-motivated customers. Pasa has 120 confirmed farmers eager to immediately implement climate-smart practices and measure their carbon benefits and we expect similar rates with our partners.

Plan to Develop and Expand Markets for Climate-Smart Commodities:

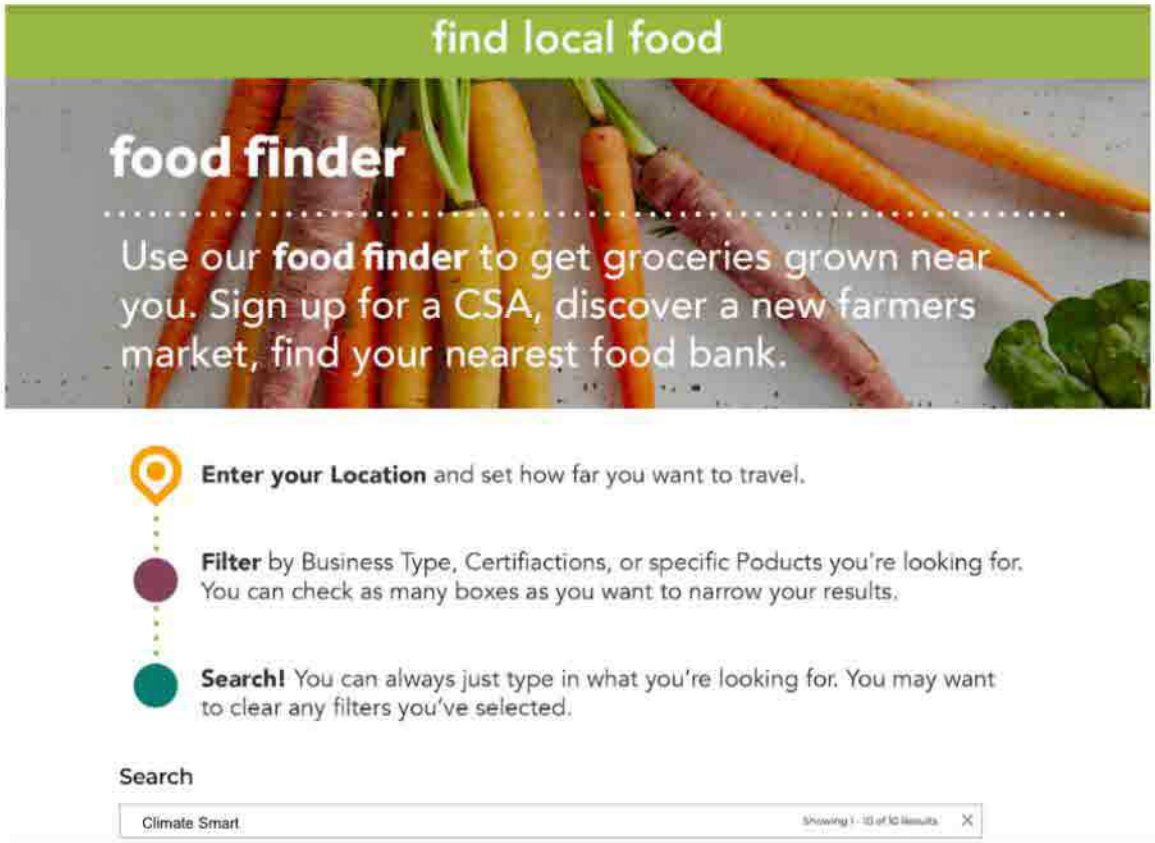
The vast majority of farms participating sell direct-to-consumer, direct-to-retailer/wholesaler, or direct-to-institution. The farms are typically diversified, potentially growing 50-100 varieties of products. Through Pasa's evolving Financial Health Benchmark Study, we track commodity movement through the supply chain at the farm-to-consumer level. Because most sales will originate with the farm and be sold directly to the buyer with no distributor in between, we anticipate that most farmers will measure increased sales only to their direct buyers, not through the supply chain as a whole, but where this does occur, we will provide a mechanism for the farmer to report on this to us.

We will (1) employ communications and marketing staff for project marketing including through storytelling and highlighting farm success stories (including photographic evidence captured through field visits throughout the region to show progress and visible changes over time, (2) contract with a marketing agency to develop and implement a marketing campaign centered on increasing regional climate smart product sales, (3) employ technical support staff to work directly with farmers to reach new markets, (4) provide subawards to partners for marketing technical support for their member farmers, (5) collaborate with partners across the region for marketing opportunities that reach beyond state borders and secure larger contracts, (6) expand our existing soil health farmer marketing materials, (7) work with cooperative development entities (i.e., specialty products such as tree fruits and nuts that often require farmers to work together to secure larger accounts), (8) expand our mapping technology for buyer ease of access to farmers, adding a climate-smart designation for the participating farms, including making the map available to partners and farms for integration into their own websites, (9) make business and financial planning technical support available to farmers through internal staff and contractors, and (10) where appropriate, customize marketing materials for individual farms. (We have reviewed and will comply with 3 CFR 200.320 as it relates to procurement.)

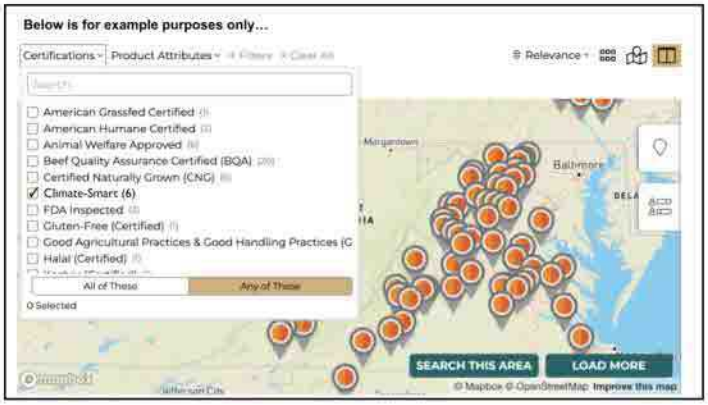
Given Pasa's extensive relationship with food policy councils, school districts, hospitals, buying clubs, farm market managers, and other market channels we know that we're meeting a need. Consumers are eager to purchase Climate Smart products-- both directly from farmers and through other points of the supply chain. For example, Pasa has a working relationship with a large cereal purchaser eager to market their products as Climate Smart. Through this regional Climate Smart designation, both larger purchasers and individual buyers will be able to quantify the impact of their purchase power.

We estimate that our targeted marketing campaign will lead to an estimated 8% increase in local purchases of Climate Smart agricultural products from participating farms. The estimated percentage comes from previous market research Pasa conducted in coordination with our current food system mapping efforts. Pasa is currently working with regional stakeholders (public, private, for-profit, and non-profit) to connect multiple large databases that represent agricultural supply chains. These connected databases will drive the development of a singular site experience for the end user, comprehensively connecting the regional supply chain. We are excited to develop a robust mapping system inherent to this data, allowing for full-scale development.

Pasa owns the domains localfood.org and climatesmart.org and will fully utilize these urls for the benefit of the farmers served through this project. Farmers will receive direct, customized marketing assistance appropriate to their marketing channels and outcomes. Providing farmers with data, language, technique, and technical assistance to talk about their practices will enable up to 2,000 farmers to more effectively market their products. Pasa has an excellent technical assistance and training track record. We host more than 60 regional events each year and will be adding several specific to climate-smart marketing. We will develop template and media kits to help farmers promote their products. Our robust marketing campaign will supplement farmer's limited marketing capacity. The marketing campaign will develop use-cases, slogans, imagery, and more specifically designed to increase regional Climate-Smart purchasing.



There is growing demand for climate-smart products in the region. Consumers increasingly expect transparency, localization, and climate-smart literacy of the farmers growing the food they source. Consumers in low food access areas or with limited financial means seek accessible, nutrient-dense food. Connecting the community-science climate-smart results discussed in the "measurements" section of this proposal with our FoodShed Mapping tool (in development and funded by the US Dept of Commerce) will enable buyers to search for and purchase from farms through a "climate-smart" tag. We are employing a digital platform and database of farm and food businesses. It coordinates local and regional food supply chains by matching farm products with demand. It was launched initially with the support and involvement of public and private partners that have included 21 land grant institutions. Pasa is also home to the national Buy Fresh Buy Local program and the many chapters across the project region support farmers at the farmers market and local foods marketing level.



Certain anonymized data from the Farmer's CoffeeShop (also see "measurements" section) will be available to collaborators, including consumers, and researchers to accelerate the development and expansion of markets for climate-smart commodities. To further connect climate-smart products with buyers, we will enhance the FoodShed Mapping tool through a REST API integration with this dataset to provide an exceptional user interface and experience.

Our farmers value sharing soil health outcomes with customers and stakeholders, especially when delivered via easy-to-digest graphic-based materials (see example below) and reports. For example, farmers are more likely to use Pasa's Soil Health Study customized infographic when talking with purchasers (as compared to lab-based soil test results alone).

Wholesale buyers/Institutions/Customers receive:

- the ability to easily locate farms designated as "climate-smart" through the FoodShed Mapping tool;
- with the farmer's permission, the ability to review a particular farm's climate-smart practices and improvements;
- increased transparency and traceability of climate-smart commodities through the supply chain; and
- the opportunity to purchase from "climate-smart" farms.

Farmers receive:

- financial, market development, and marketing technical assistance

- marketing tools to communicate the work they're doing to build soil health and their farm's carbon benefits;
- new and expanding market opportunities;
- sales and marketing support through local technical support from partners and service providers; and
- increased community visibility (including agrotourism, referrals, and press).

Many farms only have the ability to market through collaboration with other farms. Interested farms can receive a stipend to participate in cooperative learning academies with cooperative development centers local to their state where farmers learn how to form cooperative business structures and cooperative marketing opportunities.

In particular, cooperative marketing is necessary for enterprises such as nuts, fruits, and florals grown as part of agroforestry practices because the products require aggregation and distribution through large wholesale and processing channels. The states covered through this project are home to numerous burgeoning tree crop cooperatives that will benefit from better coordination and cooperation along the East Coast. Most farms with existing nut trees - hickory, black walnut, chestnut - do little with these crops. Establishing and organizing value-added producers through marketing efforts will incentivize keeping existing trees and adding new ones, augmenting income and sequestering additional carbon.

This cooperative model could be used as a case study and expanded throughout the nation to small and mid-scale urban and rural farms without requiring large infrastructure or complex engineering and management plans. Specialty crops from trees have the potential to foster ecosystem restoration and economic development simultaneously, at a time when environmental degradation and climate migration to Appalachia and New England are increasingly critical challenges to address. Low-maintenance, passive income projects based on cooperative marketing models will prove beneficial for many of our farms in the long term.

We are also seeing that innovative farmers across the region are working to increase domestic production of plant fibers for "climate-smart" clothing. Many commodity row crop farmers are looking to move into growing products that adapt well to a changing climate and meet growing clothing industry demand. We will support several trials throughout the region. This approach will provide a meaningful case study for commodity growers to switch to a high-earning, high carbon-sequestration, high-demand product and should be highly replicable in other states in the region. Flax, for example, is a low-input 100-day crop that grows well in our region, fits nicely into rotation on diversified farms, and brings a good price on the market providing a cash crop for farmers. Processing the flax into spinnable fiber and then into linen requires no chemical inputs, making it a climate-beneficial textile.

Estimating the economic benefits is difficult among highly diversified farms (for example, in our Financial Benchmark Study, both farm sales and profits ranged by degrees of magnitude among participating farmers), but it is clear that all farms will benefit economically, even within the short term. Farms who participate in our studies and marketing report increased profits over

time[14]. With the added benefits of climate-smart marketing and galvanizing an untapped market of climate-smart-motivated consumers, our farmers are eager to both participate and measure the effects of their work. Both market and carbon benefits will be long-lasting and will set up more farmers to be involved in carbon-smart farming. All farmers will provide sales data to track carbon benefits from farm to plate. **This project aims to increase revenue per acre across all farm types by distinguishing farmers who are diversifying into climate-smart commodities in the marketplace.**

Throughout the project, we will report on:

- the number of farmers/forest landowners/lessees participating;
- our ability to equitably enroll a diversity of collaborators;
- which practices are being implemented and the financial and technical assistance provided to collaborators to implement them;
- further discovery and analysis of innovative MMRV systems and how they are working for farmers;
- the marketing, outreach, and trainings conducted;
- a verified calculation of greenhouse gas reduction, carbon sequestration, and practice co-benefits;
- supply chain, demand, traceability, and economic impacts realized; and
- additional partnerships developed and leveraged.

Plan to provide financial assistance for producers/landowners:

Financial and technical support needs are the top barriers facing implementation of climate-smart practices. Anecdotally, we know that for each farm that successfully demonstrates implementation and quantifiable results, two neighboring farms are willing to follow suit. Through small incentives, many farmers can have an enormous impact on sequestering carbon and reducing GHG. 72% of our farmers report that, after covering the hard costs associated with implementation, even $5,000 or less would still be highly motivating. In this project, farmers recognize that there will be considerable new learning, implementation, management, and marketing demands to ensure their early years of investment are worth their time and effort. Our farmers are incredibly eager to implement exactly this type of work, to test out direct marketing of climate-smart practices, and measure the results associated with each practice. **Pasa and partners approve funding directly to farmers for practice implementation resulting from their annual plan. We will also cover technical support either through in-house expertise or from external technical support of the farmer's choosing, but within the cost range typical for NRCS cost-share. Additionally, farms will be eligible for marketing technical support and cooperative or independent market development support.**

Pasa has extensive experience providing stipends, relief payments, and scholarship funds to farmers. We recently created a regional system for accepting, reviewing, approving, and

[14] https://pasafarming.org/can-direct-market-vegetable-farmers-make-a-middle-class-income/

awarding over 1,000 COVID relief funds to farmers throughout the Northeast US. We annually process volunteer and scholarship applications and have the internal capacity and financial controls to effectively handle this project's planning, verification, and payment process.

Pasa does not anticipate any profit nor any program income.

Approach to minimize transaction costs associated with project activities:

41% of the project budget will go directly to farmers in the form of incentives and implementation costs, 30% towards technical support by contractors and service agencies (climate-smart planning, practice implementation, and marketing), and 19% to support climate-smart farmer-driven capacity of project organizations.

The climate-smart practices being implemented are cost-effective and long-lasting. They are easily replicated across farms in the region, and, as more practices are implemented, partner organizations gain more internal capacity to act as TSPs, thus decreasing the costs of implementation over time. This will result in a direct lasting benefit of highly trained TSPs spread across the region and well-versed in climate-smart state, private, and federal support. Additionally, TSPs will have established deep trust with regional farms and will be well suited to follow up and ensure projects remain viable beyond the project period.

Approach to reducing producer barriers:

Traditionally underserved farmers face proportionally higher access barriers, both to meaningful financial data and marketing expertise. This project addresses those access barriers, creates long-term viability beyond the project period, and elevates the region's farms as a whole. We know that creating and maintaining consistent records, properly interpreting, and then regularly and systematically using that information is trying at best, especially when those entrepreneurs have to develop those systems from scratch.

This project keeps support local and on-the-ground for farmers. Through accessible, trusted, localized technical service providers, our project will remove cost, marketing, and technical barriers that traditionally prevent farmers from implementing climate-smart practices. Each organization partner has relationships with small and underserved farmers. The financial and technical support provided through this project allows us to reward the early adopters by enhancing the farmer's existing marketing and sales, as well as to encourage new practice implementation by middle and late adopters, through our time-honored peer-to-peer networks which have been the most effective route to change-making on the farm.

Commitment to Equity and Justice Principles:

Pasa is committed to integrating diversity, equity, inclusion, justice, and anti-racism into our culture, programs, and services as well as ensuring we adopt the training, policies, practices, planning, and resources to do this work. The food system and all involved partners and farmers

are stronger, more resilient, and enriched as a result of these commitments. We will hold our partners accountable for these same commitments.

We are partnering with Indigenous peoples throughout the region to ensure culturally appropriate technical services and training. We are also partnering with Spanish-speaking farmers to provide language equity in our marketing, training, and outreach. Much of the project is of value to a more diverse community each time we overcome barriers to involvement and develop relationships.

Summary:

Through this project, we will provide farmers with reliable, accessible, and consistent technical support; incentivize climate-smart practices on farms, and calculate and verify carbon benefits. We will support farmers to generate additional profit by realizing the co-benefits of ecologically-sound farming practices; they will be equipped with the resources to do what they know to do best: grow food, feed, fiber, and fuel, all while being great stewards of our natural resources. This is an exciting opportunity to steward federal funding in a manner that empowers producers to monetize the paths that are right for them, right for the market, and right for the climate.

Attachment - Benchmarks Table

						Total Yr 1					Cumulative Total Yr 2					Cumulative Total Yr 3					Cumulative Total Yr 4					Cumulative Total Yr 5
		Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar		Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar		Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar		Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar		Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar	
Benchmark/Milestone	**Associated Activity, if applicable**	Qtr 1	Qtr 2	Qtr 3	Qtr 4		Qtr 1	Qtr 2	Qtr 3	Qtr 4		Qtr 1	Qtr 2	Qtr 3	Qtr 4		Qtr 1	Qtr 2	Qtr 3	Qtr 4		Qtr 1	Qtr 2	Qtr 3	Qtr 4	
Required Quantitative Targets by Quarter (Cumulative):																										
Number of producers involved	Producers involved at any stage of the project toward the end goal of marketing their products as climate-smart	12	50	200	250	**250**	300	350	450	500	**500**	550	650	950	1,000	**1,000**	1,100	1,200	1,400	1,500	**1,500**	1,600	1,700	1,900	2,000	**2,000**
Number of underserved producers involved	Underserved producers involved at any stage of the project toward the end goal of marketing their products as climate-smart	11	45	180	225	**225**	270	315	405	450	**450**	495	585	855	900	**900**	990	1,080	1,260	1,350	**1,350**	1,440	1,530	1,710	1,800	**1,800**
Number of acres involved	Tracking number of acres involved	360	1,500	6,000	7,500	**7,500**	9,000	10,500	13,500	15,000	**15,000**	16,500	19,500	28,500	30,000	**30,000**	33,000	36,000	42,000	45,000	**45,000**	48,000	51,000	57,000	60,000	**60,000**
Number of head involved (if applicable)	Tracking number of head involved (if applicable)																									
Dollars provided to producers via technical support	Provide technical support to farmers through research, farm planning, mmrv, marketing, etc	6,100	30,500	67,100	129,625	**129,625**	168,513	207,400	246,288	285,175	**285,175**	330,544	375,913	421,281	466,650	**466,650**	518,500	570,350	622,200	674,050	**674,050**	738,863	803,675	868,488	935,000	**935,000**
Dollars provided to producers via stipends	Stipends for practice implementation and marketing	0	0	297,808	1,489,040	**1,489,040**	2,233,560	2,978,080	3,722,600	4,467,120	**4,467,120**	5,583,900	6,700,680	7,817,460	8,934,240	**8,934,240**	10,423,280	11,912,320	13,401,360	14,890,400	**14,890,400**	16,751,700	18,613,000	20,474,300	22,335,453	**22,335,453**
Dollars provided to producers via scholarships	Scholarships provided (by Pasa and subawardee Future Harvest) for educational workshops, field days and peer-to-peer learning events	0	0	16,707	267,313	**267,313**	267,313	27,567	300,727	534,626	**534,626**	547,156	563,863	580,570	864,590	**864,590**	881,297	906,358	923,065	1,257,206	**1,257,206**	1,282,267	1,307,327	1,332,388	1,650,000	**1,650,000**
GHG Benefits (Metric Tons of CO2e Reduced or Sequestered)	GHG Benefits (Metric Tons of CO2e Reduced or Sequestered)	0	8,000	16,875	37,500	**37,500**	37,500	58,125	78,750	99,375	**120,000**	120,000	140,625	161,250	181,875	**202,500**	202,500	223,125	243,750	264,375	**285,000**	285,000	305,625	326,250	346,875	**367,500**
Number of new marketing channels* established	Marketing technical support	0	0	0	0	**0**	5	8	10	12	**12**	14	16	18	20	**20**	22	25	28	31	**31**	35	40	45	52	**52**
Number of marketing channels* expanded	Marketing technical support	0	45	110	250	**250**	300	350	425	500	**500**	600	700	850	1,000	**1,000**	1,100	1,250	1,300	1,500	**1,500**	1,600	1,750	1,900	2,000	**2,000**
Number of measurement tools utilized	☐ Satellite imagery or remote sensing ☐ Producer records or attestation ☐ Plot based sampling (soil, water, etc.) ☐ Soil sensors ☐ Ground level photos and videos ☐ Computer modeling ☐ Site or field visit ☐ Photos	1	4	7	7	**7**	8	8	8	8	**8**	8	8	8	8	**8**	8	8	8	8	**8**	8	8	8	8	**8**
Other Required Benchmarks that may be quantitative or qualitative:																										
Outreach, training and other technical assistance	Outreach- number of individuals reached - farmers and buyers/consumers	200	300	500	1,000	**1,000**	1,500	2,500	3,500	7,000	**7,000**	9,000	15,000	20,000	25,000	**25,000**	29,000	33,000	40,000	48,000	**48,000**	54,000	61,000	80,000	100,000	**100,000**
Outreach, training and other technical assistance	Training- number of individuals attend training	200	300	400	1,000	**1,000**	1,500	1,900	2,200	3,000	**3,000**	3,400	3,700	4,400	6,000	**6,000**	7,000	8,000	9,000	12,000	**12,000**	13,000	14,500	16,000	19,000	**19,000**
Outreach, training and other technical assistance	Other technical assistance will be captured in qualitative narrative																									
Other MMRV and supply chain traceability attributes	Tracking other MMRV and supply chain traceability attributes																									
Other measurements of work related to marketing of commodities	Other measurements of work related to marketing of commodities will be captures in qualitative narrative																									
Demonstrated engagement of major partners	Engagement with major partners	25	80	125	200	**200**	225	250	275	325	**325**	350	375	400	450	**450**	475	500	525	600	**600**	625	650	675	775	**775**
Climate smart technologies employed	Water infiltration capacity of soils	0	0	1	1	**1**	2	2	2	2	**2**	2	2	2	2	**2**	2	2	2	2	**2**	2	2	2	2	**2**
Pasa Unique items																										
# of applications received	Tracking applications received	100	145	200	1,200	**1,200**	2,000	2,400	2,600	2,800	**2,800**	2,900	3,000	3,100	3,500	**3,500**	4,600	5,200	6,700	7,700	**7,700**	8,200	8,400	8,700	9,000	**9,000**
% of underserved producers involved	Tracking percentage of underserved produced involved	80%	80%	80%	90%		90%	90%	90%	90%		90%	90%	90%	90%		90%	90%	90%	90%		90%	90%	90%	90%	
# of events provided	Tracking total number of climate-smart events	2	5	15	25	**25**	30	35	40	50	**50**	55	60	65	75	**75**	80	85	90	100	**100**	105	110	115	125	**125**
Projected Expenses		Qtr 1	Qtr 2	Qtr 3	Qtr 4	**Total Yr 1**	Qtr 1	Qtr 2	Qtr 3	Qtr 4	**Total Yr 2**	Qtr 1	Qtr 2	Qtr 3	Qtr 4	**Total Yr 3**	Qtr 1	Qtr 2	Qtr 3	Qtr 4	**Total Yr 4**	Qtr 1	Qtr 2	Qtr 3	Qtr 4	**Total Yr 5**
Total Direct Costs		1,276,093	1,552,447	1,614,602	2,084,516	**$6,527,659**	2,289,983	2,306,010	2,297,850	2,676,460	**$9,570,303**	2,771,670	2,862,437	2,824,838	3,594,049	**$12,052,994**	2,795,288	2,936,054	2,848,455	3,827,667	**$12,407,464**	2,781,099	2,913,298	2,829,167	4,005,879	**$12,529,444**
Indirect		95,513	79,549	79,664	84,656	**$339,381**	78,131	79,733	78,916	92,277	**$329,057**	83,613	92,690	88,930	126,350	**$391,583**	82,979	97,055	88,294	146,716	**$415,044**	84,017	97,237	88,823	166,994	**$437,071**
Total Budget		1,371,606	1,631,996	1,694,266	2,169,172	**$6,867,040**	2,368,114	2,385,743	2,376,766	2,768,737	**$9,899,360**	2,855,283	2,955,127	2,913,768	3,720,399	**$12,444,577**	2,878,267	3,033,109	2,936,749	3,974,383	**$12,822,508**	2,865,116	3,010,535	2,917,990	4,172,873	**$12,966,515**
	Cumulative budget total					**$6,867,040**					**$16,766,400**					**$29,210,977**					**$42,033,485**					**$55,000,000**

