USDA

U.S. Department of Agriculture
Natural Resources Conservation Service

NRCS-ADS-093

NOTICE OF GRANT AND AGREEMENT AWARD

1. Award Identifying Number NR233A750004G003	2. Amendment Number	3. Award /Project Period Date of Final Signature - 03/31/2028	4. Type of award instrument: Grant Agreement

5. Agency (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	6. Recipient Organization (Name and Address) NATIONAL FISH AND WILDLIFE FOUNDATI ON 1133 15TH ST NW FL 10 WASHINGTON DC 20005-2710 UEI Number / DUNS Number: S4SXKUK5RAC8 / 175172527 EIN:

7. NRCS Program Contact Name: ERIC HANSEN (b)(6)	8. NRCS Administrative Contact Name: MICHELE DEVANEY (b)(6)	9. Recipient Program Contact Name: Bridget Collins (b)(6)	10. Recipient Administrative Contact (b)(6)
11. CFDA 10.937	12. Authority 15 USC 714 et seq	13. Type of Action New Agreement	14. Program Director Name: Todd Hogrefe Phone: (b)(6) Email:

15. Project Title/ Description: Expands markets for climate-smart corn/soy in IL, IN, IA, KS, KY, MN, MI, MO, NE, OH, SD, TN, ND, NC, MD, DE, NY, WI, PA & VA and supports farmer implementation/monitoring of climate-smart practices.

16. Entity Type: M = Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education)

17. Select Funding Type

Select funding type:	☒ Federal	☒ Non-Federal
Original funds total	95,000,000.000	$2,877,195.00
Additional funds total	$0.00	$0.00
Grand total	95,000,000.000	$2,877,195.00

18. Approved Budget

Personnel	$1,155,102.00	Fringe Benefits	$589,102.00
Travel	$36,768.00	Equipment	$0.00
Supplies	$0.00	Contractual	$5,959,692.00
Construction	$0.00	Other	87,259,336.000
Total Direct Cost	94,207,752.000	Total Indirect Cost	$792,248.00
		Total Non-Federal Funds	$2,877,195.00
		Total Federal Funds Awarded	95,000,000.000
		Total Approved Budget	97,877,195.000

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: 2023.03.10 15:17:00 -05'00'	Date
Name and Title of Authorized Recipient Representative Jeff Trandahl Executive Director/CEO	Signature *Jeff Trandahl*		Date 3/8/2023

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 the National Fish and Wildlife Foundation (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 $ 97,877,195

TOTAL FEDERAL FUNDS $95,000,000
PERSONNEL $1,119,285
FRINGE BENEFITS $570,835
TRAVEL $35,628
EQUIPMENT $0
SUPPLIES $0
CONTRACTUAL $5,774,895
CONSTRUCTION (usually n/a) $0
OTHER $86,707,109
PRODUCER INCENTIVES $69,450,000
TOTAL DIRECT COSTS $94,207,752
INDIRECT COSTS $792,248

TOTAL NON-FEDERAL FUNDS $2,877,195
PERSONNEL $0
FRINGE BENEFITS $0
TRAVEL $0
EQUIPMENT $0
SUPPLIES $0
CONTRACTUAL $0
CONSTRUCTION (usually n/a) $0
OTHER $2,877,195
PRODUCER INCENTIVES $0
TOTAL DIRECT COSTS $2,877,195
INDIRECT COSTS $0

Recipient has an approved Negotiated Indirect Cost Rate Agreement (NICRA) with a rate of 3.2 percent and a base of $24,757,752 (Federal funds only). The base is total direct costs less capital expenditures. Subawards and contractual services are included in the base.

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.

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)

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

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Farmers for Soil Health Climate Smart Commodities Partnership

Project Narrative

i. Executive Summary

A. <u>Contact Information</u>

David Gagner, Senior Director, Government Relations
National Fish and Wildlife Foundation (NFWF)
1133 15th St., NW Suite 1000
Washington, DC 20005
Mobile: 202-731-2506, Email: david.gagner@nfwf.org

B. <u>List of Farmers for Soil Health Project Partners</u>

Farmers for Soil Health (FSH) is an initiative of the National Corn Growers Association, the United Soybean Board, and the National Pork Board, representing the vast majority of the row crop acreage in the U.S. FSH seeks to rapidly mitigate climate change while creating resilient, high-yield, commodity row crops by improving soil health with a specific focus on cover crops.

Farmers for Soil Health has selected its partner, the National Fish and Wildlife Foundation, a 501(c)(3) organization, as the prime recipient organization.

Commodities Partners:
- National Corn Growers Association (NCGA)
- United Soybean Board (USB)
- National Pork Board (NPB)
- State affiliated commodity organizations in 20 target states

Implementation Partners:
- National Association of Conservation Districts (NACD)
- Soil Health Institute (SHI)
- Center for Regenerative Agriculture, University of Missouri (CRA), a Land Grant University
- National Center for Appropriate Technology (NCAT)

Contract Service Providers:
- Data Transmission Network (DTN)
- The Sustainability Consortium (TSC)
- MBSH Consulting

C. <u>List of underserved/minority-focused project partners</u>

- National Center for Appropriate Technology (NCAT) – Appropriate Technology Transfer for Rural American (ATTRA) Sustainable Agriculture Program (focused on <u>economically disadvantaged or traditionally underserved communities)</u>
- State commodity partners will commit to identify and work with underserved/ minority project partners to encourage program enrollment of underserved farmers.