Attachment - Benchmarks Table

						Total Yr 1					Cumulative Total Yr 2					Cumulative Total Yr 3					Cumulative Total Yr 4					Cumulative Total Yr 5
		Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar		Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar		Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar		Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar		Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar	
Benchmark/Milestone	**Associated Activity, if applicable**	Qtr 1	Qtr 2	Qtr 3	Qtr 4		Qtr 1	Qtr 2	Qtr 3	Qtr 4		Qtr 1	Qtr 2	Qtr 3	Qtr 4		Qtr 1	Qtr 2	Qtr 3	Qtr 4		Qtr 1	Qtr 2	Qtr 3	Qtr 4	
Required Quantitative Targets by Quarter (Cumulative):																										
Number of producers involved	Producers involved at any stage of the project toward the end goal of marketing their products as climate-smart	12	50	200	250	**250**	300	350	450	500	**500**	550	650	950	1,000	**1,000**	1,100	1,200	1,400	1,500	**1,500**	1,600	1,700	1,900	2,000	**2,000**
Number of underserved producers involved	Underserved producers involved at any stage of the project toward the end goal of marketing their products as climate-smart	11	45	180	225	**225**	270	315	405	450	**450**	495	585	855	900	**900**	990	1,080	1,260	1,350	**1,350**	1,440	1,530	1,710	1,800	**1,800**
Number of acres involved	Tracking number of acres involved	360	1,500	6,000	7,500	**7,500**	9,000	10,500	13,500	15,000	**15,000**	16,500	19,500	28,500	30,000	**30,000**	33,000	36,000	42,000	45,000	**45,000**	48,000	51,000	57,000	60,000	**60,000**
Number of head involved (if applicable)	Tracking number of head involved (if applicable)																									
Dollars provided to producers via technical support	Provide technical support to farmers through research, farm planning, mmrv, marketing, etc	6,100	30,500	67,100	129,625	**129,625**	168,513	207,400	246,288	285,175	**285,175**	330,544	375,913	421,281	466,650	**466,650**	518,500	570,350	622,200	674,050	**674,050**	738,863	803,675	868,488	935,000	**935,000**
Dollars provided to producers via stipends	Stipends for practice implementation and marketing	0	0	297,808	1,489,040	**1,489,040**	2,233,560	2,978,080	3,722,600	4,467,120	**4,467,120**	5,583,900	6,700,680	7,817,460	8,934,240	**8,934,240**	10,423,280	11,912,320	13,401,360	14,890,400	**14,890,400**	16,751,700	18,613,000	20,474,300	22,335,453	**22,335,453**
Dollars provided to producers via scholarships	Scholarships provided (by Pasa and subawardee Future Harvest) for educational workshops, field days and peer-to-peer learning events	0	0	16,707	267,313	**267,313**	267,313	27,567	300,727	534,626	**534,626**	547,156	563,863	580,570	864,590	**864,590**	881,297	906,358	923,065	1,257,206	**1,257,206**	1,282,267	1,307,327	1,332,388	1,650,000	**1,650,000**
GHG Benefits (Metric Tons of CO2e Reduced or Sequestered)	GHG Benefits (Metric Tons of CO2e Reduced or Sequestered)	0	8,000	16,875	37,500	**37,500**	37,500	58,125	78,750	99,375	**120,000**	120,000	140,625	161,250	181,875	**202,500**	202,500	223,125	243,750	264,375	**285,000**	285,000	305,625	326,250	346,875	**367,500**
Number of new marketing channels* established	Marketing technical support	0	0	0	0	**0**	5	8	10	12	**12**	14	16	18	20	**20**	22	25	28	31	**31**	35	40	45	52	**52**
Number of marketing channels* expanded	Marketing technical support	0	45	110	250	**250**	300	350	425	500	**500**	600	700	850	1,000	**1,000**	1,100	1,250	1,300	1,500	**1,500**	1,600	1,750	1,900	2,000	**2,000**
Number of measurement tools utilized	☐ Satellite imagery or remote sensing ☐ Producer records or attestation ☐ Plot based sampling (soil, water, etc.) ☐ Soil sensors ☐ Ground level photos and videos ☐ Computer modeling ☐ Site or field visit ☐ Photos	1	4	7	7	**7**	8	8	8	8	**8**	8	8	8	8	**8**	8	8	8	8	**8**	8	8	8	8	**8**
Other Required Benchmarks that may be quantitative or qualitative:																										
Outreach, training and other technical assistance	Outreach- number of individuals reached - farmers and buyers/consumers	200	300	500	1,000	**1,000**	1,500	2,500	3,500	7,000	**7,000**	9,000	15,000	20,000	25,000	**25,000**	29,000	33,000	40,000	48,000	**48,000**	54,000	61,000	80,000	100,000	**100,000**
Outreach, training and other technical assistance	Training- number of individuals attend training	200	300	400	1,000	**1,000**	1,500	1,900	2,200	3,000	**3,000**	3,400	3,700	4,400	6,000	**6,000**	7,000	8,000	9,000	12,000	**12,000**	13,000	14,500	16,000	19,000	**19,000**
Outreach, training and other technical assistance	Other technical assistance will be captured in qualitative narrative																									
Other MMRV and supply chain traceability attributes	Tracking other MMRV and supply chain traceability attributes																									
Other measurements of work related to marketing of commodities	Other measurements of work related to marketing of commodities will be captures in qualitative narrative																									
Demonstrated engagement of major partners	Engagement with major partners	25	80	125	200	**200**	225	250	275	325	**325**	350	375	400	450	**450**	475	500	525	600	**600**	625	650	675	775	**775**
Climate smart technologies employed	Water infiltration capacity of soils	0	0	1	1	**1**	2	2	2	2	**2**	2	2	2	2	**2**	2	2	2	2	**2**	2	2	2	2	**2**
Pasa Unique items																										
# of applications received	Tracking applications received	100	145	200	1,200	**1,200**	2,000	2,400	2,600	2,800	**2,800**	2,900	3,000	3,100	3,500	**3,500**	4,600	5,200	6,700	7,700	**7,700**	8,200	8,400	8,700	9,000	**9,000**
% of underserved producers involved	Tracking percentage of underserved produced involved	80%	80%	80%	90%		90%	90%	90%	90%		90%	90%	90%	90%		90%	90%	90%	90%		90%	90%	90%	90%	
# of events provided	Tracking total number of climate-smart events	2	5	15	25	**25**	30	35	40	50	**50**	55	60	65	75	**75**	80	85	90	100	**100**	105	110	115	125	**125**
Projected Expenses		Qtr 1	Qtr 2	Qtr 3	Qtr 4	**Total Yr 1**	Qtr 1	Qtr 2	Qtr 3	Qtr 4	**Total Yr 2**	Qtr 1	Qtr 2	Qtr 3	Qtr 4	**Total Yr 3**	Qtr 1	Qtr 2	Qtr 3	Qtr 4	**Total Yr 4**	Qtr 1	Qtr 2	Qtr 3	Qtr 4	**Total Yr 5**
Total Direct Costs		1,276,093	1,552,447	1,614,602	2,084,516	**$6,527,659**	2,289,983	2,306,010	2,297,850	2,676,460	**$9,570,303**	2,771,670	2,862,437	2,824,838	3,594,049	**$12,052,994**	2,795,288	2,936,054	2,848,455	3,827,667	**$12,407,464**	2,781,099	2,913,298	2,829,167	4,005,879	**$12,529,444**
Indirect		95,513	79,549	79,664	84,656	**$339,381**	78,131	79,733	78,916	92,277	**$329,057**	83,613	92,690	88,930	126,350	**$391,583**	82,979	97,055	88,294	146,716	**$415,044**	84,017	97,237	88,823	166,994	**$437,071**
Total Budget		1,371,606	1,631,996	1,694,266	2,169,172	**$6,867,040**	2,368,114	2,385,743	2,376,766	2,768,737	**$9,899,360**	2,855,283	2,955,127	2,913,768	3,720,399	**$12,444,577**	2,878,267	3,033,109	2,936,749	3,974,383	**$12,822,508**	2,865,116	3,010,535	2,917,990	4,172,873	**$12,966,515**
	Cumulative budget total					**$6,867,040**					**$16,766,400**					**$29,210,977**					**$42,033,485**					**$55,000,000**

Climate-Smart Practices and Limitations

Climate-Smart practices under this grant shall be limited to the following practices:

NRCS Practice Code (if applicable)	Practice Name
327	Conservation Cover
328	Conservation Crop Rotation
329	Residue and Tillage Management, No Till (acres)
332	Contour Buffer Strips
340	Cover Crop
345	Residue and Tillage Management, Reduced Till (acres)
386	Field Border (acres)
393	Filter Strips (acres)
412	Grassed Waterways (acres)
484	Mulching (acres)
585	Stripcropping
601	Vegetative Barrier
603	Herbaceous Wind Barriers)
590	Nitrogen Management
512	Pasture and Hay Planting
528	Prescribed Grazing
550	Range Planting
382	Fence
516	Livestock Pipeline
614	Watering Facility*
311	Alley cropping
379	Forest Farming
380	Windbreak/Shelterbelt Establishment and Renovation (Ft.)
381	Silvopasture
390	Riparian Herbaceous Cover
422	Hedgerow Planting
612	Tree/Shrub Establishment (Ac.)
645	Upland Wildlife Habitat Management (Ac.)
380	Windbreak/Shelterbelt Establishment and Renovation (Ft.)

*In conjunction with the aforementioned grazing and pasture codes and/or where grazing practices include the hereinafter mentioned agroforestry codes.

All practices applied under this grant will follow NRCS practice standards unless noted below:

Practice Name	Alternative Practice Standards
None	

Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Version 1.0

USDA Partnerships for Climate-Smart Commodities Data Dictionary for Recipients
February 2023

Table of Contents

Overview of Reporting Requirements

Grant recipients are required to submit reports to document their performance under the *Partnerships for Climate-Smart Commodity* funding opportunity. These submissions will be required to use the Microsoft Excel workbook templates provided by USDA. The workbooks contain a series of worksheets that collect data in a standardized format to ensure data quality and allow for aggregation and summary of this information. The entire workbook must be submitted quarterly, with updates to all applicable worksheets. This guide is divided into three sections. The *Overview of Reporting Requirements* section summarizes the layout of the reporting workbook and presents the data elements included in each worksheet. It also describes additional documents that must be submitted to supplement the performance reports. The *Data Definitions* section provides descriptions and allowable response options for each data element. The guide also indicates whether each data element is required, applicable at times, or optional; as well as how frequently each data element must be updated. Finally, the *Appendices* contain practice and commodity lists that will be used for these reports. Reporting is necessary for USDA oversight of this effort. The data elements required for inclusion in the quarterly performance reports allow USDA to conduct selected audits to review whether producers are receiving federal funds from multiple sources for the same purpose; to determine whether GHG benefits from implementation of climate-smart agriculture and forestry (CSAF) practices are being estimated accurately; and for other purposes deemed appropriate by USDA.

The reporting worksheets collect information at four levels: project, partner, producer, and field. Descriptions of each level:

> **Project level**: Information about activities and impacts at a whole project/aggregate level (i.e., reflecting all activities under the grant agreement). Some project-level reporting is further subdivided by commodity type or a combination of commodity and CSAF practice(s) (commodity x practice).
> **Partner level:** Information about activities related to a single organization (recipient, subrecipient, contractor, or other partner) within a project.
> **Producer level**: Information about individual producers who have one or more farms enrolled in a project.
> **Field level**: Information about individual fields enrolled in a project.

Certain data elements are required to be reported for each producer and field enrolled in a project. In order to minimize the burden associated with data collection and to enable USDA to match data to existing records, these producer- and field-specific records must use the producer's established FSA Farm, Tract and Field IDs, and report the State and County associated with the Farm ID. Associated data entered in conjunction with these data elements, such as Producer Name, must match the data contained in the customer's Business Partner record, and the Farm Operating Plan in Business File for that Farm ID. Disclosure of this information is protected under Section 1619 of the Food, Conservation, and Energy Act of 2008 (PL 110- 246), 7 U.S.C. 8791. Additionally, Departmental Regulation 4370-001 provides USDA's policies for collecting demographic data, including race, ethnicity and gender. Providing demographic information is voluntary and at the discretion of the customer. Demographic information is used by USDA for statistical purposes only and will not be used to determine an applicant's eligibility for programs or services for which they apply.

Note: For purposes of this guide, "farm" refers to the operation from which climate-smart commodities are produced and may represent farms, ranches, forests or other operations. Similarly, "field" refers to the individual land units at which climate-smart practices are being implemented to produce climate-smart commodities and may represent lots, farmsteads or other units, depending on the type of operation and commodity. The use of "Farm", "Tract" and "Field" align with the FSA definitions; for example, "A field is a part of a farm that is separated from the balance of the farm by a permanent boundary, such as; fences, permanent waterways, woodlands, croplines in cases where farming practices make it probable that this cropline is not subject to change, and other similar features."

The following tables list the data elements included in each reporting worksheet, along with a brief description of each item.

Project Summary

These data will be collected about each project. Cumulative results are reported each quarter. Report last quarter's entry if there has been no change in this quarter.

Table 1. Project Summary elements

Data element name	Description	Frequency
Commodity type	Type of commodity(ies) incentivized by the project	Quarterly
Commodity sales	Indicates sales of the commodity(ies) related to the project occurred this quarter	Quarterly
Farms enrolled	Indicates enrollment activities occurred this quarter	Quarterly
GHG calculation methods	Methods used to calculate greenhouse gas (GHG) benefits	Quarterly
GHG cumulative calculation	Method used to calculate cumulative GHG benefits	Quarterly
Cumulative GHG benefits	Whole project estimate of total GHG (CO2e) emission reductions	Quarterly
Cumulative carbon stock	Whole project estimate of total carbon sequestration	Quarterly
Cumulative CO2 benefit	Whole project estimate of total CO2 emission reductions	Quarterly
Cumulative CH4 benefit	Whole project estimate of total CH4 emission reductions	Quarterly
Cumulative N2O benefit	Whole project estimate of total N2O emission reductions	Quarterly
Offsets produced	Amount of carbon offsets produced by project	Quarterly
Offsets sale	Name of marketplace where carbon offsets were sold	Quarterly
Offsets price	Price of carbon in offset sales	Quarterly
Insets produced	Amount of carbon insets produced by project	Quarterly
Cost of on-farm TA	Cost of on-farm technical assistance (TA) provided to producers	Quarterly
MMRV cost	Cost of measurement, monitoring, reporting, and verification (MMRV) activities	Quarterly
GHG monitoring method	Methods used by project to monitor GHG benefits (up to 5)	Quarterly
GHG reporting method	Methods used by project to report on GHG benefits (up to 5)	Quarterly
GHG verification method	Methods used to verify GHG benefits (up to 5)	Quarterly

Partner Activities

These data will be collected at the project level. Each row in this worksheet will represent one organization involved in the project, including the recipient and all contributing partners. A partner is any organization that is receiving project funds or providing matching contributions (funds or in-kind contributions) to the project. While the recipient must complete one row for their own organization, not all data elements apply to the recipient. These exceptions are noted in the detailed descriptions of the specific elements in the *Data Definitions* section of this guide. Data are reported cumulatively each quarter. Report last quarter's entry if there has been no change in this quarter.

Table 2. Partner Activities elements

Data element name	Description	Frequency
Partner ID	Unique ID for each partner	One-time
Partner name	Name of partner organization	One-time
Partner type	Type of organization	One-time
Partner POC	Partner point of contact name	As applicable
Partner POC email	Partner point of contact email	As applicable
Partnership start date	Start of partnership on project	One-time
Partnership end date	End of partnership on project	As applicable
New partnership	Indicator for partner organizations that have no prior work with the recipient	As applicable
Partner total requested	Total amount requested to date by partner from recipient	Quarterly
Total match contribution	Total amount of match contribution by partner to date	Quarterly
Total match incentives	Total amount of match contribution by partner for incentives	Quarterly
Match type	Top 3 types of match contribution by partner, other than incentives	Quarterly
Match amount	Value of match contributions by type	Quarterly
Training provided	Top 3 types of training provided to the partner through project	Quarterly
Activity by partner	Top 3 types of activities provided by this partner to producers or other partners	Quarterly
Activity cost	Approximate cost per activity type provided by partner to producers or other partners	Quarterly
Products supplied	Names of products supplied to producers as part of project activities or incentives	Quarterly
Product source	Supplier or source of products supplied to producers as part of project activities or incentives	Quarterly

Marketing Activities

These data will be collected at the project level. Each row in this worksheet will correspond to one commodity for which the project enrolls fields and one marketing channel used to sell that commodity by the project or producers enrolled in the project. Data are reported for the current quarter and are not cumulative. If no sales of the commodity were reported during a quarter, do not complete this worksheet for that quarter.

Table 3. Marketing Activities elements

Data element name	Description	Frequency
Commodity type	Type of commodity incentivized by the project	Quarterly
Marketing channel type	Type of marketing channels used	Quarterly
Number of buyers	Number of buyers per marketing channel	Quarterly
Names of buyers	Names of buyers in the marketing channel	Quarterly
Marketing channel geography	Geography of marketing channel	Quarterly
Value sold	Value of commodity sold by marketing channel	Quarterly
Volume sold	Volume of commodity sold by marketing channel	Quarterly
Price premium	Price premium of commodity by marketing channel	Quarterly
Price premium to producer	Percent of price premium that goes to the producer	Quarterly
Product differentiation method	Top 3 types of product differentiation methods used	Quarterly
Marketing method	Top 3 types of marketing methods used	Quarterly
Marketing channel identification method	Top 3 ways marketing channel was identified	Quarterly
Traceability method	Top 3 types of supply chain traceability methods used	Quarterly

Producer Enrollment

These data will be collected at the producer level about each farm enrolled in the project. In this worksheet, each row will correspond to one farm that has at least one field enrolled in the project. Data are reported when a producer first enrolls one or more fields in the project. If a producer is enrolled in the project for multiple years, review the farm characteristics each time a new contract is signed and provide any necessary updates. The quarterly submission should contain information about each farm initially enrolled in the project during that quarter and for updates to farms that have re-enrolled during that quarter, as applicable. If no farms are enrolled during that quarter, do not complete this worksheet for that quarter.

Table 4. Producer Enrollment elements

Data element name	Description	Frequency
Farm ID	Unique Farm ID assigned by FSA	
State or territory	State name (must match FSA farm enrollment data)	
County of residence	County name (must match FSA farm enrollment data)	
Producer data change	Indicator that producer data was updated at re-enrollment	As applicable
Producer start date	Contract start date	Enrollment
Producer name	Name of primary operator	Enrollment
Underserved status	Indicator the primary operator is considered underserved and/or a small producer	Enrollment
Total area	Total area of enrolled operation	Annual
Total crop area	Total crop area in enrolled operation enrolled	Annual
Total livestock area	Total livestock confinement, pasture and rangeland in enrolled operation	Annual
Total forest area	Total forest area in enrolled operation	Annual
Livestock type	Top 3 types of livestock on enrolled operation	Annual
Livestock head	Total livestock currently managed (by type)	Annual
Organic farm	Indicator that part of the farm is certified or transitioning organic	Annual
Organic fields	Indicator that any of the enrolled fields are certified or transitioning organic	Annual
Producer motivation	Motivation for participation	Annual
Producer outreach	Top 3 types of outreach provided to producer	Annual
CSAF experience	Indicator of prior implementation of CSAF practices at this farm	Annual
CSAF federal funds	Indicator of prior receipt of federal funds for CSAF practices	Annual
CSAF state or local funds	Indicator of prior receipt of state funds for CSAF practices	Annual
CSAF nonprofit funds	Indicator of prior receipt of nonprofit funds for CSAF practices	Annual
CSAF market incentives	Indicator of prior receipt of market incentives for CSAF practices	Annual

Field Enrollment

These data will be collected about each field enrolled in the project. In this worksheet, each row corresponds to one field x commodity combination enrolled in the project. Generally, data are reported once for each field, at its initial enrollment. The quarterly submission should contain information about each field initially enrolled in the project during that quarter. If no fields are enrolled during that quarter, do not complete this worksheet for that quarter. If a field is enrolled for multiple years, any relevant changes, such as a new ID number or changes to the commodity or practice combinations should be entered in this worksheet during the quarter it is re-enrolled, or as applicable.