Farmers for Soil Health Climate Smart Commodities Partnership

D. High-level project description and compelling need for project

FSH's mission is to "advance conservation practices to improve soil health across the U.S." to mitigate climate change, build farm productivity and profitability, and assist commodity organizations in meeting their environmental sustainability goals. With a long-term goal of doubling cover crop acres in the U.S. to 30 million by 2030, FSH proposes to accelerate long-term cover crop adoption by creating a platform to incentivize farmers through a marketplace that efficiently quantifies, verifies, and facilitates the sale of ecosystem benefits. This project will create this much-needed marketplace to generate demand for climate-smart commodities and related conservation practices. Working in concert with commodity organizations, FSH will provide needed strategic coordination on a national scale to implement this strategy. With funding from the requested Climate-Smart Commodities Partnership grant, FSH will incentivize cover crop adoption on 1.36 million acres in corn and soybean production.

As of the 2017 USDA Census, cover crops represented 15.4 million acres. Although corn and soybeans represent more than half of all U.S. row crop acres, at about 180 million acres, according to USDA's Ag Resource Management Survey, only about 5% of corn and 8% of soybean acres utilize cover crops. Cover crops have proven to be an effective climate-smart practice across the U.S, but their use needs to expand. Factors working against cover crop adoption are varied. A primary farmer concern is the cost of implementing a cover crop program. FSH proposes offering *Transition Incentive Payments (TIPs)*, to assist with initial costs *until* soil health, carbon/greenhouse gas (GHG) credits, premium commodity prices and other benefits are realized. Additionally, cover crop education and technical assistance for farmers is both a critical need and a key component of this project. FSH's project simultaneously addresses these two important barriers to adoption of cover crops as a climate-smart practice.

The FSH cover crop initiative serves as a catalyst to create a vibrant climate-smart commodity marketplace and was chosen as a strategic first step to engage farmers. Greater adoption of cover crops will contribute to climate-smart commodities in several ways. First, cover crops build soil carbon over time and significantly reduce GHGs, not only through carbon sequestration, but also by providing better nutrient efficiency, thus lowering fertilizer inputs. Second, cover crops are often linked to the adoption of no-till and minimal tillage practices, and vice versa, which further reduce carbon emissions and enhance the marketability of the commodity. Third, from a climate adaptation viewpoint, cover crops help rainfall infiltration, boost soil water-retention, reduce soil loss due to weather extremes, and overall, lead to improved soil health.

While there is an upfront cost, cover crops begin to improve farmer profitability after just a few years. A 2019 USDA-SARE report on cover crop economics showed it takes about three years to break even, after which cover crops provide a net profit. This project helps farmers lower the economic risk of transitioning to cover crops through three-year TIPs. After this three-year period, FSH partners believe sustainable, long-term cover crop utilization can be achieved when farmers realize greater crop profitability (e.g., additional opportunities for selling credits, and/or obtaining a premium price for these crops).

While farmers are inherently conscious of and concerned about soil health, the U.S. agricultural industry lacks the strategic, collaborative, and scaled approach necessary to accomplish cover crop acceptance at the levels needed to make a positive climate impact. FSH brings broad, trusted "boots on the ground" farmer relationships and crosscutting coordination from the nation's leading agricultural commodity groups. The support of a Partnership for Climate-Smart

Commodities grant brings the financial and technical assistance necessary for sustained cover crop adoption, including opportunities for minority and underserved farmers.

Through this project, FSH intends to create a new transition program that will build cover crop capacity nationwide. With a national and state strategy, FSH's approach is four-pronged. First, FSH will establish a new financial assistance (FA) program. Second, FSH will strengthen its technical assistance (TA) and education programs in its targeted states. Third, it will create and launch a nationwide Measurement, Reporting and Verification (MRV) platform for conservation practices, including cover crops. Finally, and perhaps most importantly, FSH will create an online public marketplace to connect farmers to climate-smart commodity opportunities and incentives. Companies and organizations such as renewable fuels, consumer package goods (CPG), food brands, food retailers, NGOs. etc., represent a broad range of demand for climate-smart commodities. The FSH marketplace is being designed with ease-of-user experience in mind to combat the significant burden and challenge farmers are experiencing in today's carbon programs.

FSH has selected DTN to provide comprehensive services to build the digital platform, populate the platform with cropland datasets, and digitally market the enrollment opportunity to farmers. The digital platform will be an innovative monitoring, reporting and verification (MRV) system that will leverage technology and data science and minimize farmer burden, while maintaining the accuracy and integrity of the climate-smart data. The MRV system will be fully integrated into the climate-smart marketplace. This marketplace will harness the power of existing demand, along with market forces, to incentivize the adoption of climate-smart production practices by offering farmers the opportunity to receive premiums for climate-smart commodities. It is expected that this marketplace platform will live long beyond the timeframe of this grant project and will ultimately expand to acreage and commodities beyond corn and soybeans. So, while the immediate focus of this grant proposal is on cover crop adoption in corn and soybean production over 1.36 million acres, the long-range potential impact is much greater.

E. Approach to minimize transaction costs associated with project activities

FSH will minimize farmer transaction costs by contracting with DTN to provide access to farmer data, technologies, and digital outreach capabilities. DTN has the only comprehensive, commercially available dataset of US farmers, cropland fields, crops and other in-field information covering approximately 95% of cropland acres in the 20 FSH states. DTN will provide the following services that will minimize transaction costs:

- **Focused and cost-efficient marketing communications:** DTN data will enable FSH to focus its marketing and communication efforts on farmers who are most likely to start or expand using cover crops. This will allow FSH to better focus its resources. Using the DTN data and outreach services, FSH can target specific crops, fields, acre numbers, sustainability interests, and small and/or underserved farmers. The digital platform to be created by DTN will nearly eliminate travel labor to secure targeted farmer offers, because interested farmers will use an online enrollment site that is also integrated with the MRV tools and services.
- **Measurement, Reporting and Verification:** DTN uses satellite imagery, remote sensing and other data science techniques to passively capture and assess much of the sustainability data needed (GHG emissions reduction practices), thereby minimizing the effort/cost that farmers would otherwise incur. Eliminating this cost burden removes a

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Farmers for Soil Health Climate Smart Commodities Partnership

notable obstacle for farmers to sign up for the program. Satellite imagery will be "ground-truthed" with a statistically significant set of soil samples from participating fields. DTN already has a comprehensive database of farmers, and their field boundaries, crops, soils, etc. DTN will pre-populate much of the necessary data and simply push it to registered farmers for validation. This provides an efficient and positive user experience for the farmer and eliminates a significant potential barrier to participation.

- **Infrastructure and access to support qualitative feedback:** DTN has existing relationships with farmers and a platform with which to survey farmers. This survey would help FSH better understand farmer views, their interest in cover crops (or other sustainable practices), and their likelihood of enrolling in FSH's cover crop program. This will help minimize marketing and communication costs and maximize payments to farmers. Further, the feedback received will also be used by state commodity groups and key partners to develop and deliver needed cover crop TA.
- **Integrated Marketplace Platform:** Most of the activities supporting cover crop adoption will be integrated into a platform that will ensure scalability, cost avoidance, positive user experience, analytical rigor, verification, and sustainability long after USDA funds have expired.

F. Approach to reduce producer barriers to implementation of CSAF practices for the purpose of marketing climate-smart commodities

Currently, less than 10% of corn and soybean fields are cover cropped, despite the well-established benefits soil health practices bring to farmers and the environment. Based on farmer and industry surveys and feedback from state commodity organizations, a key barrier to cover crop adoption is lack of sufficient training and education programs on the agronomics and economics of cover crops for farmers and their advisors. FSH proposes to address these barriers to adoption by providing regionally appropriate cover crop selection and management information taking into account each local condition, traditions, and cropping system. This FSH project will implement technical training and educational options such as: cover crop selection; locally tailored cultural practices for seeding cover crops during busy fall harvest period; approaches to cover crop termination; techniques for planting cash crops into cover crop residue; and providing business case justification for cover crops or other soil health practices.

This farmer educational program will be coupled with a financial assistance program with a descending payment structure over a three-year period. The payments are critical to motivating farmers and mitigating their risk in adopting a new practice. These payments will support farmers while they make their transition to a climate-smart agricultural management system that works for *their* soils, crops, and climate. This marketplace platform – of integrated farmer communication, engagement, MRV activities, practices, GHG benefit reporting, and more – streamlines various processes and will give farmers access to additional marketing opportunities for their climate-smart commodities.

G. Geographic Focus

The FSH mission includes all major corn and soybean states, however, the initial project plan targets 20 select states, chosen based on a detailed assessment. The assessment included current cover crop acreage, existing programs, NRCS funding, cover crop growth potential in the 31 corn and soy states. The 20 states represent 713,000 farmers and 157.7 million acres. These acres encompass the bulk of the corn belt and the Great Lakes and Chesapeake Bay watersheds.

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Combined, these states represent 87% of all corn and soybean acres and have the potential to create the most change and movement toward large-scale agricultural climate mitigation. Additionally, the technical and educational resources developed by national FSH partners will be accessible on the FSH website clearinghouse for producers and commodity partners in all states.

The twenty targeted states include: 1) Illinois, 2) Indiana, 3) Iowa, 4) Kansas, 5) Minnesota, 6) Missouri, 7) Nebraska, 8) Ohio, 9) South Dakota 10) Kentucky, 11) Tennessee, 12) Michigan, 13) North Carolina, 14) North Dakota, 15) Wisconsin, 16) Delaware, 17) Maryland, 18) New York, 19) Pennsylvania, and 20) Virginia.

H. Project management capacity of partners

FSH partner, the National Fish and Wildlife Foundation (NFWF), will serve as the prime awardee and project management fiscal administrator. Established by Congress, NFWF has grown to become the nation's largest private conservation grant-maker, managing $6.1 billion in financial assets. NFWF serves a vital role in specifically tracking the delivery of cash and in-kind contributions to NFWF and its local grantees and in supporting third party partners for its federal projects. NFWF helps ensure that federal cost-sharing and matching requirements, along with broader goals for leveraging federal funding, are met while adhering to federal standards for appropriate and eligible project contributions and expenses. NFWF is a longtime partner of USDA NRCS. NFWF staff are involved daily with NRCS staff across nearly all fifty states, and its finance staff have decades of experience working with USDA grants and agreements.