Table 5. Field Enrollment elements

Data element name	Description
Farm ID	Unique Farm ID assigned by FSA
Tract ID	Unique Tract ID assigned by FSA
Field ID	Unique Field ID assigned by FSA
State or territory of field	State name
Physical County of field	Physical county name must match FSA farm records
Prior Field ID	Previous Field ID when reconstitution of farm results in new Field IDs
Field data change	Indicator that field data has changed from initial enrollment
Contract start date	Start date of contract
Total field area	Size of enrolled field
Commodity category	Category of commodity(ies) produced
Commodity type	Type of commodity(ies) produced
Baseline yield	Average yield of commodity in 3 years prior to enrollment
Baseline yield location	Location for which baseline yield is provided
Field land use	Most common land use in field in past 3 years
Field irrigated	Most common irrigation type in field in past 3 years
Field tillage	Most common tillage in field in past 3 years
Practice past extent - farm	Extent of operation that implemented this practice prior to project enrollment
Field any CSAF practice	Indicator for prior CSAF practices in this field in past 3 years
Practice past use - this field	Indicator of prior use of this practice in this field in the past 3 years
Practice type	CSAF practice(s) that will be implemented in enrolled field (up to 7)
Practice standard	Organization that developed CSAF practice standard implemented in field
Planned practice implementation year	Year that practice is planned to be implemented
Practice extent	Area or number of animals for which practice is implemented
Follow-on questions	Follow-on questions by practice type (see Table 11)

Farm Summary

These data will be collected about each farm enrolled in the project. In this worksheet, each row will correspond to one farm that has at least one field enrolled in the project. The quarterly submission should contain updates to any data elements that have changed for each farm enrolled in the project during that quarter. If there are no changes from the previous quarter, do not complete this worksheet for that quarter. Data are not cumulative.

Table 6. Farm Summary elements

Data element name	Description	Frequency
Farm ID	Unique Farm ID assigned by FSA	
State or territory	State name	
County of residence	County name	
Producer TA received	Type of technical assistance provided to producer	Quarterly
Producer incentive amount	Total financial incentive provided to the producer	Quarterly
Incentive reason	Top 4 reason(s) for financial incentives provided to producer	Quarterly
Incentive structure	Top 4 units on which financial incentives are structured	Quarterly
Incentive type	Top 4 type(s) of financial incentives provided to producer	Quarterly
Payment on enrollment	Extent of payment provided to producer upon enrollment	Quarterly
Payment on implementation	Extent of payment provided to producer upon implementation of CSAF practices	Quarterly
Payment on harvest	Extent of payment provided to producer upon harvest or slaughter	Quarterly
Payment on MMRV	Extent of payment provided to producer upon reporting or verification	Quarterly
Payment on sale	Extent of payment provided to producer upon sale of commodity	Quarterly

Field Summary

These data will be collected about each field enrolled in the project for a commodity x practice(s) combination. In this worksheet, each row will correspond to one field x commodity x practice(s) combination enrolled in the project. Data for each field will be reported quarterly and are not cumulative. Report data for any elements that have an update in that quarter. Greenhouse gas benefit estimates must be entered upon practice completion or annually, as appropriate. If there are no changes from the previous quarter, do not complete this worksheet for that quarter. This worksheet includes a section to report the "official" estimate of GHG benefits – amounts of greenhouse gas emissions reduced and carbon sequestered – for the field. These quantities refer to the estimates that are used to calculate the project's aggregate impact (reported in Table 1). Tables 8 and 9 are used to report alternate estimates of the field-level GHG benefits when additional methods are used to model (Table 8) or measure (Table 9) these impacts. Any field that can use COMET-Planner must submit those results, either as the official or alternate model.

Table 7. Field Summary elements

Data element name	Description	Frequency
Farm ID	Unique Farm ID assigned by FSA	
Tract ID	Unique Tract ID assigned by FSA	
Field ID	Unique Field ID assigned by FSA	
State or territory of field	State name	
County of field	County name	
Commodity type	Type of commodity produced from field	Quarterly
Practice type	Type of practice(s) incentivized in field (up to seven)	Quarterly
Date practice complete	Date that practice implementation is certified complete	Quarterly
Contract end date	End date of contract	Quarterly
MMRV assistance provided	Indicator that MMRV assistance is provided to field	Quarterly
Marketing assistance provided	Indicator that marketing assistance provided for commodity from field	Quarterly
Incentive per acre or head	Indicator that a per acre/head incentives is provided for the CSAF practice(s) on this field	Quarterly
Field commodity value	Value of commodity produced from field	Quarterly
Field commodity volume	Volume of commodity produced from field	Quarterly
Cost of implementation	Total cost of practice implementation in field	Quarterly
Cost coverage	Percent of total cost of implementation of practice covered by project incentives	Quarterly
Field GHG monitoring	Methods used to monitor GHG benefits in field (up to 3)	Quarterly
Field GHG reporting	Methods used to report on GHG benefits for field (up to 3)	Quarterly
Field GHG verification	Methods used to verify GHG benefits for field (up to 3)	Quarterly
Field GHG calculations	Methods used to calculate GHG benefits for field	Quarterly
Field official GHG calculation	Method used to calculate official GHG benefits for field	Quarterly
Field official GHG ER	Official estimate of total GHG emission reductions for field	Quarterly
Field official carbon stock	Official estimate of total carbon sequestration for field	Quarterly
Field official CO2 ER	Official estimate of total CO2 emission reductions for field	Quarterly
Field official CH4 ER	Official estimate of total CH4 emission reductions for field	Quarterly
Field official N2O ER	Official estimate of total N2O emission reductions for field	Quarterly
Field offsets produced	Amount of carbon offsets produced in field	Quarterly
Field insets produced	Amount of carbon insets produced in field	Quarterly
Other field measurements	Indicator that field data was collected for reasons other than GHG benefit estimation	Quarterly

GHG Benefits - Alternate Modeled

If greenhouse gas benefits are modeled for the same field using multiple methods, the results for the alternate models are reported in this worksheet. The "alternate" models refer to those model results that were not used in the calculation of the project's aggregate impact (as reported in Table 1). Any field that can use COMET-Planner must submit those results, either as the official or alternate model. These data will be collected about the modeled GHG benefits for each field x commodity x practice(s) combination. In this worksheet, each row will correspond to one field enrolled in the project. Data are not cumulative. Each quarterly submission should include information for all fields that have new modeled data. Greenhouse gas benefit estimates must be entered upon practice completion or annually, as appropriate.

Table 8. GHG Benefits – Alternate Modeled elements

Data element name	Description	Frequency
Farm ID	Unique Farm ID assigned by FSA	
Tract ID	Unique Tract ID assigned by FSA	
Field ID	Unique Field ID assigned by FSA	
State or territory of field	State name	
County of field	County name	
Commodity type	Type of commodity(ies) produced from the field (up to 6)	Annual
Practice type	Type of practice(s) incentivized in field (up to 7)	Annual
GHG model	Model used to calculate GHG benefits	Annual
Model start date	Start date of model run	Annual
Model end date	End date of model run	Annual
Total GHG benefits estimated	Estimate of total GHG benefits for field	Annual
Total carbon stock estimated	Estimate of total change in carbon stock for field	Annual
Total CO2 estimated	Estimate of total CO2 emission reductions for field	Annual
Total CH4 estimated	Estimate of total CH4 emission reductions for field	Annual
Total N2O estimated	Estimate of total N2O emission reductions for field	Annual

GHG Benefits - Measured

Projects must report the results of any carbon stock or greenhouse gas emission measurements in this worksheet. These data will be collected at the field level. Each row will represent a separate measurement method used to calculate GHG benefits for a given field. Data are reported once per year of measurement and are not cumulative. Each quarterly submission should include information for any field for which there are new soil samples or new calculations of annual GHG benefits based on actual measurements.

Table 9. GHG Benefits - Measured data elements

Data element name	Description	Frequency
Farm ID	Unique Farm ID assigned by FSA	
Tract ID	Unique Tract ID assigned by FSA	
Field ID	Unique Field ID assigned by FSA	
State	State name	
County	County name	
GHG measurement method	Method of measurement	Annual
Lab name	Entity that conducted analysis	Annual
Measurement start date	Start date of measurements	Annual
Measurement end date	End date of measurements	Annual
Total CO2 reduction calculated	Calculation of total CO2 reduction	Annual
Total carbon stock change calculated	Calculation of change in carbon stock	Annual
Total CH4 reduction calculated	Calculation of total CH4 reduction	Annual
Total N2O reduction calculated	Calculation of total N2O reduction	Annual
Soil sample result	Numeric result from soil sample	Annual
Measurement type	Type of analysis conducted	Annual

Additional Environmental Benefits

Projects that track additional environmental benefits (e.g., water quality improvements) from enrolled fields report results in this worksheet. These data will be collected about each field. Each row in this worksheet will correspond to an enrolled field. Data are not cumulative. Estimates of environmental benefits must be entered upon practice completion or annually, as appropriate.

Table 10. Additional Environmental Benefits elements

Data element name	Description	Frequency
Farm ID	Unique Farm ID assigned by FSA	
Tract ID	Unique Tract ID assigned by FSA	
Field ID	Unique Field ID assigned by FSA	
State	State name	
County	County name	
Environmental benefits	Indicator that project tracks other environmental benefits	Annual
Reduction in nitrogen loss	Indicator that project tracks reductions in nitrogen loss	Annual
Amount	Amount	Annual
Purpose	Purpose of tracking those co-benefits	Annual
Reduction in phosphorus loss	Indicator that project tracks reductions in phosphorus loss	Annual
Amount	Amount	Annual
Purpose	Purpose of tracking those co-benefits	Annual
Other water quality	Indicator that project tracks other water quality improvements	Annual
Type	Type of water quality metric being tracked	Annual
Amount	Amount	Annual
Purpose	Purpose of tracking those co-benefits	Annual
Water quantity	Indicator that project tracks reduced water use	Annual
Amount	Amount	Annual
Purpose	Purpose of tracking those co-benefits	Annual
Reduced erosion	Indicator that project tracks reductions in soil erosion	Annual
Amount	Amount	Annual
Purpose	Purpose of tracking those co-benefits	Annual
Reduced energy use	Indicator that project tracks reductions in energy use	Annual
Amount	Amount	Annual
Purpose	Purpose of tracking those co-benefits	Annual
Avoided land conversion	Indicator that project tracks reductions in land conversion	Annual
Amount	Amount	Annual
Purpose	Purpose of tracking those co-benefits	Annual
Improved wildlife habitat	Indicator that project tracks improvements in wildlife habitat	Annual
Amount	Amount	Annual
Purpose	Purpose of tracking those co-benefits	Annual

Supplemental Data Submission

Project MMRV Plan

Definition of MMRV elements:

Measurement: Quantification of the greenhouse gas benefits (reduction or capture) using mathematical models and/or direct physical measurements in the field

Monitoring: Ongoing review and confirmation that the climate-smart practice has been implemented according to the agreed upon standard and documentation of any changes in the site, implementation, or GHG emissions impacts over time

Reporting: Documenting and sharing monitoring and measurement results with project partners, the recipient, and any third-party verification organization

Verification: Independent confirmation that measurement, monitoring and reporting information are complete, accurate and reliable.

Projects must submit an MMRV plan that includes details about how each of the following are addressed:

- Quantification approach, including:
  - GHG models used
  - GHG measurement plan (if applicable)
  - Approach to quantifying additional environmental benefits, if applicable (e.g., water quality, habitat)
- Verification approach:
  - Compliance criteria
  - Verification plan/methodology
- Approach to ensuring:
  - Additionality
  - Permanence
  - Leakage
  - Impacts of weather
- Plan for non-compliance

If the project is using a specific MMRV methodology or approach developed by the recipient, a project partner, or an outside organization, the project can submit documentation associated with the methodology as long as the documentation addresses each of the above categories.

If the project is tracking other environmental benefits (as reported in the *Additional Environmental Benefits* worksheet), include a description of the methodology and tools used to track and report on these benefits.

Field modeled GHG benefit reports

Results from any models besides COMET-Planner used to estimate GHG benefits must also be submitted as a separate report. This includes projects running COMET-Farm. The full results of any model can be submitted in the native/standard format generated by the modeling tool and must include the following Unique IDs in the report or in the file name: State, County, Farm ID, Tract ID, Field ID.

Field direct measurement results

For any direct physical measurements in the field, measurement results must be submitted as a separate report and must include the following Unique IDs in the report or in the file name: State, County, Farm ID, Tract ID, Field ID. Measurement results reports must include the name of the equipment used for sampling or data collection, the name of the lab that analyzed the data, and the analytical method used.

Sample report types include soil analysis reports, summarized results of portable emissions analyzers or flux towers, water quality analyses, and plant species counts. These could be collected for the purposes of determining GHG emission reductions or carbon sequestration amounts, for calibration of tools or models, for tracking other environmental benefits, or for other reasons.

Data Descriptions

This section provides descriptions and allowable response options for each data element. The guide also indicates whether each data element is required, applicable at times, or optional; as well as how frequently each data element must be updated.

Unique IDs

Project ID: Unique ID at the project level – "Award Identifying Number" shown on award documentation
Partner ID: Unique ID at the partner level – use EIN; if no EIN, a unique ID will be assigned for use in these reports
State or territory of operation: State or territory name
County of operation: Physical county name
Farm ID: Unique ID at the operation level assigned by Farm Service Agency (FSA)
Tract ID: Unique ID at the tract level assigned by FSA
Field ID: Unique ID at the field level assigned by FSA

Project Summary

Commodity type

Data element name: Commodity type

Reporting question: What climate-smart commodity types are produced by this project?

Description: Type of commodity incentivized by the project. These commodities include those for whom farmers are directly receiving incentives or other types of marketing support. See full list of commodity options in Appendix B. List one commodity per row.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values: FSA commodity list

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Commodity sales

Data element name: Commodity sales

Reporting question: Did project activities result in sales this quarter of the commodity(ies) produced by this project?

Description: Indicator of sales of commodity(ies) related to project activities. If sales are reported, complete the *Marketing Activities* worksheet (Table 3) as part of the quarterly performance report.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Farms enrolled

Data element name: Farms enrolled

Reporting question: Did the project enroll any producers or fields this quarter?

Description: Indicator that the project enrolled producers or fields. If enrollment activities occurred this quarter, complete the *Producer Enrollment* and *Field Enrollment* worksheets (Tables 4 and 5) as part of the quarterly performance report.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

GHG calculation methods

Data element name: GHG calculation methods

Reporting question: What methods is the project using to calculate GHG benefits?

Description: List the way(s) that GHG benefits are being measured and calculated by the project this quarter.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Models
- Direct field measurements
- Both

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

GHG cumulative calculation

Data element name: GHG cumulative calculation

Reporting question: What method(s) was used to calculate the total cumulative GHG benefits reported here?

Description: List the method(s) that was used to calculate the total cumulative GHG benefits reported by the project this quarter.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:
- Models
- Direct field measurements
- Both

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Cumulative GHG benefits

Data element name: Cumulative GHG benefits

Reporting question: What are the project's estimated total GHG emission reductions (CO2eq) to date?

Description: Total cumulative estimated greenhouse gas emission reductions from practice implementation. This is updated quarterly. If there are no changes, enter the same number as the previous quarter.

Data type: Decimal

Select multiple values: No

Measurement unit: Metric tons CO_2eq

Allowed values: 0-10,000,000

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Cumulative carbon stock

Data element name: Cumulative carbon stock

Reporting question: How much carbon has the project sequestered to date?

Description: Estimated total cumulative change in carbon stock based on practice implementation. This is updated quarterly. If there are no changes, enter the same numbers as the previous quarter. Conversion rate is one ton of carbon = 3.67 tons of CO_2eq.

Data type: Decimal

Select multiple values: No

Measurement unit: Metric tons CO_2eq

Allowed values: 0-10,000,000

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Cumulative CO2 benefit

Data element name: Cumulative CO2 benefit

Reporting question: What are the project's estimated total cumulative CO2 emission reductions to date?

Description: Estimated total cumulative carbon dioxide emission reductions based on practice implementation. This is updated quarterly. If there are no changes, enter the same number as the previous quarter.

Data type: Decimal

Select multiple values: No

Measurement unit: Metric tons CO_2

Allowed values: 0-10,000,000

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Cumulative CH4 benefit

Data element name: Cumulative CH4 benefit

Reporting question: What are the project's estimated total CH4 emission reductions to date?

Description: Estimated total cumulative methane reduction based on practice implementation. This is updated quarterly. If there are no changes, enter the same numbers as the previous quarter. Conversion rate is one ton of CH_4 = 25 tons of CO_2eq.

Data type: Decimal

Select multiple values: No

Measurement unit: Metric tons CH4 reduced in CO_2eq

Allowed values: 0-10,000,000

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Cumulative N20 benefit

Data element name: Cumulative N2O benefit

Reporting question: What are the project's estimated total N2O emission reductions to date?

Description: Estimated total cumulative nitrous oxide reduction based on practice implementation. This is updated quarterly. If there are no updated numbers enter the same number as the previous quarter. Conversion rate is one ton of N_2O = 298 tons of CO_2eq.

Data type: Decimal

Select multiple values: No

Measurement unit: Metric tons N2O reduced in CO_2eq

Allowed values: 0-10,000,000

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Offsets produced

Data element name: Offsets produced

Reporting question: How many carbon offsets have been produced in the project?

Description: Total carbon offsets produced by enrolled project fields during the quarter. Offsets are defined as having been verified and certified using an accepted standard and sold into the carbon marketplace.

Data type: Decimal

Select multiple values: No

Measurement unit: Metric tons CO_2eq

Allowed values: 0-10,000,000

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Offsets sale

Data element name: Offsets sale

Reporting question: To what marketplace(s) were carbon offsets sold?

Description: Marketplaces to which carbon offsets produced by enrolled project fields were sold. Offsets are defined as having been verified and certified using an accepted standard and sold into the carbon marketplace. List each marketplace name. Separate names with commas.

Data type: Text

Select multiple values: NA

Measurement unit: Name

Allowed values: Text

Logic: Respond if >0 to 'Offsets produced'

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Offsets price

Data element name: Offsets price

Reporting question: What was the average price of carbon received for offsets?

Description: Average price per metric ton paid for carbon offsets produced by enrolled project fields. Offsets are defined as having been verified and certified using an accepted standard and sold into the carbon marketplace.

Data type: Decimal

Select multiple values: No

Measurement unit: Dollars per metric ton

Allowed values: 0-500

Logic: Respond if >0 to 'Offsets produced'

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Insets produced

Data element name: Insets produced

Reporting question: How many carbon insets have been produced in the project?

Description: Total carbon insets produced by enrolled fields during the quarter. Insets are defined as having been verified and certified using an accepted standard and accounted for within Scope 3 emissions for a firm.

Data type: Decimal

Select multiple values: No

Measurement unit: Metric tons CO_2eq

Allowed values: 0-10,000,000

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Cost of on-farm TA

Data element name: Cost of on-farm TA

Reporting question: What is the total amount that has been spent to provide on-farm TA?

Description: Total cost of any field- or practice-specific technical assistance provided by the project (by recipient or partners) to any producers. This is updated quarterly. If there are no changes, enter the same number as the previous quarter.

Data type: Decimal

Select multiple values: No

Measurement unit: Dollars

Allowed values: $0-$50,000,000

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

MMRV cost

Data element name: MMRV cost

Reporting question: What is the total amount that has been spent on MMRV activities?

Description: Total cost of all MMRV activities paid for by the project (recipient or partners). MMRV components are defined as measurement (calculations or estimations of GHG emissions), monitoring (ongoing review and confirmation that the climate-smart practices have been implemented according to the agreed upon standard and documentation of any changes in the site, implementation, or GHG emissions impacts over time), reporting (documenting and sharing monitoring and measurement results with project partners, the recipient, and any third-party verification organization), and verification (independent confirmation that measurement, monitoring and reporting information are complete, accurate and reliable). This is updated quarterly. If there are no changes, enter the same number as the previous quarter.

Data type: Decimal

Select multiple values: No

Measurement unit: Dollars

Allowed values: $0-$50,000,000

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

GHG monitoring method

Data element name: GHG monitoring 1-5

Reporting question: How did the project monitor GHG benefits?

Description: Up to the five most common forms of monitoring GHG benefits used this quarter as part of MMRV requirements. Monitoring is defined as ongoing review and confirmation that the climate-smart practice has been implemented according to the agreed upon standard and documentation of any changes in the site, implementation, or GHG emissions impacts over time. Include up to 5 methods, based on which methods are most commonly used for this project. The worksheet provides five columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 5 GHG monitoring methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other GHG monitoring methods as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Drones
- Ground-level photos and videos
- On-farm visit
- Plot-based sampling
- Producer records or attestation
- Satellite monitoring or remote sensing
- Soil metagenomics
- Soil sensors
- Water sensors
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

GHG reporting method

Data element name: GHG reporting 1-5

Reporting question: How did the project track and report implementation of practices to reduce GHG emissions?

Description: Up to the five most common forms of tracking and reporting on practice implementation used this year as part of MMRV requirements. Reporting is defined as documenting and sharing monitoring and measurement results with project partners, the recipient, and any third-party verification organization. Include up to 5 methods, based on which methods are most commonly used for this project. The worksheet provides five columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 5 GHG reporting methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other GHG reporting methods as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Automated devices
- Email
- Mobile app
- Paper
- Third-party actors
- Website
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

GHG verification method

Data element name: GHG verification method 1-5

Reporting question: How did the project verify implementation of practices to reduce GHG emissions?