Under this project, NFWF will manage grant funds in three primary areas. First, NFWF will make cost-share payments to farmers for planting new cover crop acres. Second, NFWF will manage funding for competitive grants for "on the ground" technical assistance delivery, as designed by states to strategically address gaps and needs for supporting cover crop adoption. State commodity affiliate organizations, in partnership with other groups such as existing soil health coalitions, Soil & Water Conservation Districts, and non-profits with experience in conservation delivery, will lead the design of these state-level programs for TA and FA delivery. NFWF will be responsible to ensure that any National Policy Requirements are adhered to with a requirement that sub-grantees work with NRCS and participating farmers as needed (projects are expected to follow specifications covered under NRCS Practice Standard 340, or an FSH-specific cover crop standard if approved by USDA and incorporated by amendment). Third, NFWF will manage technical contracts for sole-source service providers (DTN and TSC) and subawards for implementation partners (NACD, CRA, SHI, NCAT-ATTRA).

In addition to NFWF, FSH's national commodity partners have long-standing relationships with their affiliated state commodity and other farm-related organizations. The state associations are a) familiar with their farmers and their practices, and b) are already promoting climate-smart activities, including cover crops. These organizations understand what is needed and what will succeed, based on that experience. FSH has secured funds to provide additional capacity-building support to the state organizations for their strategic planning and coordination of cover crop expansion. NCGA, NPB, and USB will use existing resources to advertise, market, and promote the benefits of climate-smart commodities and to provide the educational and technical support needed to increase cover crop acres. Funds from USB are currently being deployed to develop a new FSH website (farmersforsoilhealth.com) that will include a cover crop resource clearinghouse (with regional information and decision-making tools), the new cover crop transition program enrollment information, and links to the FSH marketplace platform.

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DTN will produce the MRV platform (which utilizes state-of-the-art satellite technology). DTN will support SHI (FSH's science advisor) in quantifying GHG benefits and deploying a soil sampling plan for further validation. DTN will provide communication services by using its database, linking it to FSH's website, and, at the request of state TA partners, pushing program information directly to farmers and customers purchasing climate-smart commodities. DTN will provide targeted marketing services to underserved, minority, and beginning farmers. NCAT-ATTRA and NACD will also advise and assist states in outreach to these populations. SHI and CRA have extensive research, education, and broad experience in developing and delivering educational resources and training to support state work. CRA-MU also provides a connection to universities in the land-grant system in the 20 targeted states. DTN will also manage a marketplace, within the platform, where climate-smart commodities can be registered and traded. TSC will assist by recruiting CPG and retail companies to participate and use the platform. The Walton Family Foundation has provided seed funding to support FSH project planning and state convening/planning.

ii.   Plan to Pilot Climate-Smart Agricultural practices on a large scale

A.   Description of Climate Smart Agriculture (CSA) practices to be deployed

In this project, FA will be used to implement cover crops in accordance with the applicable state NRCS Conservation Practice Standard 340 – Cover Crops. Farmers will enroll in the TIP through the FSH digital platform and will be required to self-certify that they planted cover crops according to the NRCS conservation practice standard. State TA grantees will be available to help enrolled farmers understand and implement the cover crop according to the NRCS conservation practice standard. FSH partners CRA-MU and SHI will provide trainings and educational materials to support farmers and TA grantees in meeting NRCS standards. All FSH cover crops will be planted on land currently in agricultural production. Cover crops will not result in ground disturbance below the plow zone. No project activities will involve concentrated animal feeding operations (CAFOs). However, it is reasonable to expect that some of the corn and soy farmers who elect to participate in the FSH project may supply feed to CAFOs. Similarly, FSH anticipates that some of the corn and/or soy produced by participating farmers may be used in biofuel plants. FSH does not expect the corn and/or soy produced by FSH participating farmers to be used in pharmaceutical plants.

If needed, FSH may draft its own modified 340 cover crop practice standard for the 20 states. The FSH standard would be submitted to USDA for review and approval and be incorporated through a formal grant amendment.

A wealth of field research has proven the conservation benefits of cover crops. For example, adding cover crops to no-till soybean production in Missouri reduced loss of soil by 94%, nitrate by 77%, and soluble P by 63%. Studies in Iowa and Indiana showed cover crops reduced nitrate losses by 61%, and a meta-analysis across many studies reported cover crops reduce nitrate leaching losses by an average of 70%. In Iowa, nitrate was continuously monitored from a drainage tile outlet, and it was found that cover crops significantly reduced nitrate loss in each of the four years monitored, regardless of weather.

It is well established that soil health management systems, such as no-tillage, minimum till, and cover crops increase carbon sequestration, reduce greenhouse gas emissions, and improve water quality, while simultaneously benefiting farmers through increased drought resilience and

nutrient availability, reduced erosion, as well as other advantages. Unfortunately, despite these emerging on-farm and environmental benefits, less than 10% of corn and soybean fields are cover cropped. FSH, with the assistance of this grant, will provide needed FA and TA to enable farmers to proactively transition to implementing and **adopting cover crops**, thus leading to additional GHG mitigating practices, such as reduced tillage and reduced nitrogen application. It is critical that this proven practice be expanded to tens of millions of acres across the nation. The benefits of this conservation practice will be maximized through adoption of cover crops in this program.

The climate mitigation and environmental benefits of this project are significant. Based on peer-reviewed literature and ramping up cover crop adoption to meet FSH's goal of 1.365 million acres by Year 3, cover crops will reduce GHG emissions by 1.8 million metric tonnes of CO_2e, reduce soil loss by 8 million metric tonnes, and reduce N leaching to groundwater by over 16 million pounds. Because our Education Programs will also focus on increasing adoption of soil health management systems (e.g. no-till), we estimate that approximately 10% of farmers adopting cover crops will also newly adopt no-tillage. This means the additional **environmental benefits will total approximately 2.16 million metric tonnes of CO_2e reduction**, 9.65 million metric tonnes of soil loss reduction, and 20 million pounds of N leaching reduction to groundwater. These environmental benefits will continue to accrue annually and will be expanded by neighboring farmers when they observe and learn of the drought resilience, input reduction, increased profitability, and other on-farm benefits that arise from cover crop adoption.

B. Plan to recruit producers and landowners

As stated previously, it is the goal of FSH to scale up to 30 million acres of cover crops by 2030. The $95 million USDA grant award will allow FSH to distribute $68.25 million in direct FA to farmers in pursuit of this goal, resulting in an additional 1.36 million cover crop acres through the FSH *Transition Incentive Payment (TIP)* program. Assuming an average of 140–200 new acres to be enrolled per farm, the program will serve between 6,825 – 9,750 farmers (landowner-operators or non-landowner operators). An additional $1.2 million in direct FA will be used to offer farmers already implementing cover crops a *Signing Incentive Payment (SIP)* of $2/acre to enroll 600,000 existing cover crop acres in the MRV program and marketplace platform being developed by DTN for FSH. With a 200-acre enrollment cap for SIP acres, approximately 3,000 farmers will be able to take advantage of new market opportunities through SIP.

FSH's ability to achieve these results is predicated on the active involvement of its national and state partners in all aspects of the program. State partners will provide leadership for designing recruitment and enrollment plans that work best in their states and utilize grant resources to either build on existing programs or to develop new initiatives. NFWF, as the FSH grant administrator, will solicit proposals from state corn and soybean commodity groups and/or their fellow conservation partners.

Additional recruitment support will be available to the states through FSH's contractors and partners. DTN will provide targeted marketing services that may be requested by the state TA partners for outreach to both underserved farmers and farmers identified as likely to adopt cover crops. NCAT-ATTRA will provide hands-on outreach to underserved farmers and advise on communications strategy and messaging for Historically Underserved producers. It is also expected that local conservation districts will be available to assist with recruitment and enrollment of farmers into the FSH program and provide TA. FSH will also form a Farmer Advisory Council to seek advice and input to improve the proposed cover crop effort and

Farmers for Soil Health Climate Smart Commodities Partnership

provide input on the design and strategy of the marketplace. This council will provide insights into outreach and recruitment of farmers, especially those who are Historically Underserved.

The FSH TIP program is designed *not* to compete with existing NRCS or other federal, state, or private NGO cover crop programs. It is intended to meet and address under-met demand for FA to incentivize adoption of cover crops on additional acres. Most current programs have greater demand than capacity and lack sufficient TA to enable lasting farmer adoption of the practice. FSH's effort will supplement, complement, or build on existing programs; and, as a result, it will scale practice acres in a coordinated manner in priority geographic areas. TIP is meant to serve as a response to the growing farmer demand to capture carbon value associated with cover crops and other climate-smart practices. It will offset the upfront costs of adoption and facilitate the farmer's transition to voluntary markets for carbon, or other environmental services, without requiring exclusivity to any one market or credit trading platform/organization.

C. Plan to provide technical assistance (TA), outreach, and training

FSH has designated $16.75 million of its budget to form a state-level TA funding pool. NFWF will offer competitive grants to state commodity groups that will provide a variety of TA to meet local or regional needs in their states. In listening meetings held with state affiliates in preparation for developing this proposal, FSH heard that in many cases TA was as important as FA to assist farmers with cover crop implementation and adoption. States indicated a desire for additional agronomists to support existing cover crop programs, the need for more farmer mentoring and peer-to-peer learning opportunities, and a need for additional capacity to proactively plan for cover crop initiatives. Through a state funding pool, partners within a state will be encouraged to collaboratively design the most effective use for and implementation of their TA funds. This may include helping farmers better understand the benefits of adopting cover crops and other associated practices, as well as encouraging participation in the FSH program. States may implement TA funds on their own or, if desired, seek additional contract assistance from FSH national partners, beyond the grant offerings. This investment will build local capabilities to help expand climate-smart practices well after the completion of this project.

NFWF, NCGA, NPB, and USB will actively solicit applications from state commodity groups and their partners in each of the 20 states to ensure full geographic technical assistance capacity coverage. NFWF will release a detailed request for proposals with significant applicant support including, but not limited to, conference calls, webinars, FAQ documents, and meetings with potential applicants. Proposals will be competitively evaluated across four primary criteria: 1) Coordination and community engagement, 2) Outcomes, 3) Budget, and 4) Technical merit. The coordination and community engagement category will ensure the grantee is a state commodity organization or a designated partner coordinating closely with one or more state commodity organizations, that the project is not duplicative with other proposals, and that the grantee has a plan to engage Historically Underserved and small producers. The outcomes category will examine the proposed impact of the project in terms of acres and farmers enrolled. The budget category will evaluate the cost effectiveness of the proposal and ensure the budget includes allowable costs. The final technical merit category will evaluate the feasibility of the proposed workplan and timeline and the capacity and experience of the applicant organization. To help ensure funding across all 20 states, the scale of outcomes indicated in each proposal will be assessed relative to the total acreage of corn and soy in the state(s) where work will occur. In this way, proposals from states with smaller corn and soy acreages will not be at a competitive disadvantage relative to proposals from states with larger acreages.