Description: Up to the five most common forms of verifying practice implementation used this year as part of MMRV requirements. Verification is defined as independent confirmation that measurement, monitoring and reporting information are complete, accurate and reliable. Include up to 5 methods, based on which methods are most commonly used for this project. The worksheet provides five columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 5 GHG verification methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other GHG verification methods as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Artificial intelligence
- Audit by recipient
- Computer modeling
- Photos
- Record audit
- Satellite imagery
- Site or field visit
- Third-party audit
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Partner Activities

Unique IDs	
Partner ID	Unique Project ID for each partner

Partner name	
Data element name: Name of partner organization	**Reporting question:** What is the official name of the recipient or partner organization?
Description: Legal name of recipient or partner organization	
Data type: Text	**Select multiple values**: NA
Measurement unit: NA	**Allowed values:** Text
Logic: None – all respond	**Required:** Yes
Data collection level: Partner	**Data collection frequency:** Partnership initiation

Partner type	
Data element name: Type of partner organization	**Reporting question:** What type of organization is this?
Description: Legal/financial structure of recipient or partner organization	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Commodity groups (501c5) • For-profit • Individual • Nonprofit • State or local agency • Tribal agency • University
Logic: None – all respond	**Required:** Yes
Data collection level: Partner	**Data collection frequency:** Partnership initiation

Partner POC	
Data element name: Partner POC	**Reporting question:** Who is the point of contact for this project at the recipient or partner organization?
Description: Name of a point of contact for the recipient or partner organization	
Data type: Text	**Select multiple values**: NA
Measurement unit: NA	**Allowed values:** Text
Logic: None – all respond	**Required:** Yes
Data collection level: Partner	**Data collection frequency:** Partnership initiation; update as necessary

Partner POC email	
Data element name: Partner POC email	**Reporting question:** What is the point of contact's email address?
Description: Email of the point of contact for the recipient or partner organization	
Data type: Text	**Select multiple values**: NA
Measurement unit: NA	**Allowed values:** Text
Logic: None – all respond	**Required:** Yes
Data collection level: Partner	**Data collection frequency:** Partnership initiation; update as necessary

Partnership start date

Data element name: Partnership start date
Reporting question: When did the partnership start?
Description: Date that the partner organization and the recipient began formally partnering on the project
Data type: Date
Select multiple values: NA
Measurement unit: MM/DD/YYYY
Allowed values: 01/01/2023 – 12/31/2030
Logic: No response for recipient
Required: Yes
Data collection level: Partner
Data collection frequency: Partnership initiation

Partnership end date

Data element name: Partnership end date
Reporting question: When did the partnership end?
Description: Date that the partner organization and the recipient stopped formally partnering on the project
Data type: Date
Select multiple values: NA
Measurement unit: MM/DD/YYYY
Allowed values: 01/01/2023 – 12/31/2030
Logic: No response for recipient
Required: Yes
Data collection level: Partner
Data collection frequency: Partnership end quarter

New partnership

Data element name: New partnership
Reporting question: Is this a new partnership?
Description: A new partnership means that the recipient and the partner organization have not had a formal working relationship (under contract or on a grant) prior to the start of the project.
Data type: List
Select multiple values: No
Measurement unit: Category
Allowed values:
- Yes
- No
- I don't know

Logic: No response for recipient
Required: Yes
Data collection level: Partner
Data collection frequency: Partnership initiation

Partner total requested

Data element name: Partner total requested
Reporting question: What is the total amount of funding the partner has requested to date from this project?
Description: Cumulative (total) amount of funds that the partner has requested reimbursement for from the recipient from the start of the partnership to the end of the reporting quarter. For each quarter's data entry, the value must be the sum of all previous entries plus the amount of funds requested in the reporting quarter. If there are no changes, report the value from the previous quarter.
Data type: Decimal
Select multiple values: NA
Measurement unit: Dollars
Allowed values: $0-$100,000,000
Logic: No response for recipient
Required: Yes
Data collection level: Partner
Data collection frequency: Quarterly

Total match contribution

Data element name: Total match contribution

Reporting question: What is the total match value the organization has contributed to the project to date?

Description: Cumulative (total) value of funds and in-kind contributions (e.g., staff time, inputs, equipment rental, marketing support) that the partner has provided as a project match contribution from the start of the partnership to the end of the reporting quarter. For each quarter's data entry, the value must be the sum of all previous entries plus match contributions in the reporting quarter. If there are no changes, report the value from the previous quarter.

Data type: Decimal

Select multiple values: NA

Measurement unit: Dollars

Allowed values: $0-$100,000,000

Logic: None – all respond

Required: Yes

Data collection level: Partner

Data collection frequency: Quarterly

Total match incentives

Data element name: Total match incentives

Reporting question: What is the total value of match provided by this organization for producer incentives?

Description: Cumulative (total) value of funds for incentive payments directly to producers that the partner has provided as a project match contribution from the start of the partnership to the end of the reporting quarter. For each quarter's data entry, the value must be the sum of all previous entries plus match incentives in the reporting quarter. If there are no changes, report the value from the previous quarter.

Data type: Decimal

Select multiple values: NA

Measurement unit: Dollars

Allowed values: $0-$100,000,000

Logic: None – all respond

Required: Yes

Data collection level: Partner

Data collection frequency: Quarterly

Match type

Data element name: Match type 1-3

Reporting question: What types of match contributions has the organization provided to the project?

Description: Types of match contributions *other than incentives* provided directly to producers by the organization from the start of the partnership to the end of the reporting quarter. Enter up to the top three (in dollar value) types of match contributions provided. In-kind staff time could be used for technical assistance, marketing assistance, or other support to producers. Production inputs include seed, fertilizer, pesticides, equipment and other inputs for use in the field. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 match types are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other match types as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Equipment rental or use
- In-kind staff time
- Production inputs (reduced cost or free)
- Program income
- Software
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Partner

Data collection frequency: Quarterly

Match amount

Data element name: Match amount 1-3

Reporting question: What is the value of the match contributions the organization provided to the project?

Description: Cumulative (total) value of funds for each match type that the organization has provided as a project match contribution from the start of the partnership to the end of the reporting quarter. Enter amounts for up to the top three (in dollar value) match types. The worksheet provides three columns for this data element. Enter one value for each column. If fewer than 3 match types are used, leave unnecessary columns blank.

Data type: Decimal

Select multiple values: NA

Measurement unit: Dollars

Allowed values: $0-$100,000,000

Logic: None – all respond

Required: Yes

Data collection level: Partner

Data collection frequency: Quarterly

Training type provided

Data element name: Training type 1-3 provided

Reporting question: What types of training has the organization provided to project partners?

Description: Types of training provided to the project partner as a result of participating in the project during the past quarter. Training can come from the recipient, a project partner organization (including other divisions of their own organization, or an outside organization. Enter up to the top three (in dollar value) types of partner training provided. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 training types are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other training types as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Data collection
- Grant reporting
- Marketing opportunities
- Providing financial assistance
- Providing technical assistance
- Writing producer contracts
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Partner

Data collection frequency: Quarterly

Activity by partner

Data element name: Activity 1-3 by partner

Reporting question: What types of activities has the organization provided to the project?

Description: Types of activities that the recipient or partner organization has provided during the reporting quarter. Enter up to the top three (in dollar value) types of activities undertaken. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 activity types are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other activity types as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Marketing support
- MMRV support
- Producer outreach for enrollment
- Technical assistance to producers
- Training to other partner organizations
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Partner

Data collection frequency: Quarterly

Activity cost

Data element name: Activity cost 1-3	**Reporting question:** What is the value of the activities this organization has provided to the project?
Description: Cumulative (total) cost of each activity type that the organization has undertaken or offered from the start of the partnership to the end of the reporting quarter. Enter amounts for up to the top three (in dollar value) activity types. The worksheet provides three columns for this data element. Enter one value for each column. If fewer than 3 activity types are provided, leave unnecessary columns blank.	
Data type: Decimal	**Select multiple values**: NA
Measurement unit: Dollars	**Allowed values:** $0-$100,000,000
Logic: None – all respond	**Required:** Yes
Data collection level: Partner	**Data collection frequency:** Quarterly

Products supplied

Data element name: Products supplied	**Reporting question:** What products or supplies were provided to enrolled fields?
Description: Name(s) of products supplied to enrolled producers as incentives or matching contributions. Enter the name of each product, including its brand. Separate each product name with a comma. If no products or supplies were provided by the organization, leave the column blank.	
Data type: Text	**Select multiple values**: NA
Measurement unit: Name	**Allowed values:** Text
Logic: None – all respond	**Required:** Yes
Data collection level: Partner	**Data collection frequency:** Quarterly

Product source

Data element name: Product source	**Reporting question:** Which companies provided the supplies?
Description: Name of firm or company from which supplies were obtained.	
Data type: Text	**Select multiple values**: NA
Measurement unit: Name	**Allowed values:** Text
Logic: Respond if text entered for 'Products supplied'	**Required:** Yes
Data collection level: Partner	**Data collection frequency:** Quarterly

Marketing Activities

Commodity type

Data element name: Commodity type

Reporting question: What type of commodity is produced by the farmers enrolled in this project?

Description: List a single commodity produced or marketed through incentives from this project. If multiple commodities are produced by the project, use additional rows of the worksheet to report each commodity. Use the FSA commodity list in Appendix B and choose the commodity from the list.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values: FSA commodity list

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Marketing channel type

Data element name: Marketing channel type

Reporting question: What type of marketing channel is used to sell this commodity?

Description: List a single type of marketing channel used to sell the commodity produced by farmers enrolled in the project. If a single commodity is marketed through multiple channels, use additional rows of the worksheet to report each combination of commodity and marketing channel. If "other" is chosen, use the additional column to enter the other marketing channel type(s) as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Agricultural marketing board
- Biorefinery
- Commodity broker
- Direct to consumer
- Direct to institution
- Direct to restaurant
- Distributor (including grain elevators)
- Food hub or cooperative
- Food processor
- Non-food byproducts processor
- Retailer
- USDA
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Number of buyers

Data element name: Number of buyers

Reporting question: How many buyers are there in this marketing channel?

Description: List the number of individual firms or buyers in this marketing channel.

Data type: Integer

Select multiple values: No

Measurement unit: Count

Allowed values: 1-500

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Names of buyers

Data element name: Names of buyers	**Reporting question:** What are the names of all of the buyers in this marketing channel?
Description: Provide the names of all buyers in this marketing channel. Separate each name with a comma.	
Data type: Text	**Select multiple values**: NA
Measurement unit: Name	**Allowed values:** Text
Logic: None – all respond	**Required:** Yes
Data collection level: Project	**Data collection frequency:** Quarterly

Marketing channel geography

Data element name: Marketing channel geography	**Reporting question:** What is the primary geography of the marketing channel?
Description: The primary geography of the type of marketing channel. Primary geography means the scale at which most of the activity of buying and selling happens. Local means within a single state or directly neighboring states. Regional means within a five-to-ten state area. National means across the United States. International means specific locations outside of the United States. Global means across the world or not to a specific international location.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Local • Regional • National • Global
Logic: None – all respond	**Required:** Yes
Data collection level: Project	**Data collection frequency:** Quarterly

Value sold

Data element name: Value sold	**Reporting question:** What is the value of the commodity sold in this marketing channel?
Description: The dollar value of the commodity sold in this marketing channel this quarter (non-cumulative).	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Dollars	**Allowed values:** $1-$100,000,000
Logic: None – all respond	**Required:** Yes
Data collection level: Project	**Data collection frequency:** Quarterly

Volume sold

Data element name: Volume sold	**Reporting question:** What is the volume of the commodity sold in this marketing channel?
Description: The volume of the commodity sold in this marketing channel this quarter (non-cumulative).	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Number	**Allowed values:** 1-100,000,000
Logic: None – all respond	**Required:** Yes
Data collection level: Project	**Data collection frequency:** Quarterly

Volume sold unit

Data element name: Volume sold unit

Reporting question: What is the unit of volume?

Description: The unit associated with the volume of the commodity sold in the marketing channel. If "other" is chosen, use the additional column to enter the appropriate unit as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Bales (500 pounds)
- Bushels
- Carcass pounds
- Gallons
- Kilograms
- Linear board feet
- Liveweight pounds
- Metric tons
- Pounds
- Short tons
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Price premium

Data element name: Price premium

Reporting question: What price premium is received for the commodity sold in this marketing channel?

Description: The price premium received for the commodity sold in this marketing channel this quarter. Price premium is the amount received above a 'business as usual' price.

Data type: Decimal

Select multiple values: No

Measurement unit: Dollars

Allowed values: $0.01-$10,000

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Price premium unit

Data element name: Price premium unit

Reporting question: What is the unit for the price premium?

Description: The unit associated with the price premium for the commodity sold in the marketing channel. If "other" is chosen, use the additional column to enter the appropriate unit as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Per bale (500 pounds)
- Per bushel
- Per carcass pound
- Per gallon
- Per kilogram
- Per linear board foot
- Per live pound
- Per metric ton
- Per ounce
- Per short ton
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Price premium to producer

Data element name: Price premium to producer

Reporting question: What percent of the price premium is provided to the producer for the commodity sold in this marketing channel?

Description: The percent of the price premium provided to the producer for the commodity sold in this marketing channel this quarter. Price premium is the amount received above a 'business as usual' price.

Data type: Decimal

Select multiple values: No

Measurement unit: Percent

Allowed values: 0-100

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Product differentiation method

Data element name: Product differentiation method 1-3

Reporting question: What methods are used to differentiate climate-smart commodities in this marketing channel?

Description: Provide the methods used to differentiate the climate-smart commodity in this market channel. Product differentiation methods are ways to distinguish or differentiate the climate-smart commodity in the marketplace. Include up to 3 methods, based on which methods are most commonly used for this project. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 product differentiation methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other product differentiation methods as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Certification/verification for internal insetting
- Farm certification
- Label or badge used on packaging or marketing
- Third party certification/verification
- Trademark
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Marketing method

Data element name: Marketing method 1-3

Reporting question: What methods are used to market climate-smart commodities in this marketing channel?

Description: Provide the method(s) used to market this commodity in this market channel. Marketing method is the way that potential buyers of the climate-smart commodity are engaged by the project partners as the sellers or facilitators of sale. Include up to 3 methods, based on which methods are most commonly used for this project. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 marketing methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other marketing methods as free text

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Label or badge used on packaging or marketing materials
- Marketing partnership (e.g., promotion by buyer)
- Print marketing campaign
- Social media and digital marketing campaign
- Verbal marketing campaign (e.g., radio, word of mouth)
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Marketing channel identification method

Data element name: Marketing channel identification method 1-3

Reporting question: What methods are used to generate interest in climate-smart commodities in this marketing channel?

Description: Provide the marketing channel identification method(s) used for this commodity in this market channel. Market channel identification methods are the ways that producers and project partners generate interest in purchasing the climate-smart commodity. Include up to 3 methods, based on which methods are most commonly used for this project. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 marketing channel identification methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other marketing channel identification methods as free text

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Educational tours for buyers
- In-person lead generation
- Negotiated contracts with buyers
- Partnership network or project partner
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Traceability method

Data element name: Traceability method 1-3

Reporting question: What traceability methods are used for climate-smart commodities in this channel?

Description: Provide the traceability method(s) used for the climate-smart commodity in this market channel. Traceability methods are ways to trace the climate-smart commodity or the climate-smart claims through the supply chain. Include up to 3 methods, based on which methods are most commonly used for this project. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 traceability methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other traceability methods as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Barcode or unique ID
- Blockchain
- Book and claim
- Chain of custody
- Mass balance
- Recordkeeping
- Registry with certification
- Segregation
- Supply shed
- Volume proxy
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Producer Enrollment

Unique IDs

Farm ID	Unique Farm ID assigned by FSA
State or territory	State name (must match FSA farm enrollment data)
County of residence	County name (must match FSA farm enrollment data)

Producer data change

Data element name: Producer data change

Reporting question: Is there new/updated information for a producer who is re-enrolling in the project?

Description: Indicates that there is new or updated information for a producer who had previously enrolled in the project and is re-enrolling.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:
- Yes
- No

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Re-enrollment

Producer start date

Data element name: Producer start date

Reporting question: When did the producer enroll in the project?

Description: Date that the producer enrolled in the project by signing their first contract.

Data type: Date

Select multiple values: NA

Measurement unit: MM/DD/YYYY

Allowed values: 01/01/2023 – 12/31/2030

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Initial enrollment

Producer name

Data element name: Producer name

Reporting question: What is the name of producer enrolled in the project?

Description: Name of the producer enrolled in the project; the name must match the name contained in the customer's Business Partner record and the Farm Operating Plan in FSA Business File for that Farm ID.

Data type: Text

Select multiple values: NA

Measurement unit: NA

Allowed values: Text

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Initial enrollment

Underserved status

Data element name: Underserved status

Reporting question: Is this producer considered an underserved and/or a small producer?

Description: Underserved status of the primary operator of the enrolled operation. Underserved producers generally include beginning farmers, socially disadvantaged farmers, veteran farmers, and limited resource farmers; women farmers and producers growing specialty crops are generally also included in these categories. Small farms are generally those with less than $350,000 in annual gross cash farm income. Indicate whether this producer is considered underserved, a small producer, or both underserved and a small producer. Use "I don't know" if the producer declines to answer. Departmental Regulation 4370-001 provides USDA's policies for collecting demographic data, including race, ethnicity and gender. Providing demographic information is voluntary and at the discretion of the customer. Demographic information is used by USDA for statistical purposes only and will not be used to determine an applicant's eligibility for programs or services for which they apply.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes, underserved
- Yes, small producer
- Yes, underserved and small producer
- No
- I don't know

Logic: None – all respond

Required: No

Data collection level: Producer

Data collection frequency: Initial enrollment

Total area

Data element name: Total area

Reporting question: What is the total area of the farm?

Description: Total area of the farm associated with the Farm ID. Report total area of the farm, even if only a portion of the farm is enrolled in the project. If a producer is enrolled in the project for multiple years, review the total area each time a new contract is signed and provide any necessary updates.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Less than 1 acre
- 1 to 9 acres
- 10 to 49 acres
- 50 to 69 acres
- 70 to 99 acres
- 100 to 139 acres
- 140 to 179 acres
- 180 to 219 acres
- 220 to 259 acres
- 260 to 499 acres
- 500 to 999 acres
- 1,000 to 1,999 acres
- 2,000 to 4,999 acres
- 5,000 or more acres

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Initial enrollment and subsequent enrollment(s), if applicable

Total crop area

Data element name: Total crop area	**Reporting question:** What percent of the current operation is cropland?
Description: Area of the total farm that is currently used as cropland. If a producer is enrolled in the project for multiple years, review the total crop area each time a new contract is signed and provide any necessary updates.	
Data type: Integer	**Select multiple values:** No
Measurement unit: Acres	**Allowed values:** 0-100,000
Logic: None – all respond	**Required:** Yes
Data collection level: Producer	**Data collection frequency:** Initial enrollment and subsequent enrollment(s), if applicable

Total livestock area

Data element name: Total livestock area	**Reporting question:** What amount of the current operation is used for livestock (by area)?
Description: Area of the total farm that is currently used for pasture, grazing, rangeland; or animal housing, feeding or milking. If a producer is enrolled in the project for multiple years, review the total livestock area each time a new contract is signed and provide any necessary updates.	
Data type: Integer	**Select multiple values:** No
Measurement unit: Acres	**Allowed values:** 0-100,000
Logic: None – all respond	**Required:** Yes
Data collection level: Producer	**Data collection frequency:** Initial enrollment and subsequent enrollment(s), if applicable

Total forest area

Data element name: Total forest area	**Reporting question:** What amount of the current operation is forested (by area)?
Description: Area of the total farm that is currently considered forest land use. Forest land use means that at least 10% of the land area is covered in trees that will be at least 13 feet tall when mature. If a producer is enrolled in the project for multiple years, review the total forest area each time a new contract is signed and provide any necessary updates.	
Data type: Integer	**Select multiple values:** No
Measurement unit: Acres	**Allowed values:** 0-100,000
Logic: None – all respond	**Required:** Yes
Data collection level: Producer	**Data collection frequency:** Initial enrollment and subsequent enrollment(s), if applicable

Livestock type

Data element name: Livestock type 1-3

Reporting question: What types of livestock are raised on the farm?

Description: Up to top three types of livestock (by head count) on the farm. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If there are fewer than 3 livestock types, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other livestock types as free text. If a producer is enrolled in the project for multiple years, review the livestock type each time a new contract is signed and provide any necessary updates.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Alpacas
- Beef cows
- Beefalo
- Buffalo or bison
- Chickens (broilers)
- Chickens (layers)
- Dairy cows
- Deer
- Ducks
- Elk
- Emus
- Equine
- Geese
- Goats
- Honeybees
- Llamas
- Reindeer
- Sheep
- Swine
- Turkeys
- Other (specify)

Logic: Respond if 'Total livestock area' >0

Required: Yes

Data collection level: Producer

Data collection frequency: Initial enrollment and subsequent enrollment(s), if applicable

Livestock head

Data element name: Livestock head 1-3

Reporting question: How many livestock (by type) are on this operation?

Description: Average annual head count for each type of livestock. Enter amounts for up to the top three livestock types by number. The worksheet provides three columns for this data element. Enter one value for each column. If there are fewer than 3 livestock types, leave unnecessary columns blank. If a producer is enrolled in the project for multiple years, review the average annual head count each time a new contract is signed and provide any necessary updates.

Data type: Integer

Select multiple values: NA

Measurement unit: Head count

Allowed values: 1-10,000,000

Logic: Respond if 'Total livestock area' >0

Required: Yes

Data collection level: Producer

Data collection frequency: Initial enrollment and subsequent enrollment(s), if applicable

Organic farm

Data element name: Organic farm

Reporting question: Is any part of the farm currently USDA-certified organic or transitioning to USDA-certified organic?

Description: USDA-certified organic means that the farm has been certified by an accredited organic certifying agent or is transitioning to USDA-certified organic by not using any of the prohibited substances. Yes means that some or all of the farm is certified organic or transitioning to certified organic. No means that no part of the farm is certified organic or transitioning to certified organic. If a producer is enrolled in the project for multiple years, review the organic certification status of the farm each time a new contract is signed and provide any necessary updates.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No
- I don't know

Logic: None – all respond

Required: No

Data collection level: Producer

Data collection frequency: Initial enrollment and subsequent enrollment(s), if applicable

Organic fields

Data element name: Organic fields

Reporting question: Are any of the fields enrolled in the project currently USDA-certified organic or transitioning to USDA-certified organic?

Description: USDA-certified organic means that the operation has been certified by an accredited organic certifying agent or is transitioning to USDA-certified organic by not using any of the prohibited substances. Yes means that some or all of the fields enrolled in the project are certified organic or transitioning to certified organic. No means that no part of the fields enrolled in the project are certified organic or transitioning to certified organic. If a producer is enrolled in the project for multiple years, review the organic certification status of the enrolled fields each time a new contract is signed and provide any necessary updates.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No
- I don't know

Logic: Respond if yes to 'Organic operation'

Required: No

Data collection level: Producer

Data collection frequency: Initial enrollment and subsequent enrollment(s), if applicable

Producer motivation

Data element name: Producer motivation

Reporting question: Which of the following was the primary reason the producer enrolled in this project?

Description: Primary operator's motivation for enrolling in the project.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Financial benefit
- Environmental benefit
- New market opportunity
- Partnerships or networks
- Other

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Initial enrollment

Producer outreach

Data element name: Producer outreach 1-3

Reporting question: What types of outreach were provided to producers?

Description: Up to three most common types of outreach provided to producer prior to enrollment. Outreach activities are those focused on identifying and enrolling producers in the project. Outreach can come from the recipient or project partners. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If there are fewer than 3 outreach types, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other outreach types as free text.

Data type: List

Select multiple values: Yes

Measurement unit: Category

Allowed values:

- Commodity organizations
- Conferences
- Cooperative extension
- Digital communications and resources
- Education workshops, field days, and town halls
- Existing partner networks
- Farm visits and one-on-one meetings
- General advertising
- Peer referrals and producer groups
- Phone calls
- Print communications and resources
- Retailers
- State agencies
- Targeted messaging using proprietary data
- Technical service providers
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Initial enrollment

CSAF experience

Data element name: CSAF experience

Reporting question: Has the primary operator implemented CSAF practices in the last ten years anywhere on the farm?

Description: Has this farm implemented climate-smart agriculture or forestry (CSAF) practices anywhere on the farm in the past 10 years or since the current primary operator took control (whichever time period is shorter)? CSAF practices are included in a list in Appendix A.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No
- I don't know

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Initial enrollment

CSAF federal funds

Data element name: CSAF federal funds

Reporting question: Were prior CSAF practices supported by federal funds?

Description: If this farm (under the primary operator) has implemented CSAF practices in the last ten years, was implementation supported by federal funds? Federal funds are defined as being from programs including, but not limited to, those from the Natural Resources Conservation Service ((NRCS), including through Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), Regional Conservation Partnership Program (RCPP), or related programs), the Farm Service Agency Conservation Reserve Program (CRP), as well as funds from other USDA programs or other federal agencies.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No
- I don’t know

Logic: Respond if yes to 'CSAF experience'

Required: Yes

Data collection level: Producer

Data collection frequency: Initial enrollment

CSAF state or local funds

Data element name: CSAF state or local funds

Reporting question: Were prior CSAF practices supported by state or local funds?

Description: If this farm (under the primary operator) has implemented CSAF practices in the last ten years, was implementation supported by state funds? State or local funds are those from state departments of agriculture or other state agencies, local water quality districts and other local agencies.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No
- I don’t know

Logic: Respond if yes to 'CSAF experience'

Required: Yes

Data collection level: Producer

Data collection frequency: Initial enrollment

CSAF nonprofit funds

Data element name: CSAF nonprofit funds

Reporting question: Were CSAF practices supported by nonprofit funds?

Description: If this farm (under the primary operator) has implemented CSAF practices in the last ten years, was implementation supported by nonprofit funds? Nonprofit funds are those offered directly from a nonprofit organization to a producer.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No
- I don’t know

Logic: Respond if yes to 'CSAF experience'

Required: Yes

Data collection level: Producer

Data collection frequency: Initial enrollment

CSAF market incentives

Data element name: CSAF market incentives	**Reporting question:** Were CSAF practices supported by market incentives?
Description: If this farm (under the primary operator) has implemented CSAF practices in the last ten years, was implementation supported by market incentives? Market incentives include premiums paid by a commodity buyer or by a consumer based on branding or labeling as a climate-smart commodity.	
Data type: List	**Select multiple values:** No
Measurement unit: Category	**Allowed values:** • Yes • No • I don't know
Logic: Respond if yes to 'CSAF experience'	**Required:** Yes
Data collection level: Producer	**Data collection frequency:** Initial enrollment

Field Enrollment

Unique IDs

Farm ID	Unique Farm ID assigned by FSA
Tract ID	Unique Tract ID assigned by FSA
Field ID	Unique Field ID assigned by FSA
State or territory of field	State name (must match FSA farm enrollment data)
County of field	County name (must match FSA farm enrollment data)
Prior Field ID, if applicable	Prior Field ID assigned by FSA if there has been reconstitution of the farm resulting in a new Field ID during the field's enrollment in the project

Field data change

Data element name: Field data change

Reporting question: Has the information previously reported for this field changed?

Description: Indicator that this entry is being used to report any relevant changes, such as a new Field ID number or changes to the commodity or practice combinations, for a field that has previously been enrolled in the project.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Re-enrollment

Contract start date

Data element name: Contract start date

Reporting question: What is the start date of the contract with the producer that includes this field?

Description: Start date listed on the contract that enrolls the field in the project.

Data type: Date

Select multiple values: NA

Measurement unit: MM/DD/YYYY

Allowed values: 01/01/2023 – 12/31/2030

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Initial enrollment

Total field area

Data element name: Total field area

Reporting question: What is the total size of the enrolled field?

Description: Total size of the field enrolled with the project.

Data type: Decimal

Select multiple values: No

Measurement unit: Acres

Allowed values: .01-500

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Initial enrollment

Commodity category

Data element name: Commodity category	**Reporting question:** What category of commodity(ies) is (are) produced from this field?
Description: Category of commodity(ies) produced in field enrolled in the project	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Crops • Livestock • Trees • Crops and livestock • Crops and trees • Livestock and trees • Crops, livestock and trees
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Initial enrollment

Commodity type

Data element name: Commodity type	**Reporting question:** What type of commodity is produced from this field?
Description: Type of commodity produced in field enrolled in the project. See full list in Appendix B. The worksheet provides a drop-down list of the allowed values. Choose the appropriate value. Enter additional commodities in subsequent rows.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** FSA commodity list
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Initial enrollment

Baseline yield

Data element name: Baseline yield	**Reporting question:** What is the baseline yield of this field?
Description: Average annual yield of commodity in 3 years prior to enrollment. Provide yield for the enrolled field if possible. If not at field level, provide average annual yield for the specific commodity for the operation.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Production per acre or animal	**Allowed values:** .01-100,000
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Initial enrollment

Baseline yield unit

Data element name: Baseline yield unit

Reporting question: Baseline yield unit

Description: Unit of average annual yield of commodity in enrolled field in 3 years prior to enrollment. The worksheet provides a drop-down list of choices for this data element. If "other" is chosen, use the additional column to enter the appropriate yield unit as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Animal units per acre
- Bushels per acre
- Carcass pounds per animal
- Head per acre
- Hundred-weights (or pounds) per head
- Linear feet per acre
- Liveweight pounds per animal
- Pounds per acre
- Tons per acre
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Initial enrollment

Baseline yield location

Data element name: Baseline yield location

Reporting question: For what portion of the operation is the baseline yield being reported?

Description: Location of the reported average annual yield of commodity in 3 years prior to enrollment. If "other" is chosen, use the additional column to enter the appropriate location as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Enrolled field
- Whole operation
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Initial enrollment

Field land use

Data element name: Field land use

Reporting question: What is this field's land use history?

Description: Prior to enrollment, what was the most common land use for this field in the past 3 years?

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Crop land
- Forest land
- Non-agriculture
- Other agricultural land
- Pasture
- Range

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Initial enrollment

Field irrigated

Data element name: Field irrigated	**Reporting question:** What is this field's irrigation history?
Description: Prior to enrollment, what was the most common irrigation practice on this field the past 3 years?	
Data type: List	**Select multiple values:** No
Measurement unit: Category	**Allowed values:** • No irrigation • Center pivot • Drip-subsurface • Drip-surface • Flood/border • Furrow/ditch • Lateral/linear sprinklers • Micro-sprinklers • Seepage • Side roll • Solid set sprinklers • Supplemental • Surface • Traveling gun/towline • Wheel Line • Other
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Initial enrollment

Field tillage

Data element name: Field tillage	**Reporting question:** What is this field's tillage history?
Description: Prior to enrollment, what was the most common tillage approach during the past 3 years?	
Data type: List	**Select multiple values:** No
Measurement unit: Category	**Allowed values:** • None • Conventional, inversion • Conventional, vertical • No-till, direct seed • Reduced till, inversion • Reduced till, vertical • Strip till • Other
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Initial enrollment

Practice past extent - farm

Data element name: Practice past extent - farm

Reporting question: What percent of the farm has implemented this CSAF practice (combination) previously?

Description: Prior to enrollment, on what portion of the whole farm had this (these) CSAF practice(s) ever been used by the primary operator? If multiple practices are planned to be implemented in this field, enter the value that best corresponds to the farm's prior experience with the planned set of practices.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Never used
- Used on less than 25% of operation
- Used on 25-50% of operation
- Used on 51-75% of operation
- Used on more than 75% of operation

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Initial enrollment

Field any CSAF practice

Data element name: Field any CSAF practice

Reporting question: What is this field's prior experience with CSAF practices?

Description: Prior to enrollment, have any CSAF practice or practices been used in this field in the past 3 years? CSAF practices are included in a list in Appendix A.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No
- I don't know

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Initial enrollment

Practice past use - this field

Data element name: Practice past use - this field

Reporting question: Have this CSAF practice (combination) been implemented previously in this field?

Description: Prior to enrollment, had this (these) CSAF practice(s) been used in this field in the in the past 3 years? Enter yes if all of the practices had been used previously in this field; enter some if multiple practices are being implemented and one or more, but not all of the practices had been used previously in this field; and enter no if none of the practices had been used previously in this field.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- Some
- No
- I don't know

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Initial enrollment

Practice type

Data element name: Practice type 1-7	**Reporting question:** What CSAF practice is being implemented in this field through the project?
Description: Which CSAF practice or practices will be implemented on this field as part of enrollment in the project? CSAF practices are included in a list in Appendix A. The worksheet provides seven columns for this data element. Enter one value for each column. If there are fewer than 7 practices being implemented on this field through enrollment in the project, leave unnecessary columns blank.	
Data type: List	**Select multiple values:** No
Measurement unit: Category	**Allowed values:** See list in Appendix A
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Initial enrollment

Practice standard

Data element name: Practice standard 1-7	**Reporting question:** What standard does the CSAF practice follow?
Description: Is the CSAF practice being implemented on the field as part of enrollment in the project following a defined practice standard? The worksheet provides seven columns for this data element. Enter one value for each column, corresponding to the practice types entered in the previous columns. If there are fewer than 7 practices being implemented on this field through enrollment in the project, leave unnecessary columns blank.	
Data type: List	**Select multiple values:** No
Measurement unit: Category	**Allowed values:** • NRCS • Other (specify)
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Initial enrollment

Planned practice implementation year

Data element name: Practice 1-7 implementation year	**Reporting question:** What year is the CSAF practice planned to be implemented?
Description: Year that the CSAF practice is planned to be implemented on the field. Use 2022 for early adopters, defined as fields that have the practice actively implemented in 2022 (prior to contract being signed for this project). The worksheet provides seven columns for this data element. Enter one value for each column, corresponding to the practice types entered in the previous columns. If there are fewer than 7 practices being implemented on this field through enrollment in the project, leave unnecessary columns blank.	
Data type: Integer	**Select multiple values:** No
Measurement unit: Year	**Allowed values:** 2022-2030
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Initial enrollment

Practice extent

Data element name: Practice 1-7 extent	**Reporting question:** To what extent is the practice implemented?
Description: Total area, length, or head where the practice is being implemented in the field specified by the contract.	
Data type: Decimal	**Select multiple values:** No
Measurement unit: Extent	**Allowed values:** .01-100,000
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Initial enrollment

Practice extent unit	
Data element name: Practice 1-7 extent unit	**Reporting question:** Unit for extent of practice implementation
Description: Unit for extent of practice implementation on the field specified by the contract. If "other" is chosen, use the additional column to enter the appropriate unit.	
Data type: List	**Select multiple values:** No
Measurement unit: Category	**Allowed values:** • Acres • Head of livestock • Linear feet • Square feet • Other (specify)
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Initial enrollment

CSAF Practice Sub-questions

For certain practices, additional questions are asked that provide information necessary to estimate greenhouse gas benefits from implementation of the practice. See Table 11 in the *CSAF Practice Sub-questions* section for descriptions of individual questions to be answered depending on the CSAF practices selected.

Farm Summary

Unique IDs

Farm ID	Unique Farm ID assigned by FSA
State or territory	State name (must match FSA farm enrollment data)
County of residence	County name (must match FSA farm enrollment data)

Producer TA received

Data element name: Producer TA received 1-3

Reporting question: What types of technical assistance were provided to this producer?

Description: Did the recipient or any partner provide technical assistance (TA) to the producer this year? Technical assistance is any training, education, capacity building or other support provided by any project partner(s) directly to producers enrolled in the project. List up to the top three most common types of TA provided to this producer. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If there are fewer than 3 TA types, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other TA types as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Demonstration plots
- Equipment demonstrations
- Group field days or in-person field workshops
- Hotline
- One-on-one enrollment assistance
- One-on-one field visits
- One-on-one producer mentorship
- Producer networks and peer-to-peer groups
- Retailer consultation
- Social media/digital tools
- Train-the-trainer opportunities
- Virtual meetings or field days
- Webinars and videos
- Written materials
- None
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly

Producer incentive amount

Data element name: Producer incentive amount

Reporting question: What is the total value of financial incentives provided to this producer?

Description: Total incentive payment received by the producer from USDA project funds for the year (non-cumulative). Do not include incentive payments made with partner match funds.

Data type: Decimal

Select multiple values: NA

Measurement unit: Dollars

Allowed values: $0-$5,000,000

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly

Incentive reason

Data element name: Incentive reason 1-4

Reporting question: Why were incentives provided to this producer?

Description: List up to four reasons for producer incentive payments. List the top 4 based on total value of the incentive for each reason. The worksheet provides four columns with a drop-down list of the allowed values. Choose one value for each column. If there are fewer than 4 reasons, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other reasons as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Avoided conversion
- Conference or training attendance
- Demographics/equity payment
- Enrollment
- Foregone revenue
- Historic data collection
- Identity preservation (supply chain tracing)
- Implementation of practices
- MMRV (e.g., data collection, reporting)
- Passing audit
- Price premium on output
- Yield change
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly

Incentive structure

Data element name: Incentive structure 1-4

Reporting question: What are the units for the financial incentives provided to this producer?

Description: List the structures (units) corresponding to the top 4 (by dollar value) incentive payments to producers. Production unit is weight or volume (bushel, kilogram, ton). The worksheet provides four columns with a drop-down list of the allowed values. Choose one value for each column. If there are fewer than 4 structure types, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other structure types as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Flat rate
- Per animal head
- Per area
- Per length
- Per production unit
- Per ton GHG
- Per tree
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly

Incentive type

Data element name: Incentive type 1-4

Reporting question: What type of incentives were provided to each producer?

Description: List the top 4 types of incentive payments to producers (based on dollar value). The worksheet provides four columns with a drop-down list of the allowed values. Choose one value for each column. If there are fewer than 4 incentive types, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other incentive types as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Cash payment
- Equipment loan
- Guaranteed commodity premium payment
- Inputs and supplies
- Land rental
- Loan
- Paid labor
- Post-harvest transportation
- Tuition or fees for training
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly

Payment on enrollment

Data element name: Payment on enrollment

Reporting question: What portion of the financial incentive is provided to the producer upon enrollment in the project?

Description: Any incentive payment provided to the producer upon enrollment/signing a contract, and not related to any implementation, MMRV or sales activities. Full payment means the full incentive amount for any contract held by the producer is paid upon enrollment. Partial payment means that only part of the full incentive amount for any contract held by the producer is paid upon enrollment. No payment means that none of the full incentive amount for any contract held by the producer is paid upon enrollment.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Full payment
- Partial payment
- No payment

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly

Payment on implementation

Data element name: Payment on implementation

Reporting question: What portion of the financial incentive is provided to the producer upon implementation of the practices?

Description: Any incentive payment provided to the producer upon implementing the practices included in the contract. Full payment means the full incentive amount for any contract held by the producer is paid upon implementation. Partial payment means that only part of the full incentive amount for any contract held by the producer is paid upon implementation. No payment means that none of the full incentive amount for any contract held by the producer is paid upon implementation.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Full payment
- Partial payment
- No payment

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly

Payment on harvest

Data element name: Payment on harvest

Reporting question: What portion of the financial incentive is provided to the producer upon harvest of the commodity?

Description: Any incentive payment provided to the producer upon harvesting or slaughtering the commodity included in the contract. Full payment means the full incentive amount for any contract held by the producer is paid upon harvest. Partial payment means that only part of the full incentive amount for any contract held by the producer is paid upon harvest. No payment means that none of the full incentive amount for any contract held by the producer is paid upon harvest.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Full payment
- Partial payment
- No payment

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly

Payment on MMRV

Data element name: Payment on MMRV

Reporting question: What portion of the financial incentive is provided to the producer upon completing MMRV requirements?

Description: Any incentive payment provided to the producer upon completing the annual MMRV requirements included in the contract. Full payment means the full incentive amount for any contract held by the producer is paid upon MMRV being complete. Partial payment means that only part of the full incentive amount for any contract held by the producer is paid upon MMRV being complete. No payment means that none of the full incentive amount for any contract held by the producer is paid upon MMRV being complete.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Full payment
- Partial payment
- No payment

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly

Payment on sale

Data element name: Payment on sale

Reporting question: What portion of the financial incentive is provided to producer upon sale of the commodity?

Description: Any incentive payment provided to the producer upon sale of the commodity included in the contract. Full payment means the full incentive amount for any contract held by the producer is paid upon sale. Partial payment means that only part of the full incentive amount for any contract held by the producer is paid upon sale. No payment means that none of the full incentive amount for any contract held by the producer is paid upon sale.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Full payment
- Partial payment
- No payment

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly

Field Summary

Unique IDs

Farm ID	Unique Farm ID assigned by FSA
Tract ID	Unique Tract ID assigned by FSA
Field ID	Unique Field ID assigned by FSA
State or territory of field	State name (must match FSA farm enrollment data)
County of field	County name (must match FSA farm enrollment data)

Commodity type

Data element name: Commodity type

Reporting question: What type of commodity is produced from this field?

Description: Type of commodity produced in field enrolled in the project. See full list in Appendix B. The worksheet provides multiple columns with a drop-down list of the allowed values. Choose one value for each column. Leave unnecessary columns blank.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values: FSA commodity list

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Practice type

Data element name: Field practice type 1-7

Reporting question: What CSAF practice is being implemented in this field through the project?

Description: Which climate-smart agriculture or forestry (CSAF) practice or practices are being implemented in this project? CSAF practices are included in a list in Appendix A. The worksheet provides seven columns for this data element. Enter one value for each column. If there are fewer than 7 practices being implemented on this field through enrollment in the project, leave unnecessary columns blank.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values: See list in Appendix A

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Date practice complete

Data element name: Date practice complete

Reporting question: When did the project certify CSAF practice implementation as complete?

Description: Date that the project certifies that implementation of the CSAF practice is complete on the field. Use January of the year prior to contract year for early adopters, defined as fields that have the practice actively implemented in the year prior to a contract associated with this project is signed). The worksheet provides seven columns for this data element. Enter one value for each column, corresponding to the practice types entered in the previous columns. If there are fewer than 7 practices being implemented on this field through enrollment in the project, leave unnecessary columns blank.

Data type: Date

Select multiple values: No

Measurement unit: MM/DD/YYYY

Allowed values: 01/01/2023 – 12/31/2030

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Contract end date

Data element name: Contract end date

Reporting question: Contract end date

Description: End date listed on the contract that enrolls the field in the project. If contract end date changes, submit updated end date during the next quarter's reporting.

Data type: Date

Select multiple values: No

Measurement unit: MM/DD/YYYY

Allowed values: 01/01/2023 – 12/31/2030

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

MMRV assistance provided

Data element name: MMRV assistance provided

Reporting question: Was MMRV assistance provided?

Description: Was any MMRV assistance provided to the primary operator for this field? MMRV assistance includes in-field support for the use of technologies, consultation on data collection and input, and other support related to MMRV. MMRV is defined a measurement (calculations or estimations of GHG emissions), monitoring (ongoing review and confirmation that the climate-smart practice has been implemented according to the agreed upon standard and documentation of any changes in the site, implementation, or GHG emissions impacts over time), reporting (documenting and sharing monitoring and measurement results with project partners, the recipient, and any third-party verification organization), and verification (independent confirmation that measurement, monitoring and reporting information are complete, accurate and reliable).

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No
- I don't know

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Marketing assistance provided

Data element name: Marketing assistance provided

Reporting question: Was marketing assistance provided?

Description: Was any marketing assistance provided to the primary operator for the commodity(ies) produced from this field? Marketing assistance includes guaranteeing the sale of the commodity(ies), providing a platform for the sale of the commodity(ies), providing a label, branding, or other support related to marketing.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No
- I don't know

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Incentive per acre or head

Data element name: Incentive per acre or head

Reporting question: Is this field receiving a per-acre or per-head incentive?

Description: Is this field receiving an incentive payment to implement a specific CSAF practice or set of practices on a per-acre or per-head (livestock) basis?