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In addition to state TA-led efforts, FSH national partners will be providing expertise in developing critical components for a broad educational plan to provide support to states. The Center for Regenerative Agriculture (CRA) and the Soil Health Institute (SHI) will collaborate to prepare the following educational tools: an online interactive farmer educational presentation series (36 sessions over three years) on cover crop best practices; eight short "how-to" videos for farmer audiences on cover crops and soil health; eight informational fact sheets on cover crops and soil health for farmers and lenders; and nine regional in-person training workshops for commodity staff and other partners. Additionally, CRA and SHI will provide continuous educational training and TA support for FSH commodity groups and related NGO partners through two full-time staff (CRA Cover Crop Specialist and SHI Soil Health Specialist). These specialists will lead educational efforts and serve as technical advisors for the entire FSH program, with additional staff from both organizations assisting with training and materials. Both CRA and SHI have established histories of providing top-of-line *train-the-trainer* programs on best soil health practices. These two research and educational organizations have advisory input from the agricultural industry, from research and academic leaders, and are well-connected to other organizations working on cover crops and soil health.

FSH's program will offer the full menu of TA to selected states to be tailored to their needs in support of their own TA efforts. For example, a state may leverage FSH's efforts with its own educational resources, tools, and/or materials. State commodity groups will also be encouraged to promote the benefits of cover crops using field days and earned/social media, etc. It should be noted that the CRA and SHI tools will be available to all farmers and agricultural groups, beyond the 20 targeted states. The tools will remain available on the FSH website after the grant period, continuing as a resource for farmers considering adoption of cover crop practices.

D. Plan to provide financial assistance (FA) for producers/landowners to implement CSAF practices

Under this project, farmers will register new cover crop acres for receiving TIPs through FSH's streamlined enrollment process via the marketplace platform. During enrollment, farm field boundaries, crop rotation, use of cover crops, soils, and other information will be prepopulated for the farmer in the digital platform. These data are available in DTN's proprietary commercial database for approximately 95% of US cropland on both owned and leased cropland. FSH will secure a time-limited data license for the dataset through a contract with DTN.

Each year the MRV platform will use remote sensing data to confirm and quantify the cover crop acres planted on enrolled fields. During the winter and early spring, DTN will produce the field-level cover crop data along with other data that will be available via the farmer's login. DTN will send an email or SMS asking them to review/confirm the information collected. (see *Section iii* below for details on verification). Farmers will self-certify their fields and acreages are correct, and reconfirm all their self-certified enrollment eligibility information, including farm and tract numbers, HEL and WC conservation compliance status, compliance with NRCS practice standard or an EE, and confirmation that they are not receiving NRCS cover crop payments on the same acres. State TA providers will assist farmers as needed in obtaining the necessary information to comply with and self-certify the eligibility requirements. They will also support farmers during enrollment, and measurement, reporting and verification tasks within the digital platform to help ensure accurate data entry. After verification and self-certification each year, DTN will transfer farmer payment, acreage, and compliance information to NFWF via a

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secure FTP site. NFWF will then issue payments to farmers (landowner-operators or non-landowner operators) in spring of each year following planting of a cover crop the previous fall.

Each TIP farmer will receive $50 per acre ($25 Year 1, $15 Year 2, and finally $10 Year 3 per acre) during the first three years in the program. Program participation for new cover crop acres will be capped at 1,000 acres/farm. TIPs may be stacked with existing cover crop programs except for NRCS programs or other programs using federal dollars. As explained previously, the descending three-year payment serves as a transition incentive for establishing cover crops. It is expected that when farmers realize the economic benefits of long-term improved soil health, as well as the potential benefits of marketing a climate-smart commodity, they will continue to use cover crops and other climate-smart practices.

The FSH platform will generate verifiable carbon sequestration and GHG emissions benefits relative to each farmer's acres planted. The farmer will have access to all of the DTN data; data they entered, verified or corrected; and the outputs from the COMET Farm, COMET Planner and other 3rd party models we may add. The farmer will be able to "share" their data through the platform (e.g., carbon programs, crop premiums or carbon insets) and invite partners to add data. The farmer can use the climate-smart data and properties of their crops for carbon or other environmental incentive payments (subject to the USDA limitations and the requirements of the carbon program or other downstream buyers). The other payments would include other stackable offers in our marketplace or outside of it (e.g., 3rd party carbon program). Based on the results of market research FSH will conduct with downstream commodity buyers, FSH may generate a quantifiable and verifiable ecosystem record (tentatively to be called an "EcoScore") specific to his/her farm and acres planted.

Farmers who have existing cover crop acres may also receive a SIP payment of $2/acre (200-acre cap) to register those acres in the marketplace platform and to participate in additional market opportunities. FSH's corn and soy cover crop initiative will create momentum, build capacity, and establish marketplace activity benefiting all commodities. It is intended to expand and include additional acres beyond this grant proposal.

E. Plan to enroll underserved and small producers

FSH will reserve (through a third and final enrollment period, if needed, through a no-cost extension) over 20% of the total FA budget, or $15 M, to go directly to Historically Underserved and small producers. However, it is expected to reach an even higher percentage through FSH's focused outreach. FSH and its partners will actively recruit and seek to enroll 2,000 historically underserved and/or small producers of corn and soybeans in the TIP and SIP programs. The DTN database has identified about 30,650 underserved farmers (including women and minority farmers). Additionally, the DTN database has identified nearly 574,000 farmers with less than $350,000 in annual farm income (before expenses). The farms of underserved and small producers typically have fewer acres, which could impact total payments. NCAT-ATTRA will provide training and template resources for state TA partners to use in their outreach, communications, and messaging to Historically Underserved and small producers. In addition, approximately $4 million (approximately 20% of TA budget) of CRA, SHI and DTN's outreach efforts will be directed toward these audiences.

To achieve this enrollment level, FSH will deploy several pathways to recruiting these farmers. First, using DTN's precision digital marketing, this project will prioritize communication to the

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30,650 underserved and small farmers noted above. FSH will adjust communication frequency to ensure participation equity. DTN's databases have built-in demographics and an ability to push information directly to targeted underserved and small growers. This data resource may also be used by partner groups, such as NCAT-ATTRA and local conservation staff, to combine with their own knowledge and acquaintance with under-served and small farmers who are interested in soil health and sustainability practices. A range of TA activities, as described in *Section ii.C.* will be provided, with the addition of these partners specifically tailoring the education and outreach materials to reach their intended audiences.
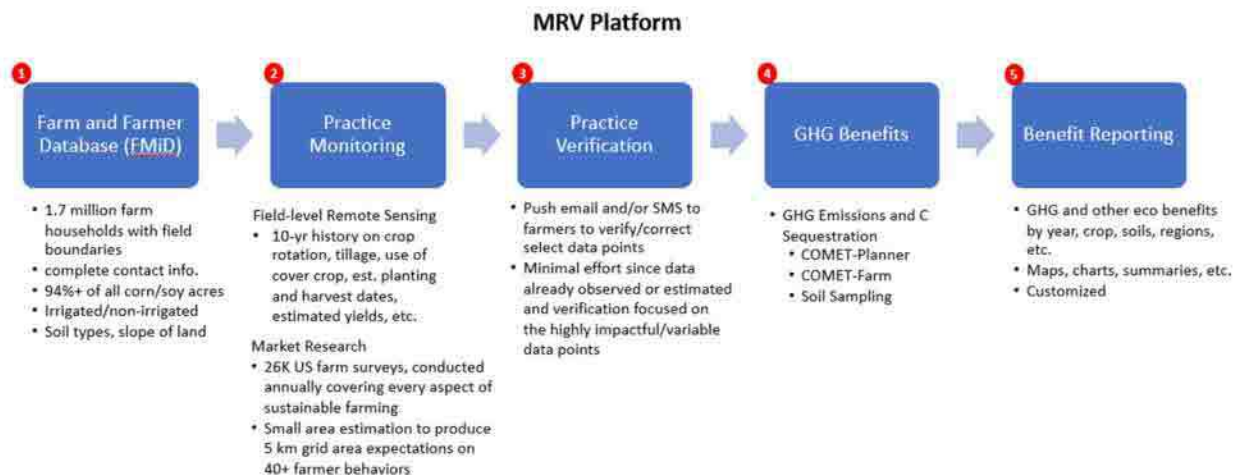
Additionally, the FSH Farmer Advisory Council will be charged with addressing issues for reaching underserved farmers. NCAT-ATTRA will help support this effort by identifying a farmer representative to serve on the council. A representative from the American Farm Bureau Federation Young Farmers & Ranchers program will also be sought to serve.

Another component of this plan includes NFWF releasing its *Request for Proposals* to the state commodity groups with a stipulation that successful applicants must recruit underserved farmers.

Further efforts, such as farmer surveys, will be conducted to determine which factors best motivate and influence historically underserved farmers to make the decision to plant cover crops. Other survey mechanisms to reevaluate and adapt communications may also be employed, if the above approaches for enrolling small and underserved producers are not successful.

Although NRCS does an excellent job in this area, it is anticipated that the FSH outreach to socially disadvantaged groups will further increase participation and enrollment of these populations in EQIP or CSP. These two program opportunities generally provide a larger incentive than the FSH program will offer. However, the FSH partners believe the TA and the marketing platform made available through its efforts will also attract and greatly benefit underserved and small producers.

iii.   MRV Plan

MRV Platform

1. Farm and Farmer Database (FMiD)	2. Practice Monitoring	3. Practice Verification	4. GHG Benefits	5. Benefit Reporting

• 1.7 million farm households with field boundaries
• complete contact info.
• 94%+ of all corn/soy acres
• Irrigated/non-irrigated
• Soil types, slope of land
	Field-level Remote Sensing
	• 10-yr history on crop rotation, tillage, use of cover crop, est. planting and harvest dates, estimated yields, etc.
	