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No
- I don't know

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Field commodity value

Data element name: Field commodity value	**Reporting question:** What is the value of the commodity produced on the enrolled field?
Description: The dollar value of the commodity produced on the enrolled field.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Dollars	**Allowed values:** $1-$10,000,000
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Quarterly

Field commodity volume

Data element name: Field commodity volume	**Reporting question:** What is the volume of commodity produced on the enrolled field?
Description: The volume of the commodity produced on the enrolled field	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Number	**Allowed values:** 1-10,000,000
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Quarterly

Field commodity volume unit

Data element name: Field commodity volume unit	**Reporting question:** What is the unit of volume?
Description: The unit associated with the volume of the commodity produced on the enrolled field. If "other" is chosen, enter the appropriate value in the additional column.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Bushels • Carcass weight pounds • Gallons • Head • Linear feet • Liveweight pounds • Pounds • Tons • Other (specify)
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Quarterly

Cost of implementation

Data element name: Cost of implementation	**Reporting question:** What is the cost of practice implementation in the field?
Description: Total annual estimated cost per unit of implementing the practice(s) in the enrolled field.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Dollars	**Allowed values:** $1-$10,000,000
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Quarterly

Cost unit

Data element name: Cost unit

Reporting question: What is the unit for cost?

Description: The unit associated with the cost of implementing CSAF practices in the field. If "other" is chosen, enter the appropriate value in the additional column.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Per acre
- Per bushel
- Per head
- Per linear foot
- Per pound
- Per ton
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Cost coverage

Data element name: Cost coverage

Reporting question: What percent of the practice cost is covered by the incentive?

Description: Estimated proportion of total annual cost of implementing the practice(s) that is covered by project incentives.

Data type: Integer

Select multiple values: No

Measurement unit: Percent

Allowed values: 0-100

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Field GHG monitoring

Data element name: Field GHG monitoring 1-3

Reporting question: How were GHG impacts monitored in this field?

Description: Up to the top three forms of monitoring GHG benefits as part of MMRV requirements. Monitoring is defined as ongoing review and confirmation that the climate-smart practice has been implemented according to the agreed upon standard and documentation of any changes in the site, implementation, or GHG emissions impacts over time. Include up to 3 methods, based on which methods are most commonly used for this field. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 GHG monitoring methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other GHG monitoring methods as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Drones
- Ground-level photos and videos
- On-farm inspection
- Plot-based sampling (e.g., soil, water)
- Producer records or attestation
- Satellite monitoring or remote sensing
- Soil metagenomics
- Soil sensors
- Water sensors
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Field GHG reporting

Data element name: Field GHG reporting 1-3

Reporting question: How were GHG benefits reported for this field?

Description: Up to the top three forms of reporting on GHG benefits as part of MMRV requirements. Reporting is defined as documenting and sharing monitoring and measurement results with project partners, the recipient, and any third-party verification organization. Include up to 3 methods, based on which methods are most commonly used for this field. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 GHG reporting methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other GHG reporting methods as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Automated devices
- Email
- Mobile app
- Paper
- Third-party actors
- Website
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Field GHG verification

Data element name: Field GHG verification 1-3

Reporting question: How was implementation of practices to reduce GHG emissions verified for this field?

Description: Up to the top three of verification of GHG benefits as part of MMRV requirements. Verification is defined as independent confirmation that measurement, monitoring and reporting information are complete, accurate and reliable. Include up to 3 methods, based on which methods are most commonly used for this field. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 GHG verification methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other GHG verification methods as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Artificial intelligence
- Computer modeling
- Recipient audit
- Photos
- Record audit
- Satellite imagery
- Site or field visit
- Third-party audit
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Field GHG calculations

Data element name: Field GHG calculations

Reporting question: What methods are used to calculate GHG benefits in this field?

Description: List the method(s) used to calculate GHG benefits in this field. If yes to direct physical measurements, submit result reports (see *Supplemental Data Submission – Field direct GHG measurement results*).

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:
- Models
- Direct field measurements
- Both

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Field official GHG calculation

Data element name: Field official GHG calculation

Reporting question: What method was used to calculate the official GHG benefits in this field?

Description: List the method used to calculate the official GHG benefits in this field that are reported as part of the project's aggregate impact.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:
- Models
- Direct field measurements

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Field official GHG ER

Data element name: Field official GHG emission reductions

Reporting question: What are the estimated total GHG emission reductions (CO2eq) in this field?

Description: Estimated greenhouse gas emission reductions from practice implementation in this field that are reported as part of the project's aggregate impact. This data element must be entered upon practice completion or annually, as appropriate.

Data type: Decimal

Select multiple values: No

Measurement unit: Metric tons CO_2eq

Allowed values: 0-10,000,000

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Field official carbon stock

Data element name: Field official carbon stock

Reporting question: How much carbon has been sequestered in this field?

Description: Estimated total change in carbon stock based on practice implementation in this field. This data element can be reported in any quarter and is cumulative for the year. Conversion rate is one ton of carbon = 3.67 tons of CO_2eq.

Data type: Decimal

Select multiple values: No

Measurement unit: Metric tons CO_2eq

Allowed values: 0-10,000,000

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Field official CO2 ER

Data element name: Field official CO2 emission reductions	**Reporting question:** What are the estimated total CO2 emission reductions in this field?
Description: Estimated total carbon dioxide emission reductions based on practice implementation in this field that are reported as part of the project's aggregate impact. This data element must be entered upon practice completion or annually, as appropriate.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Metric tons CO_2	**Allowed values:** 0-10,000,000
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Quarterly

Field official CH4 ER

Data element name: Field official CH4 emission reductions	**Reporting question:** What are the estimated total CH4 emission reductions in this field?
Description: Estimated total methane emission reductions based on practice implementation in this field that are reported as part of the project's aggregate impact. This data element must be entered upon practice completion or annually, as appropriate. Conversion rate is one ton of CH_4 = 25 tons of CO_2eq.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Metric tons CH4 reduced in CO_2eq	**Allowed values:** 0-10,000,000
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Quarterly

Field official N20 ER

Data element name: Field official N2O emission reductions	**Reporting question:** What are the estimated total N2O emission reductions in this field?
Description: Estimated total nitrous oxide emission reductions based on practice implementation in this field that are reported as part of the project's aggregate impact. This data element must be entered upon practice completion or annually, as appropriate. Conversion rate is one ton of N_2O = 298 tons of CO_2eq.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Metric tons N2O reduced in CO_2eq	**Allowed values:** 0-10,000,000
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Quarterly

Field offsets produced

Data element name: Field offsets produced	**Reporting question:** How many carbon offsets have been produced in this field?
Description: Total carbon offsets produced in the field during the quarter (not cumulative). Offsets are defined as having been verified and certified using an accepted standard and sold into the carbon marketplace.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Metric tons CO_2eq	**Allowed values:** 0-10,000,000
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Quarterly

Field insets produced

Data element name: Field insets produced	**Reporting question:** How many carbon insets have been produced in this field?
Description: Total carbon insets produced in the field during the quarter (not cumulative). Insets are defined as having been verified and certified using an accepted standard and accounted for within Scope 3 emissions for a firm.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Metric tons CO_2eq	**Allowed values:** 0-10,000,000
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Quarterly

Other field measurement

Data element name: Other field measurement	**Reporting question:** Were data collected from the field for reasons other than GHG benefit estimation?
Description: Direct physical measurements or data collection taken in the field for any reason other than GHG benefits estimation. These reasons could include calibration of GHG estimation tools or models, tracking other environmental benefits (see Field environmental benefits report), and other reasons. If yes, submit corresponding reports (see *Supplemental data submission - Field direct measurement results*).	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Yes • No • I don't know
Logic: None – all respond	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Quarterly

GHG Benefits - Alternate Modeled

Unique IDs	
Farm ID	Unique Farm ID assigned by FSA
Tract ID	Unique Tract ID assigned by FSA
Field ID	Unique Field ID assigned by FSA
State or territory of field	State name (must match FSA farm enrollment data)
County of field	County name (must match FSA farm enrollment data)

Commodity type

Data element name: Commodity type 1-6 **Reporting question:** What type of commodity(ies) is produced from this field?

Description: Type of commodity(ies) produced in field enrolled in the project. See full list of commodity options in Appendix B. The worksheet provides multiple columns with drop-down lists of the allowed values. Choose one value for each column. Leave unnecessary columns blank

Data type: List **Select multiple values**: No

Measurement unit: Category **Allowed values:** FSA commodity list

Logic: None – all respond **Required:** If project calculates GHG benefits using multiple methods

Data collection level: Field **Data collection frequency:** Annual

Practice type

Data element name: Practice type 1-7 **Reporting question:** What CSAF practice is being implemented by this project?

Description: Which CSAF practice or practices are being implemented in this project? CSAF practices are included in a list in Appendix A. The worksheet provides seven columns for this data element. Enter one value for each column. If there are fewer than 7 practices being implemented by the project, leave unnecessary columns blank.

Data type: List **Select multiple values:** No

Measurement unit: Category **Allowed values:** See list in Appendix A

Logic: None – all respond **Required:** If project calculates GHG benefits using multiple methods

Data collection level: Field **Data collection frequency:** Annual

GHG model

Data element name: GHG model

Reporting question: What model was used for alternate calculation of GHG benefits?

Description: Select the model used for the alternate calculation of the field's GHG benefits.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- ACC Calculator
- Agriculture, Forestry and Other Land Use (AFOLU) Carbon Calculator
- AIRES
- APEX
- Bowen Ratio Energy Balance
- Carat-Calculator
- CArPE
- CDFA web-based calculator
- COMET-Farm
- COMET-Planner
- CoolFarm
- Cover Crop Explore
- CropTrak
- CultivateAI's FMIS
- DayCent-CR
- DNDC
- DSSAT
- Earth Optics
- EcoPractices
- EPIC
- Extrapolation based on literature
- FieldPrint
- Granular
- GREET
- gTIR
- IFSM
- IPCC default emissions factors & models
- itree
- Nitrogen Balance
- Nutrient Tracking Tool (NTT)
- RCD Project Tracker
- Revised Universal Soil Loss equation 2 (RUSLE2)
- RuFaS
- SAFE-Link
- SALUS (CIBO)
- SNAPGRAZE
- SquareRoots
- SWAT-C
- SYMFONI
- Truterra Sustainability Tool
- Verra
- WEPP
- YardStick
- Other (specify)

Logic: None – all respond

Required: If project calculates GHG benefits using multiple methods

Data collection level: Field

Data collection frequency: Annual

Model start date

Data element name: Model start date	**Reporting question:** For what time period are the GHG benefits modeled (model start date)?
Description: Date that the model parameters begin.	
Data type: Date	**Select multiple values**: NA
Measurement unit: MM/DD/YYYY	**Allowed values:** 01/01/1950 – 12/31/2030
Logic: None – all respond	**Required:** If project calculates GHG benefits using multiple methods
Data collection level: Field	**Data collection frequency:** Annual

Model end date

Data element name: Model end date	**Reporting question:** For what time period are the GHG benefits modeled (model end date)?
Description: Date that the model parameters end.	
Data type: Date	**Select multiple values**: NA
Measurement unit: MM/DD/YYYY	**Allowed values:** 01/01/2023– 12/31/2030
Logic: None – all respond	**Required:** If project calculates GHG benefits using multiple methods
Data collection level: Field	**Data collection frequency:** Annual

Total GHG benefits estimated

Data element name: Total GHG benefits estimated	**Reporting question:** What is the alternate estimate of the field's total GHG emission reductions?
Description: Total greenhouse gas emission reductions from practice implementation in the field estimated using an alternate model.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Metric tons CO_2eq	**Allowed values:** 0-10,000,000
Logic: None – all respond	**Required:** If project calculates GHG benefits using multiple methods
Data collection level: Field	**Data collection frequency:** Annual

Total carbon stock estimated

Data element name: Total carbon stock estimated	**Reporting question:** What is the alternate estimate of how much carbon has the field has sequestered?
Description: Total change in carbon stock based on practice implementation in the field estimated using an alternate model. Conversion rate is one ton of carbon = 3.67 tons of CO_2eq.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Metric tons CO_2eq	**Allowed values:** 0-10,000,000
Logic: None – all respond	**Required:** If project calculates GHG benefits using multiple methods
Data collection level: Field	**Data collection frequency:** Annual

Total CO2 estimated

Data element name: Total CO2 estimated	**Reporting question:** What is the alternate estimate of the field's total CO2 emission reductions?
Description: Total carbon dioxide emission reductions based on practice implementation in the field estimated using an alternate model.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Metric tons CO_2	**Allowed values:** 0-10,000,000
Logic: None – all respond	**Required:** If project calculates GHG benefits using multiple methods
Data collection level: Field	**Data collection frequency:** Annual

Total CH4 estimated

Data element name: Total CH4 estimated	**Reporting question:** What is the alternate estimate of the field's total CH4 emission reductions?
Description: Total methane emission reductions based on practice implementation in the field estimated using an alternate model. Conversion rate is one ton of CH_4 = 25 tons of CO_2eq.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Metric tons CH4 reduced in CO_2eq	**Allowed values:** 0-10,000,000
Logic: None – all respond	**Required:** If project calculates GHG benefits using multiple methods
Data collection level: Field	**Data collection frequency:** Annual

Total field N20 estimated

Data element name: Total N2O estimated	**Reporting question:** What is the alternate estimate of the field's total N2O emission reductions?
Description: Total nitrous oxide emission reductions based on practice implementation in the field estimated using an alternate method. Conversion rate is one ton of N_2O = 298 tons of CO_2eq.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Metric tons N2O reduced in CO_2eq	**Allowed values:** 0-10,000,000
Logic: None – all respond	**Required:** If project calculates GHG benefits using multiple methods
Data collection level: Field	**Data collection frequency:** Annual

GHG Benefits - Measured

Unique IDs

Farm ID	Unique Farm ID assigned by FSA
Tract ID	Unique Tract ID assigned by FSA
Field ID	Unique Field ID assigned by FSA
State or territory of field	State name (must match FSA farm enrollment data)
County of field	County name (must match FSA farm enrollment data)

GHG measurement method

Data element name: GHG measurement method

Reporting question: What measurement method is used to calculate GHG benefits?

Description: Field-based measurement method used to calculate GHG benefits. If "other" is chosen, enter the appropriate value as free text in the additional column.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Emissions measurement unit
- Flux towers
- Litterbags
- Plant measurements
- Portable emissions analyzers
- Soil flux chambers
- Soil samples
- Soil sensors
- Vehicle-mounted sensors
- Other (specify)

Logic: None – all respond

Required: If a project conducts soil samples or takes carbon stock or greenhouse gas emission measurements in this field

Data collection level: Field

Data collection frequency: Annual

Lab name

Data element name: Lab name

Reporting question: What is the name of the lab that processed the measurement samples?

Description: Name of entity that received data and conducted analysis of samples.

Data type: Text

Select multiple values: No

Measurement unit: NA

Allowed values: Free text

Logic: None – all respond

Required: If applicable

Data collection level: Field

Data collection frequency: Annual

Measurement start date

Data element name: Measurement start date

Reporting question: On what date did the measurement start?

Description: Date that the measurements began. If it was a single point in time, use the same date for start date and end date. If multiple measurements took place over a time period, use the date that the measurements first began.

Data type: Date

Select multiple values: No

Measurement unit: MM/DD/YYYY

Allowed values: 01/01/2023 – 12/31/2030

Logic: None – all respond

Required: If a project conducts soil samples or takes carbon stock or greenhouse gas emission measurements in this field

Data collection level: Field

Data collection frequency: Annual

Measurement end date

Data element name: Measurement end date

Reporting question: On what date did the measurement end?

Description: Date that the measurements began. If it was a single point in time, use the same date for start date and end date. If multiple measurements took place over a time period, use the date that the measurements were completed.

Data type: Date

Select multiple values: No

Measurement unit: MM/DD/YYYY

Allowed values: 01/01/2023– 12/31/2030

Logic: None – all respond

Required: If a project conducts soil samples or takes carbon stock or greenhouse gas emission measurements in this field

Data collection level: Field

Data collection frequency: Annual

Total CO2 reduction calculated

Data element name: Total CO2 reduction calculated

Reporting question: What are the total measured CO2 emission reductions?

Description: Total annual CO2 emission reductions based on practice implementation in the field calculated from in-field measurements.

Data type: Decimal

Select multiple values: No

Measurement unit: Metric tons CO_2

Allowed values: 0-10,000,000

Logic: None – all respond

Required: If a project takes carbon stock or greenhouse gas emission measurements in this field

Data collection level: Field

Data collection frequency: Annual

Total field carbon stock measured

Data element name: Total field carbon stock measured

Reporting question: What is the total amount of carbon sequestered based on repeat measurements in this field?

Description: Change in carbon stock based on practice implementation in the field calculated from repeat soil sampling in this field. (Results for initial field soil samples should be reported in the 'Soil sample result' and 'Measurement type" columns.) Conversion rate is one ton of carbon = 3.67 tons of CO_2eq.

Data type: Decimal

Select multiple values: No

Measurement unit: Metric tons CO_2eq

Allowed values: 0-10,000,000

Logic: None – all respond

Required: If a project conducts soil samples or takes carbon stock measurements in this field

Data collection level: Field

Data collection frequency: Annual

Total CH4 reduction calculated

Data element name: Total CH4 reduction calculated	**Reporting question:** What are the total measured CH4 emission reductions?
Description: Total annual methane emission reductions based on practice implementation in the field calculated from in-field measurements. Conversion rate is one ton of CH_4 = 25 tons of CO_2eq.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Metric tons CH4 reduced in CO_2eq	**Allowed values:** 0-10,000,000
Logic: None – all respond	**Required:** If a project conducts soil samples or takes carbon stock or greenhouse gas emission measurements in this field
Data collection level: Field	**Data collection frequency:** Annual

Total N20 reduction calculated

Data element name: Total N2O reduction calculated	**Reporting question:** What are the total measured N2O emission reductions?
Description: Total annual nitrous oxide emission reductions based on practice implementation in the field calculated from in-field measurements. Conversion rate is one ton of N_2O = 298 tons of CO_2eq.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Metric tons N2O reduced in CO_2eq	**Allowed values:** 0-10,000,000
Logic: None – all respond	**Required:** If a project conducts soil samples or takes carbon stock or greenhouse gas emission measurements in this field
Data collection level: Field	**Data collection frequency:** Annual

Soil sample result

Data element name: Soil sample result	**Reporting question:** What is the numeric result from this soil sample?
Description: Results of measurement(s) taken to determine the carbon stock of a soil (the tons of carbon found in a specified volume of soil).	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Amount	**Allowed values:** .00001-100,000
Logic: None – all respond	**Required:** If a project conducts soil samples in this field
Data collection level: Field	**Data collection frequency:** Annual

Soil sample result unit

Data element name: Soil sample result unit

Reporting question: What is unit for the soil sample result?

Description: Unit for the corresponding soil sample result. The worksheet provides a drop-down list of choices for this data element. If "other" is chosen, use the additional column to enter the appropriate yield unit as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Percent
- Ppm
- Grams
- Grams per cubic centimeter
- Other (specify)

Logic: None – all respond

Required: If a project conducts soil samples in this field

Data collection level: Field

Data collection frequency: Annual

Measurement type

Data element name: Measurement type

Reporting question: What type of analysis was conducted for this soil sample?

Description: Type of soil analysis conducted. The worksheet provides a drop-down list of choices for this data element. If "other" is chosen, use the additional column to enter the appropriate yield unit as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Organic matter
- Total organic carbon
- Bulk density
- Other (specify)

Logic: None – all respond

Required: If a project conducts soil samples in this field

Data collection level: Field

Data collection frequency: Annual

Additional Environmental Benefits

Unique IDs

Farm ID	Unique Farm ID assigned by FSA
Tract ID	Unique Tract ID assigned by FSA
Field ID	Unique Field ID assigned by FSA
State or territory of field	State name (must match FSA farm enrollment data)
County of field	County name (must match FSA farm enrollment data)

Environmental benefits

Data element name: Environmental benefits

Reporting question: Are environmental benefits other than GHGs being tracked in the field?

Description: Tracking of environmental benefits other than greenhouse gas emission reductions and carbon sequestration in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No
- I don't know

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Annual

Reduction in nitrogen loss

Data element name: Reduction in nitrogen loss

Reporting question: Are reductions in nitrogen losses being tracked in the field?

Description: Tracking reductions in nitrogen losses in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No
- I don't know

Logic: Respond if yes to 'Environmental benefits'

Required: Yes

Data collection level: Field

Data collection frequency: Annual

Reduction in nitrogen loss amount

Data element name: Reduction in nitrogen loss amount

Reporting question: How much reduction in nitrogen losses have been measured in the field?

Description: Total amount of reduction in nitrogen losses that is measured and reported in the enrolled field.

Data type: Decimal

Select multiple values: No

Measurement unit: Amount

Allowed values: 0-1,000,000

Logic: Respond if yes to 'Reduction in nitrogen loss'

Required: Yes

Data collection level: Field

Data collection frequency: Annual

Reduction in nitrogen loss amount unit

Data element name: Reduction in nitrogen loss amount unit	**Reporting question:** What is the unit for how much reduction in nitrogen losses have been measured in the field?
Description: Unit for the total amount of reduction in nitrogen losses that is measured and reported in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Kilograms • Metric tons • Pounds • Other (specify)
Logic: Respond if yes to 'Reduction in nitrogen loss'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Reduction in nitrogen loss purpose

Data element name: Reduction in nitrogen loss purpose	**Reporting question:** What is the purpose of tracking reduction in nitrogen losses?
Description: Purpose of tracking reduction in nitrogen losses in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Commodity marketing • Producing insets • Producing offsets • I don't know • Other (specify)
Logic: Respond if yes to 'Reduction in nitrogen loss'	**Required:** Yes
Data collection level: Project	**Data collection frequency:** Annual

Reduction in phosphorus loss

Data element name: Reduction in phosphorus loss	**Reporting question:** Are reductions in phosphorus losses being tracked in the field?
Description: Tracking of reductions in phosphorus losses in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Yes • No • I don't know
Logic: Respond if yes to 'Environmental benefits'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Reduction in phosphorus loss amount

Data element name: Reduction in phosphorus loss amount	**Reporting question:** How much reduction in phosphorus losses have been measured in the field?
Description: Total amount of reduction in phosphorus losses that is measured in the field.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Amount	**Allowed values:** 0-1,000,000
Logic: Respond if yes to 'Reduction in phosphorus loss'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Reduction in phosphorus loss amount unit

Data element name: Reduction in phosphorus loss amount unit	**Reporting question:** What is the unit for the reduction in phosphorus losses measured in the field?
Description: Unit for the total amount of reduction in phosphorus losses that is measured in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Kilograms • Metric tons • Pounds • Other (specify)
Logic: Respond if yes to 'Reduction in phosphorus loss'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Reduction in phosphorus loss purpose

Data element name: Reduction in phosphorus loss purpose	**Reporting question:** What is the purpose of tracking reductions in phosphorus losses?
Description: Purpose of tracking reduction in phosphorus losses in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Commodity marketing • Producing insets • Producing offsets • I don't know • Other (specify)
Logic: Respond if yes to 'Reduction in phosphorus loss'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Other water quality

Data element name: Other water quality	**Reporting question:** Are other water quality metrics being tracked in the field?
Description: Project tracking of other water quality metrics in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Yes • No • I don't know
Logic: Respond if yes to 'Environmental benefits'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Other water quality type	
Data element name: Other water quality type	**Reporting question:** What type of other water quality metric have been measured in the field?
Description: Type of other water quality metric (besides nitrogen loss and phosphorus loss reductions) that is measured in the field. If "other" is chosen, enter the appropriate value as free text in the additional column.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Sediment load reduction • Temperature • Other (specify)
Logic: Respond if yes to 'Other water quality'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual
Other water quality amount	
Data element name: Other water quality amount	**Reporting question:** How much reduction in other water quality metrics have been measured in the field?
Description: Total amount of reduction in other water quality metrics that is measured in the enrolled field.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Amount	**Allowed values:** 0-1,000,000
Logic: Respond if yes to 'Other water quality'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual
Other water quality amount unit	
Data element name: Other water quality amount unit	**Reporting question:** What is the unit for the reduction in other water quality metrics measured in the field?
Description: Unit for the total amount of reduction in other water quality metrics that is measured in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Degrees F • Kilograms • Kilograms per liter • Metric tons • Pounds • Other (specify)
Logic: Respond if yes to 'Other water quality'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Other water quality purpose

Data element name: Other water quality purpose	**Reporting question:** What is the purpose of tracking other water quality benefits?
Description: Purpose of tracking other water quality benefits in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Commodity marketing • Producing insets • Producing offsets • I don't know • Other (specify)
Logic: Respond if yes to 'Other water quality'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Water quantity

Data element name: Water quantity	**Reporting question:** Is water conservation being tracked in the field?
Description: Tracking of water conservation or reduction in use in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Yes • No • I don't know
Logic: Respond if yes to 'Environmental benefits'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Water quantity amount

Data element name: Water quantity amount	**Reporting question:** How much water conservation has been measured in the field?
Description: Total amount of water conservation or reduction that is measured in the field.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Amount	**Allowed values:** 0-1,000,000
Logic: Respond if yes to 'Water quantity'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Water quantity amount unit

Data element name: Water quantity amount unit	**Reporting question:** What is the unit for the amount of water conservation measured in the field?
Description: Unit for the total amount of water conservation or reduced use that is measured and reported in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Acre-feet • Cubic feet • Other (specify)
Logic: Respond if yes to 'Water quantity'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Water quantity purpose

Data element name: Water quantity purpose	**Reporting question:** What is the purpose of tracking water conservation?
Description: Purpose of tracking water conservation or reductions in water use in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Commodity marketing • Producing insets • Producing offsets • I don't know • Other (specify)
Logic: Respond if yes to 'Water quantity'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Reduced erosion

Data element name: Reduced erosion	**Reporting question:** Is reduced soil erosion being tracked in the field?
Description: Tracking of reduced soil erosion in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Yes • No • I don't know
Logic: Respond if yes to 'Environmental benefits'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Reduced erosion amount

Data element name: Reduced erosion amount	**Reporting question:** How much erosion reduction has been measured in the field?
Description: Total amount of erosion reduction that is measured in the enrolled field.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Amount	**Allowed values:** 0-1,000,000
Logic: Respond if yes to 'Reduced erosion'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Reduced erosion amount unit

Data element name: Reduced erosion unit	**Reporting question:** What is the unit for the amount of erosion reduction measured?
Description: Unit for the total amount of erosion reduction from enrolled fields that is measured and reported by the project. If "other" is chosen, enter the appropriate value as free text in the additional column.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Tons • Other (specify)
Logic: Respond if yes to 'Reduced erosion'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Reduced erosion purpose

Data element name: Reduced erosion purpose

Reporting question: What is the purpose of tracking reduced erosion in the field?

Description: Purpose of tracking reduced erosion the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Commodity marketing
- Producing insets
- Producing offsets
- I don't know
- Other (specify)

Logic: Respond if yes to 'Reduced erosion'

Required: Yes

Data collection level: Field

Data collection frequency: Annual

Reduced energy use

Data element name: Reduced energy use

Reporting question: Is reduced energy use being tracked in the field?

Description: Tracking of reduced energy use in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No
- I don't know

Logic: Respond if yes to 'Environmental benefits'

Required: Yes

Data collection level: Field

Data collection frequency: Annual

Reduced energy use amount

Data element name: Reduced energy use amount

Reporting question: How much energy use reduction has been measured in the field?

Description: Total amount of energy use reduction that is measured in the enrolled field.

Data type: Decimal

Select multiple values: No

Measurement unit: Amount

Allowed values: 0-1,000,000

Logic: Respond if yes to 'Reduced energy use'

Required: Yes

Data collection level: Field

Data collection frequency: Annual

Reduced energy use amount unit

Data element name: Reduced energy use unit

Reporting question: What is the unit for the energy use reduction measured in the field?

Description: Unit for the total amount of energy use reduction that is measured in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Kilowatt hours
- Other (specify)

Logic: Respond if yes to 'Reduced energy use'

Required: Yes

Data collection level: Field

Data collection frequency: Annual

Reduced energy use purpose

Data element name: Reduced energy use purpose	**Reporting question:** What is the purpose of tracking reduced energy use in the field?
Description: Purpose of tracking reduced energy use in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Commodity marketing • Producing insets • Producing offsets • I don't know • Other (specify)
Logic: Respond if yes to 'Reduced energy use'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Avoided land conversion

Data element name: Avoided land conversion	**Reporting question:** Is avoided land conversion being tracked in the field?
Description: Tracking of avoided land conversion in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits. Land conservation means land use changing from agricultural uses to non-agricultural uses.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Yes • No • I don't know
Logic: Respond if yes to 'Environmental benefits'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Avoided land conversion amount

Data element name: Avoided land conversion amount	**Reporting question:** How much avoided land conversion has been measured in the field?
Description: Total amount of avoided land conversion that is measured in the enrolled field.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Amount	**Allowed values:** 0-1,000,000
Logic: Respond if yes to 'Avoided land conversion'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Avoided land conversion amount unit

Data element name: Avoided land conversion unit	**Reporting question:** What is the unit for the amount of avoided land conversion measured in the field?
Description: Unit for the total amount of avoided land conversion that is measured in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Acres • Other (specify)
Logic: Respond if yes to 'Avoided land conversion'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Avoided land conversion purpose

Data element name: Avoided land conversion purpose	**Reporting question:** What is the purpose of tracking avoided land conversion in the field?
Description: Purpose of tracking avoided land conversion in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Commodity marketing • Producing insets • Producing offsets • I don't know • Other (specify)
Logic: Respond if yes to 'Avoided land conversion'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Improved wildlife habitat

Data element name: Improved wildlife habitat	**Reporting question:** Are improvements to wildlife habitat being tracked in the field?
Description: Tracking of improvements to wildlife in and around the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Yes • No • I don't know
Logic: Respond if yes to 'Environmental benefits'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Improved wildlife habitat amount

Data element name: Improved wildlife habitat amount	**Reporting question:** How much improved wildlife habitat has been measured in the field?
Description: Total amount of improved wildlife habitat that is measured in and around the enrolled fields.	
Data type: Decimal	**Select multiple values**: No
Measurement unit: Amount	**Allowed values:** 0-1,000,000
Logic: Respond if yes to 'Improved wildlife habitat'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Improved wildlife habitat amount unit

Data element name: Improved wildlife habitat unit	**Reporting question:** What is the unit for the amount of improved wildlife habitat measured in the field?
Description: Unit for the total amount of improved wildlife habitat that is measured in and around enrolled fields. If "other" is chosen, enter the appropriate value as free text in the additional column.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Acres • Linear feet • Other (specify)
Logic: Respond if yes to 'Improved wildlife habitat'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

Improved wildlife habitat purpose	
Data element name: Improved wildlife habitat purpose	**Reporting question:** What is the purpose of tracking improved wildlife habitat in the field?
Description: Purpose of tracking improved wildlife habitat in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.	
Data type: List	**Select multiple values**: No
Measurement unit: Category	**Allowed values:** • Commodity marketing • Producing insets • Producing offsets • I don't know • Other (specify)
Logic: Respond if yes to 'Improved wildlife habitat'	**Required:** Yes
Data collection level: Field	**Data collection frequency:** Annual

CSAF Practice Sub-questions

For some CSAF practices, there is an additional set of questions that are unique to each practice. Responses to these questions are needed to verify estimated GHG benefits of these practices. If a field is implementing a CSAF practice with an NRCS CPS code in Table 11, answer the follow-up questions listed next to the relevant practice name in the table. Use the *Supplemental Reporting Workbook – CSAF Practice Sub-questions* to report the required information.

Table 11. Follow-on questions for select CSAF practices

Practice name and code	Follow-up question	Options (select one)
Alley Cropping (CPS 311)	Species category (select most common/extensive type if using more than one)	Coniferous trees Deciduous trees Shrubs
	Species density (number of trees planted per acre)	1-10,000
Anaerobic Digester (CPS 366)	Waste storage system prior to installing anaerobic digester	Aerobic lagoon Anaerobic digester (complex mix) with energy generation Anaerobic digester (plug flow) with energy generation Anaerobic lagoon Composting Covered lagoon (no energy generation or flaring) Covered lagoon with energy generation Covered lagoon with flaring Daily spread Deep bedding pack Deep pit Dry lot Dry stacking/solid storage Pasture/range/paddock Poultry with bedding Poultry without bedding (e.g., high rise) Slurry tank/basin
	Digester type	Covered lagoon with energy generation Covered lagoon with flaring Covered lagoon (no energy generation or flaring) Complex mix with energy generation Plug flow with energy generation Other (specify)
	Additional feedstock source (select most common if using more than one)	Food waste Straw or bedding Wastewater Other (specify)

Combustion System Improvement (CPS 372)	Fuel type before installation	Coal Diesel Electricity Gasoline Kerosene Liquified petroleum gas (LPG) Natural gas Propane Wood Other (specify)
	Fuel amount before installation	0-1,000,000
	Fuel amount unit before installation	Cubic feet (natural gas) Gallons (diesel, gasoline, propane, LPG, kerosene) Kilowatt-hours (electricity) Pounds (wood, coal) Other (specify)
	Fuel type after installation	Coal Diesel Electricity Gasoline Kerosene Liquified petroleum gas (LPG) Natural gas Propane Wood Other (specify)
	Fuel amount after installation	0-1,000,000
	Fuel amount unit after installation	Cubic feet (natural gas) Gallons (diesel, gasoline, propane, LPG, kerosene) Kilowatt-hours (electricity) Pounds (wood, coal) Other (specify)
Conservation Cover (CPS 327)	Species category (select most common/extensive type if using more than one)	Brassicas Grasses Legumes Non-legume broadleaves Shrubs

Conservation Crop Rotation (CPS 328)	Conservation crop type	Brassica Broadleaf Cool season Grass Legume Warm season
	Change implemented	Added perennial crop Reduced fallow period Both
	Conservation crop rotation tillage type	Conventional (plow, chisel, disk) No-till, direct seed Reduced till Strip till None Other (specify)
	Total conservation crop rotation length in days	1-120
Contour Buffer Strips (CPS 332)	Strip width (feet)	1-100
	Species category	Grasses Forbs Mix
Cover Crop (CPS 340)	Species category (select most common/extensive type if using more than one)	Brassicas Forbs Grasses Legume Non-legume broadleaves
	Cover crop planned management	Grazing Haying Termination
	Cover crop termination method	Burning Herbicide application Incorporation Mowing Rolling/crimping Winter kill/frost
Critical Area Planting (CPS 342)	Species category (select most common/extensive type if using more than one)	Grass Grass legume/forb mix Herbaceous woody mix Perennial or reseeding Shrubs Trees
Feed Management (CPS 592)	Crude protein (percent)	0-100
	Fat (percent)	0-100
	Feed additives/supplements	Chemical Edible oils/fats Seaweed/kelp Other (specify)
Field Border (CPS 386)	Species category (select most common/extensive type if using more than one)	Forbs Grasses Mix Shrubs

Filter Strip (CPS 393)	Strip width (feet)	20-1,000
	Species category (select most common/extensive type if using more than one)	Forbs Grasses Mix Shrubs
Forest Farming (CPS 379)	Land use in previous year	Forest Multi-story cropping Pasture/grazing land Row crops Other agroforestry
Forest Stand Improvement (CPS 666)	Purpose for implementation	Maintain or improve forest carbon stocks Maintain or improve forest health and productivity Maintain or improve forest structure and composition Maintain or improve wildlife, fish, and pollinator habitat Manage natural precipitation more efficiently Reduce forest pest pressure Reduce forest wildfire hazard
Grassed Waterway (CPS 412)	Species category (select most common/extensive type if using more than one)	Flowering Plants Forbs Grasses
Hedgerow Planting (CPS 422)	Species category (select most common/extensive type if using more than one)	Grasses Shrubs Trees
	Species density (number of trees planted per acre)	1-10,000
Herbaceous Wind Barriers (CPS 603)	Species category (select most common/extensive type if using more than one)	Forbs Grasses Mix Shrubs
	Barrier width (feet)	1-1,000
	Number of rows	1-100
Mulching (CPS 484)	Mulch type	Gravel Natural Synthetic Wood
	Mulch cover (percent of field)	0-100

Nutrient management (CPS 590)	Nutrient type with CPS 590	Biosolids Commercial fertilizers Compost EEF (nitrification inhibitor) EEF (slow or controlled release) EEF (urease inhibitor) Green manure Liquid animal manure Organic by-products Organic residues or materials Solid/semi-solid animal manure Wastewater
	Nutrient application method with CPS 590	Banded Broadcast Injection Irrigation Surface application Surface application with tillage Variable rate
	Nutrient application method in the previous year	Banded Broadcast Injection Irrigation Surface application Surface application with tillage Variable rate
	Nutrient application timing with CPS 590	Single pre-planting Single post-planting Split pre- and post-planting Split post-planting
	Nutrient application timing in the previous year	Single pre-planting Single post-planting Split pre- and post-planting Split post-planting
	Nutrient application rate with CPS 590	0-20,000
	Nutrient application rate unit with CPS 590	Gallons per acre Pounds per acre
	Nutrient application rate change	Decrease compared to previous year Increase compared to previous year No change
Pasture and Hay Planting (CPS 512)	Species category (select most common/extensive type if using more than one)	Cool-season broadleaf Cool-season grass Warm-season broadleaf Warm-season grass
	Termination process	Grazing Haying (i.e., cutting and baling) Other (specify)
Prescribed Grazing (CPS 528)	Grazing type	Cell grazing Deferred rotational Management intensive Rest-rotation

Range Planting (CPS 550)	Species category (select most common/extensive type if using more than one)	Forbs Grasses Legumes Shrubs Trees
Residue and Tillage Management – No-till (CPS 329)	Surface disturbance	None Seed row only
Residue and Tillage Management – Reduced Till (CPS 345)	Surface disturbance	None Seed row/ridge tillage for planting Shallow across most of the soil surface Vertical/mulch
Riparian Forest Buffer (CPS 391)	Species category (select most common/extensive type if using more than one)	Coniferous trees Deciduous trees Shrubs
	Species density (number of trees planted per acre)	1-10,000
Riparian Herbaceous Cover (CPS 390)	Species category (select most common/extensive type if using more than one)	Ferns Forbs Grasses Legumes Rushes Sedges
Roofs and Covers (CPS 367)	Roof/cover type	Concrete Flexible geomembrane Metal Timber Other (specify)
Silvopasture (CPS 381)	Species category (select most common/extensive type if using more than one)	Coniferous trees Deciduous trees Forage Shrubs
	Species density (number of trees planted per acre)	1-10,000
Stripcropping (CPS 585)	Strip width (feet)	1-1,000
	Crop category (select most common/extensive type if using more than one)	Erosion resistant crops Fallow Sediment trapping crops
	Number of strips	2-100
Tree/Shrub Establishment (CPS 612)	Species category (select most common/extensive type if using more than one)	Coniferous trees Deciduous trees Shrubs
	Species density (number of trees planted per acre)	1-10,000
Vegetative Barrier (CPS 601)	Species category (select most common/extensive type if using more than one)	Grasses Grass forb mix Grass legume mix
	Barrier width (feet)	3-1,000

Waste Separation Facility (CPS 632)	Separation type	Chemical (e.g., salts, polymers) Mechanical (e.g., screens, presses) Settling basin
	Most common use of solids	Bedding Field applied Other (specify)
Waste Storage Facility (CPS 313)	Waste storage system prior to installing your waste storage facility	Aerobic lagoon Anaerobic digester (complex mix) with energy generation Anaerobic digester (plug flow) with energy generation Anaerobic lagoon Composting Covered lagoon (no energy generation or flaring) Covered lagoon with energy generation Covered lagoon with flaring Daily spread Deep bedding pack Deep pit Dry lot Dry stacking/solid storage Pasture/range/paddock Poultry with bedding Poultry without bedding (e.g., high rise) Slurry tank/basin
Waste Treatment (CPS 629)	Treatment type	Biological Chemical Mechanical
Waste Treatment Lagoon (CPS 359)	Waste storage system prior to installing waste treatment lagoon	Aerobic lagoon Anaerobic digester (complex mix) with energy generation Anaerobic digester (plug flow) with energy generation Anaerobic lagoon Composting Covered lagoon (no energy generation or flaring) Covered lagoon with energy generation Covered lagoon with flaring Daily spread Deep bedding pack Deep pit Dry lot Dry stacking/solid storage Pasture/Range/Paddock Poultry with bedding Poultry without bedding (e.g., high rise) Slurry tank/basin
	Is there a lagoon cover/crust?	Yes No
	Is there lagoon aeration?	Yes No

Windbreak/Shelterbelt Establishment and Renovation (CPS 380)	Species category (select most common/extensive type if using more than one)	Coniferous trees Deciduous trees Shrubs
	Species density (number of trees planted per acre)	1-10,000

Appendix A: Climate-smart Agriculture and Forestry Practices

All NRCS Practice Standards (not limited to climate-smart practices)

309, Agrichemical Handling Facility
311, Alley Cropping
313, Waste Storage Facility
314, Brush Management
315, Herbaceous Weed Treatment
316, Animal Mortality Facility
317, Composting Facility
318, Short Term Storage of Animal Waste and By-Products
319, On-Farm Secondary Containment Facility
320, Irrigation Canal or Lateral
324, Deep Tillage
325, High Tunnel System
326, Clearing and Snagging
327, Conservation Cover
328, Conservation Crop Rotation
329, Residue and Tillage Management, No Till
330, Contour Farming
331, Contour Orchard and Other Perennial Crops
332, Contour Buffer Strips
333, Amending Soil Properties with Gypsum Products
334, Controlled Traffic Farming
336, Soil Carbon Amendment
338, Prescribed Burning
340, Cover Crop
342, Critical Area Planting
345, Residue and Tillage Management, Reduced Till
348, Dam, Diversion
350, Sediment Basin
351, Well Decommissioning
353, Monitoring Well
355, Groundwater Testing
356, Dike and Levee
359, Waste Treatment Lagoon
360, Waste Facility Closure
362, Diversion
366, Anaerobic Digester
367, Roofs and Covers
368, Emergency Animal Mortality Management
371, Air Filtration and Scrubbing
372, Combustion System Improvement
373, Dust Control on Unpaved Roads and Surfaces
374, Energy Efficient Agricultural Operation
375, Dust Management for Pen Surfaces
376, Field Operations Emissions Reduction
378, Pond
379, Forest Farming
380, Windbreak/Shelterbelt Establishment and Renovation
381, Silvopasture
382, Fence
383, Fuel Break
384, Woody Residue Treatment
386, Field Border
388, Irrigation Field Ditch
390, Riparian Herbaceous Cover
391, Riparian Forest Buffer
393, Filter Strip
394, Firebreak
395, Stream Habitat Improvement and Management
396, Aquatic Organism Passage
397, Aquaculture Pond
398, Fish Raceway or Tank
399, Fishpond Management
400, Bivalve Aquaculture Gear and Biofouling Control
402, Dam
410, Grade Stabilization Structure
412, Grassed Waterway
420, Wildlife Habitat Planting
422, Hedgerow Planting
423, Hillside Ditch
428, Irrigation Ditch Lining
428A, Irrigation Water Conveyance, Ditch and Canal Lining, Plain Concrete
428B, Irrigation Water Conveyance, Ditch and Canal Lining, Flexible Membrane
428C, Irrigation Water Conveyance, Ditch and Canal Lining, Galvanized Steel
430, Irrigation Pipeline
432, Dry Hydrant
436, Irrigation Reservoir
441, Irrigation System, Microirrigation
442, Sprinkler System
443, Irrigation System, Surface and Subsurface
447, Irrigation and Drainage Tailwater Recovery
449, Irrigation Water Management
450, Anionic Polyacrylamide (PAM) Application
453, Land Reclamation, Landslide Treatment
455, Land Reclamation, Toxic Discharge Control
457, Mine Shaft and Adit Closing
460, Land Clearing
462, Precision Land Forming and Smoothing
464, Irrigation Land Leveling
466, Land Smoothing
468, Lined Waterway or Outlet
472, Access Control
484, Mulching
490, Tree/Shrub Site Preparation
500, Obstruction Removal
511, Forage Harvest Management
512, Pasture and Hay Planting
516, Livestock Pipeline
520, Pond Sealing or Lining, Compacted Soil Treatment
521, Pond Sealing or Lining, Geomembrane or Geosynthetic Clay Liner
521A, Pond Sealing or Lining, Flexible Membrane
521B, Pond Sealing or Lining, Soil Dispersant
521C, Pond Sealing or Lining, Bentonite Sealant

521D, Pond Sealing or Lining, Compacted Clay Treatment
522, Pond Sealing or Lining - Concrete
527, Sinkhole Treatment
528, Prescribed Grazing
533, Pumping Plant
543, Land Reclamation, Abandoned Mined Land
544, Land Reclamation, Currently Mined Land
548, Grazing Land Mechanical Treatment
550, Range Planting
554, Drainage Water Management
555, Rock Wall Terrace
557, Row Arrangement
558, Roof Runoff Structure
560, Access Road
561, Heavy Use Area Protection
562, Recreation Area Improvement
566, Recreation Land Improvement and Protection
570, Stormwater Runoff Control
572, Spoil Disposal
574, Spring Development
575, Trails and Walkways
576, Livestock Shelter Structure
578, Stream Crossing
580, Streambank and Shoreline Protection
582, Open Channel
584, Channel Bed Stabilization
585, Stripcropping
587, Structure for Water Control
588, Crosswind Ridges
589, Cross Wind Trap Strips
590, Nutrient Management
591, Amendments for Treatment of Agricultural Waste
592, Feed Management
595, Pest Management Conservation System
600, Terrace
601, Vegetative Barrier
602, Equitable Relief
603, Herbaceous Wind Barriers
604, Saturated Buffer
605, Denitrifying Bioreactor
606, Subsurface Drain
607, Surface Drain, Field Ditch
608, Surface Drain, Main or Lateral
609, Surface Roughening
610, Salinity and Sodic Soil Management
612, Tree/Shrub Establishment
614, Watering Facility
620, Underground Outlet
629, Waste Treatment
630, Vertical Drain
632, Waste Separation Facility
633, Waste Recycling
634, Waste Transfer
635, Vegetated Treatment Area
636, Water Harvesting Catchment
638, Water and Sediment Control Basin
640, Waterspreading
642, Water Well
643, Restoration of Rare or Declining Natural Communities
644, Wetland Wildlife Habitat Management
645, Upland Wildlife Habitat Management
646, Shallow Water Development and Management
647, Early Successional Habitat Development-Mgt
649, Structures for Wildlife
650, Windbreak/Shelterbelt Renovation
654, Road/Trail/Landing Closure and Treatment
655, Forest Trails and Landings
656, Constructed Wetland
657, Wetland Restoration
658, Wetland Creation
659, Wetland Enhancement
660, Tree-Shrub Pruning
666, Forest Stand Improvement
670, Energy Efficient Lighting System
672, Energy Efficient Building Envelope
736, Crop By-Product Transfer, interim
724, Water Treatment Facility, interim
735, Waste Gasification Facility, interim
737, Reduced Water and Energy Coffee Conveyance System, interim
740, Pond Sealing and Lining, Soil Cement, interim
751, Individual Terrace, interim
753, Infiltration Ditch, interim
755, Well Plugging, interim
770, Livestock Confinement Facility, interim
775, Drainage Ditch Covering, interim
782, Phosphorus Removal System, interim
800, Controlling Existing Flowing Wells, interim
803, Water Well Disinfection, interim
805, Amending Soil Properties with Lime, interim
808, Soil Carbon Amendment, interim
809, Conservation Harvest Management, interim
810, Annual Forages for Grazing Systems, interim
812, Raised Beds, interim
815, Groundwater Recharge Basin or Trench, interim
817, On-Farm Recharge, interim
818, Water Conservation System, interim
821, Low Tunnel Systems, interim
823, Organic Management, interim

Other CSAF Practices

Traditional or cultural practices
Microbial products
Solar power generation
Grain bin construction
Pre-season drainage

Appendix B: Commodity List

CROPS
ALFALFA
ALMONDS
AMARANTH GRAIN
APPLES
APRICOTS
ARONIA (CHOKEBERRY)
ARTICHOKES
ASPARAGUS
ATEMOYA
AVOCADOS
BAMBOO SHOOTS
BANANAS
BARLEY
BEANS
BEETS
BIRDSFOOT/TREFOIL
BLUEBERRIES
BREADFRUIT
BROCCOFLOWER
BROCCOLI
BROCCOLINI
BRUSSEL SPROUTS
BUCKWHEAT
CABBAGE
CACAO
CACTUS
CAIMITO
CALABAZA MELON
CALALOO
CAMELINA
CANARY MELON
CANARY SEED
CANEBERRIES
CANISTEL
CANOLA
CANTALOUPES
CARAMBOLA (STAR FRUIT)
CARROTS
CASHEW
CASSAVA
CAULIFLOWER
CELERIAC
CELERY
CHERIMOYA
CHERRIES
CHESTNUTS
CHICORY/RADICCHIO
CHINESE BITTER MELON
CHRISTMAS TREES
CHUFAS
CINNAMON
CLOVER
COCONUTS
COFFEE
CORN
COTTON ELS
COTTON UPLAND
CRANBERRIES
CRENSHAW MELON
CRUSTACEAN
CUCUMBERS
CURRANTS
DASHEEN
DATES
DURIAN
EGGPLANT
EINKORN
ELDERBERRIES
EMMER
FIGS
FINFISH
FLAX
FLOWERS
FORAGE SOYBEAN/SORGHUM
GAILON
GARLIC
GENIP
GINGER
GINSENG
GOOSEBERRIES
GOURDS
GRAPEFRUIT
GRAPES
GRASS
GREENS
GROUND CHERRY
GUAMABANA/SOURSOP
GUAR
GUAVA
GUAVABERRY
GUAYULE
HAZEL NUTS
HEMP
HERBS
HESPERALOE
HONEY
HONEYBERRIES
HONEYDEW
HOPS
HORSERADISH
HUCKLEBERRIES
HYBRID POPLAR TREES
IDLE
INDIGO
ISRAEL MELONS
JACK FRUIT
JERUSALEM ARTICHOKES
JICAMA
JOJOBA
JUJUBE
JUNEBERRIES
KENAF
KHORASAN
KIWIBERRY
KIWIFRUIT
KOCHIA (PROSTRATA)
KOHLRABI
KOREAN GOLDEN MELON
KUMQUATS
LAMBS EAR
LEEKS
LEMONS
LENTILS
LESPEDEZA
LETTUCE
LIMES
LONGAN
LOQUATS
LYCHEE
MANGOS
MANGOSTEEN
MAPLE SAP
MAYHAW BERRIES
MEADOWFOAM
MILKWEED
MILLET
MIXED FORAGE
MOHAIR
MOLLUSK
MORINGA
MULBERRIES
MUSHROOMS
MUSTARD
NECTARINES
NIGER SEED
NONI
OATS
OKRA
OLIVES
ONIONS
ORANGES
PAPAYA

PARSNIP
PASSION FRUITS
PAWPAW
PEACHES
PEANUTS
PEARS
PEAS
PECANS
PENNYCRESS
PEPPERS
PERENNIAL PEANUTS
PERIQUE TOBACCO
PERSIMMONS
PINE NUTS
PINEAPPLE
PISTACHIOS
PITAYA/DRAGONFRUIT
PLANTAIN
PLUMCOTS
PLUMS
POMEGRANATES
POTATOES
POTATOES SWEET
PRUNES
PSYLLIUM
PUMMELO
PUMPKINS
QUINCES
QUINOA
RADISHES
RAISINS
RAMBUTAN
RAPESEED
RHUBARB
RICE
RICE SWEET
RICE WILD
RUTABAGA
RYE
SAFFLOWER
SAPODILLA
SAPOTE
SCALLIONS
SESAME
SHALLOTS
SORGHUM
SORGHUM DUAL PURPOSE
SORGHUM FORAGE
SOYBEANS
SPELT
SQUASH
STAR GOOSEBERRY
STRAWBERRIES
SUGAR BEETS
SUGARCANE
SUNFLOWERS
SUNN HEMP
TANGELOS
TANGERINES
TANGORS
TANGOS
TANNIER
TARO
TEA
TEFF
TI
TOBACCO CIGAR WRAPPER
TOBACCO BURLEY
TOBACCO BURLEY 31V
TOBACCO CIGAR BINDER
TOBACCO CIGAR FILLER
TOBACCO CIGAR FILLER BINDER
TOBACCO DARK AIR CURED
TOBACCO FIRE CURED
TOBACCO FLUE CURED
TOBACCO MARYLAND
TOBACCO VIRGINIA FIRE CURED
TOMATILLOS
TOMATOES
TREES TIMBER
TRITICALE
TRUFFLES
TURNIPS
VETCH
WALNUTS
WAMPEE
WASABI
WATERMELON
WAX JAMBOO FRUIT
WHEAT
WILLOW SHRUB
WINTER MELON
WOLFBERRY/GOJI
YAM

LIVESTOCK
ALPACAS
BEEF COWS
BEEFALO
BUFFALO OR BISON
CHICKENS (BROILERS)
CHICKENS (LAYERS)
DAIRY COWS
DEER
DUCKS
ELK
EMUS
EQUINE
GEESE
GOATS
HONEYBEES
LLAMAS
REINDEER
SHEEP
SWINE
TURKEYS

Partnerships for Climate-Smart Commodities Additional Specific Terms and Conditions February 2023

I. Overarching Statement

The following award terms and conditions are applicable to Partnerships for Climate-Smart Commodities agreements and are in addition to the USDA FPAC General Terms and Conditions. The award recipient must abide by all terms of this grant including, but not limited to, the General Terms and Conditions, the terms in the Funding Opportunity and associated Frequently Asked Questions, and this addendum. The recipient must also deliver on the planned objectives in the project narrative and budget narrative associated with this grant.

II. Eligibility and Highly Erodible Lands and Wetlands Compliance

In order to be eligible for an incentive payment as a part of the Partnerships for Climate-Smart Commodities, a producer must:

- Establish Farm Records with the Farm Service Agency (FSA) (have farm, tract, and field numbers in place);
- Complete an AD-2047 (Customer Data Worksheet to facilitate the collection of customer data for Business Partner Record);
- Certify highly erodible land conservation (HEL) and wetland conservation (WC) compliance via Form AD-1026, Highly Erodible Land Conservation (HELC) and Wetland Conservation (WC) Certification; and
- Certify that they are not a foreign person or entity.

Farm, tract, and field numbers are required for the producer, and ultimately the Partnerships for Climate-Smart Commodities recipient, to report climate-smart practice implementation to USDA, as well as to certify and maintain HELC/WC compliance. This will require that some producers who do not already have these numbers, like perennial crop growers or feedlots, establish these records with USDA's FSA. Farm, tract, field numbers, producer name, and Core Customer I.D. (CCID) will be provided by the recipient to the National Program Officer as a part of routine grant reporting. Recipients must ensure that producers receiving financial assistance or incentives through this project use the same name as is included in the relevant FSA Business File for that Farm ID in any contracts or similar documentation kept by the recipient.

Producers are not bound by the payment limitations and the adjusted gross income (AGI) limitations that are in place for other USDA programs.

In order to demonstrate HELC/WC compliance for Partnerships for Climate-Smart Commodities incentive payments, producers will need to request a copy of their subsidiary print from their

USDA FSA field office. The Subsidiary Print includes print year specific eligibility related information about a selected producer. The producer will then provide this documentation to the Partnerships for Climate-Smart Commodities recipients as proof of compliance. A current year subsidiary print will be required for each crop year that the producer receives a payment, and HELC/WC eligibility information is provided under the AD-1026 and Conservation Compliance sections of subsidiary (determined by year, which can change at any time during the year or in a subsequent year). As is the case already, field offices will not be expected to provide documentation to anyone besides the producer themselves (and must always comply with Section 1619 limitations if they ever do provide documentation to third parties). Producers must have control of the land for the term of their beneficiary contract.

Recipients are responsible for determining producer eligibility within the funding opportunity requirements. Recipients must inform producers of eligibility requirements and direct them to local USDA offices for requested information as necessary, including but not limited to, farm and tract establishment and Highly Erodible Land and Wetland Compliance determinations. Privacy of producers is a priority throughout this process, and recipients are responsible for maintaining producer privacy in the process.

At minimum, the recipient will collect and review subsidiary reports from participating producers. They will ensure that the producer is listed as "compliant" in all sections of the conservation compliance portion of subsidiary and "certified" for AD-1026 before an incentive payment is made. If payments to a producer span more than one Federal fiscal year, the recipient will review an updated subsidiary print each fiscal year to ensure that the status is still compliant.

III. Other Environmental and Cultural Resources Reviews

A Finding of No Significant Impact (FONSI) was signed by USDA NRCS on August 26, 2022. A copy of the Programmatic Environmental Assessment for Partnerships for Climate-Smart Commodities is available at www.usda.gov/climate-smart-commodities . USDA may determine that additional environmental and cultural resources review is needed for any particular action under Partnerships for Climate-Smart Commodities. The recipient must not execute any beneficiary contracts under this grant agreement prior to receipt of a letter from USDA that specifically details:

1) further procedures deemed appropriate by the Agency to ensure a completed National Environmental Policy Act (NEPA) review and all appropriate consultation requirements are met, and
2) additional instructions for any unanticipated discoveries or conditions.

A resolution of support is required for projects on Tribal lands from the governing body of the Tribe with jurisdiction over that land, if the applicant is not the Tribe nor an entity owned or

operated by that Tribe. USDA may approve alternative documentation for resolutions when USDA deems necessary and legally sufficient.

IV. Producer Benefits

USDA encourages the recipient to disclose to participating producers the manner and amount for which any market premiums derived from the development of the relevant climate-smart commodity will be shared between participating parties, including producers. USDA will be monitoring producer benefits, in particular those to small and underserved producers, throughout the grant period. Recipients agree that their project(s) will implement a plan for engaging small and underserved producers as laid out in this agreement.

V. Producer Data Protection and Disclosure

Recipients must ensure each producer has convenient access to any data collected from that producer or the producer's land and any associated modeling as part of the project. The recipient must provide each producer applying for benefits under this grant a description in writing of how their information, including but not limited to data about their farm and commodities, will be utilized, protected and shared as applicable.

VI. Other Data and Reporting Requirements

In addition to the reporting information provided in the statement of work and General Terms and Conditions, USDA will provide a template for the Detailed Progress Report, also known as the Partnerships for Climate-Smart Commodities (PSCS) Project Reporting Workbook. Within 30 calendar days of execution of this grant, a copy of this workbook will be posted at www.usda.gov/climate-smart-commodities or an alternative location provided to the recipient by the National Program Officer. USDA may provide updates to the PCSC Project Reporting Workbook or submission methods to streamline the data collection process and/or reduce the burden on the recipient throughout the grant period. Generally, these updates will be provided at least 3 months in advance of any required changes. The recipient must not transfer any data to foreign governments or foreign entities without prior approval from USDA.

USDA will provide a Technical Contact for this grant. The Technical Contact will have the responsibility of technical oversight for USDA for the project. The recipient is responsible for providing the technical assistance required to successfully implement and complete the project. The recipient must comply with any requests for information from the Technical Contact. The Technical Contact for this award is the National Program Officer assigned to this grant.

Prior to execution of this grant, the recipient must provide a shapefile depicting the project boundary for enrollment under this grant. Producer enrollment may not occur outside this boundary without modification of this grant.

Within 30 calendar days of execution of this grant, the recipient must provide to the National Program Officer a website address where enrollment information will be posted for producers for the project associated with this grant. Recipients will be responsible for the following reports:

- Submit quarterly performance reports that include a written progress report, as well as additional reporting on specific data elements contained in the most up-to-date version of the Partnerships for Climate-Smart Commodities Project Reporting Workbook. Additional information about each reported element is described in the Data Dictionary.
- Submit supplemental reports required to validate greenhouse gas (GHG) benefit data, including: (1) an initial project MMRV plan, (2) field-modeled GHG benefit reports, and (3) field-direct GHG measurement results, as applicable. Additional information about these reports is in included in the Data Dictionary.
- Submit copies of project outputs and deliverables (e.g., fact sheets, reports) as attachments in ezFedGrants along with quarterly performance reports.
- Report the version of COMET-Planner used to estimate GHG benefits of the project within each quarterly performance report. As COMET-Planner is updated, recipients must adopt the latest version of the tool as directed by USDA for use in performance reports.

Recipients must designate an individual as a member of the USDA Partnerships for Climate-Smart Commodities Learning Network (Partnerships Network); this representative should be identified in the Project Narrative for this grant. Each project includes a plan for up to two Partnerships Network virtual meetings and two in-person meetings a year during the project duration. Dates and other details on events will be posted at www.usda.gov/climate-smart-commodities or an alternative location provided to the recipient by the National Program Officer.

The Partnerships Network will be co-chaired by representative from the USDA Office of the Chief Economist and the Farm Production and Conservation Mission Area. The Partnerships Network will inform synthesis reports to be assembled by USDA on a range of topics related to the implementation of Partnerships for Climate-Smart Commodities projects, including:

- Lessons-learned as projects are implemented;
- Options for providing technical assistance;
- Procedures for measurement/quantification, monitoring, reporting, and verifying GHG benefits;
- Options for tracing climate-smart commodities through the supply chain;
- Mechanisms for reducing costs of implementation;
- A forum for discussion and learning regarding approaches to climate-smart agriculture and forestry implementation (including but not limited to deployment and

measurement/quantification, monitoring, reporting, tracking, and verification of associated greenhouse gas benefits and marketing of climate-smart commodities).
- Synthesis of outcomes; and
- Opportunities for USDA and others to inform future approaches to generating new and expanded markets for climate-smart commodities.

The Partnerships Network topics to be discussed will cover at minimum the areas described in previous FAQs and will evolve with USDA's ongoing project data analysis efforts and with input from the project recipients on the kinds of sessions that will be most helpful to them in building the diverse climate-smart markets associated with their projects. Participation may include at least one interview a year and include questions related to the following areas:

- Technical assistance approaches, methods, and successes and/or challenges
- Producer outreach approaches, methods, and successes and/or challenges
- Monitoring, measurement, reporting, and verification (MMRV) approaches, methods, and successes and/or challenges
- Marketing approaches, methods, and successes and/or challenges
- Partnership approaches, methods, and successes and/or challenges
- Data collection and storage approaches, methods, and successes and/or challenges
- Supply chain approaches, methods and successes and/or challenges, including approaches to traceability
- Supply chain benefits and demand for climate-smart commodities
- Perspectives on program design, climate-smart commodity definitions, and future approaches or opportunities
- Project successes and stories

USDA may also request producer exit reports at a later date. Additional marketing and branding-related requirements may be provided by USDA, including signage related to Partnerships for Climate-Smart Commodities.

VII. Competition and Anti-Competitive Practices

In connection with this grant, recipients may not prohibit or otherwise limit a producer from changing the provider of other services or materials not included as part of this grant. Recipients may not condition, limit, steer, or discriminate in their provision or sale of non-project business functions or products to producers based on their participation or non-participation in or use of any services provided as part of this grant. Additionally, funds in this agreement shall not be used for purposes or activities related to mergers or acquisitions.

VIII. Suspension and Disbarment

The provisions governing Suspension and Disbarment in subsection 1.a.8 shall also apply to fraud, embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or violations of the Federal civil antitrust or unfair trade practice laws.

IX. Special provisions for awards to for-profit entities as recipients

This section contains provisions that apply to awards to for-profit entities. These provisions are in addition to other applicable provisions of these terms and conditions, or they make exceptions from other provisions of the terms and conditions for awards to for-profit entities. For-profit entities that receive awards have two options regarding audits:

1) A financial related audit of a particular award in accordance with Generally Accepted Government Auditing Standards issued by the Comptroller General of the United States, in those cases where the for-profit entity receives awards under only one USDA program; or, if awards are received under multiple USDA programs, a financial related audit of all awards in accordance with Generally Accepted Government Auditing Standards issued by the Comptroller General of the United States; or

2) An audit that meets the requirements contained in 2 CFR 200 subpart F.

For-profit entities that receive annual awards totaling less than the audit requirement threshold in 2 CFR 200 subpart F are exempt from USDA audit requirements for that year, but records must be available for review by appropriate officials of Federal agencies or the Government Accountability Office.

X. Non-Disparagement

Recipients may not engage in any advertising deemed by USDA as disparaging to another agricultural commodity or competing product, or in violation of the prohibition against false and misleading advertising. Disparagement is defined as anything that depicts other commodities in a negative or unpleasant light via overt or subjective video, photography, or statements. Comparative advertising is allowable, provided the presentation of facts is truthful, objective, not misleading, and supported by a reasonable basis.

Audit of 'NR233A750004G025 REC.pdf'

This document is a FINALIZED sign request

From	Christina Kostelecky <christina@pasafarming.org>
File Owner	Christina Kostelecky
Initialized	Apr 5, 2023 @ 3:49 PM EDT 99cbb528
Finalized	Apr 5, 2023 @ 4:41 PM EDT 24504da3
Unique Url	https://dochub.com/christinakostelecky/eOLPG9YKjoQB1q2VZpXz6y/nr233a750004
Page Count	175

Signers

HS

hannah@pasafarming.org FINALIZED

Hannah Smith-Brubaker

Verified Email Verified IP 2601:980:4200:fd40:2922:9cd9:a23f:d80b Verified consent to Esign

Document "after" snapshot: Apr 5, 2023 @ 4:41 PM EDT 24504da3

Assigned Fields

Value	Type	Req.	Page #	Updated
	Signature Field	🔒	2	Apr 5, 2023 @ 4:41 PM EDT

Event History

Apr 5, 2023

3:48 PM	+ Document created	christina@pasafarming.org created the document
3:48 PM	Modified	christina@pasafarming.org modified the document IP 174.60.255.186, Chrome 111, Mac 10.15.7
3:49 PM	Sign request created	christina@pasafarming.org initialized a sign request with the document Verified snapshot 99cbb528 IP 174.60.255.186, Chrome 111, Mac 10.15.7
3:49 PM	Email sent	hannah@pasafarming.org was notified by email Email Delivery Status: DELIVERED

3:50 PM	Email read	hannah@pasafarming.org opened the notification email
4:40 PM	Viewed	hannah@pasafarming.org viewed the document IP 2601:980:4200:fd40:2922:9cd9:a23f:d80b, Chrome 111, Mac 10.15.7
4:41 PM	Consented to esign	hannah@pasafarming.org consented to esign IP 2601:980:4200:fd40:2922:9cd9:a23f:d80b, Chrome 111, Mac 10.15.7
4:41 PM	Modified	hannah@pasafarming.org modified the document IP 2601:980:4200:fd40:2922:9cd9:a23f:d80b, Chrome 111, Mac 10.15.7
4:42 PM	Sign request finalized	hannah@pasafarming.org finalized the sign request for the document Verified snapshot 24504da3