	Market Research
	• 26K US farm surveys, conducted annually covering every aspect of sustainable farming
	• Small area estimation to produce 5 km grid area expectations on 40+ farmer behaviors
		• Push email and/or SMS to farmers to verify/correct select data points
		• Minimal effort since data already observed or estimated and verification focused on the highly impactful/variable data points
			• GHG Emissions and C Sequestration
			  • COMET-Planner
			  • COMET-Farm
			  • Soil Sampling
				• GHG and other eco benefits by year, crop, soils, regions, etc.
				• Maps, charts, summaries, etc.
				• Customized

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A. Approach to GHG benefit quantification

Enrollment in this cover crop program will require farmers to verify select data points that have been captured and prepopulated via the DTN data license to FSH, including use of cover crops, tillage practices, and nitrogen fertilizer. This and other management practice data will be an input into COMET-Planner, COMET-FARM, and other third-party models to quantify GHG emissions and sequestration. The GHG emission estimates generated from COMET-Planner will be verified using COMET-Farm. The soil C sequestration estimates provided by COMET-Farm will be verified by soil sampling and analysis, as described below in *Section iii.D*. Tracing of these benefits through the supply chain is described below in *Section iv.B.*

B. Approach to monitoring of practice implementation; farms and acres reached

The cover crop practice implementation will be monitored using remote sensing coupled with DTN's database of farmers and field boundaries. This will produce a field-level view of farm practices over the last 10 years. With this lookback, additionality and permanence of any GHG mitigation or sequestration practices can also be measured. The DTN data license will provide prepopulated, field-level, farm practice data using remote sensing and market research to minimize the administrative burden on the farmer. DTN's existing database of farmers and farm field boundaries cover more than 95% of all corn/soy acres in the targeted 20-state footprint. This process has produced a comprehensive set of 50-plus data points on farms, at a field-level, over the previous 10 years, and will continue to accumulate data going forward for the 5-year observation period of the cover crop program. Crop identification, crop rotation, cover crop use, tillage practices, yield estimates, planting and harvest dates are documented using remote sensing. Other practices are based on annual, anonymized, localized, and statistically representative market research data of over 26,000 farmer respondents (across all major U.S. crops) to determine localized (5-km grids) data of estimated use of various inputs (e.g., herbicides, nitrogen, energy inputs) and typical farm practices relevant to calculating carbon footprints and water use.

The marketplace platform will verify key practice data with the farmer each year to ensure compliance and accuracy of GHG calculations. This approach drastically reduces farmer burden, removing key barriers to CSA practice adoption. The verification process ensures accuracy in the data. It is anticipated that nearly **two million acres** and up to **12,750 farms** will be reached through project activities and monitoring of practice implementation on the farms receiving the TIP and SIPs.

C. Approach to reporting and tracking of greenhouse gas benefits per farm, per project, per commodity produced, and per dollar expended

All the data collected through the platform (remote sensing, market research efforts, farmer-verified data and GHG data (e.g., COMET)) will be stored in the marketplace platform database and be used to generate reports for the USDA, and other users of the platforms, that offer CSAF opportunities to farmers. This data will also allow FSH to provide regular data visualization reports detailing use of cover crops and other historical data from the past five years *and* the grant period. FSH contractor DTN will generate reports for FSH, USDA and other platform users including, but not limited to:
- Heatmaps showing progress of and presence of cover crops,
- Year-by-year summaries of acres, GHG emission reduction, and

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- Penetration of cover crop use and reduced/no-till in any geographies and within various other segments, such as size, crop types, soil types and much more.

As farmers enroll, they will *not* be required to use cover crops on all fields. However, FSH/DTN will track and monitor all the data at a field-level.

Based on peer-reviewed literature and increasing adoption from <u>a range of 25 to 45% TIP acres in Year 1 to 100% of TIP acres in Years 3 through 5 and beyond, this project will reduce GHG emissions by an estimated 2.16 million metric tonnes of CO_2e. This equates to 1.08 million metric tonnes of CO_2e reduced for corn production and 1.08 million metric tonnes of CO_2e reduced for soybean production. This also means each farm will provide GHG reductions of 222-317 metric tonnes of CO_2e, and each dollar of FA will reduce GHG emissions by 0.032 metric tonnes of CO_2e.</u> After receiving three years of TIP payments, the agronomic benefits of cover crops will materialize and will motivate the farmers to continue the practice, so organic matter and carbon will continue to build in the soil for the long-term. In addition, the marketplace platform will provide sustainability premiums from the marketplace that will further incentivize a long-term commitment to cover crops and conservation tillage, keeping carbon sequestered indefinitely. The foundational TA established by this project will ensure these benefits will continue to accrue and expand beyond the life of this project, as supported by SHI interviews with 100+ farmers after five years of using cover crops.

D. <u>Approach to verification of GHG benefits</u>

Greenhouse gas (GHG) emissions will be estimated for each enrolled field using <u>COMET-Planner</u>. Because COMET-Planner estimates GHG emissions using algorithms at the MLRA scale, the GHG emissions will be verified at the individual field scale using <u>COMET-Farm</u> for each farm, and field, enrolled in the program.

As COMET-Farm also provides estimates of soil C sequestration, <u>FSH will take advantage of that opportunity by verifying soil C sequestration through soil sampling</u> for soil organic C (SOC) and bulk density, at the farm field scale. The number and location of fields sampled will be determined to ensure statistically proportional representation of farms, soils, climates, and MLRAs in the population of farms that enroll in the program. <u>Field-level soil testing will be performed on about 350–400 farms, based on a 95% confidence level and a 5% margin of error.</u>

A *Request for Proposals* will be issued for soil sampling and analysis, following strict requirements and operating procedures developed by Soil Health Institute (SHI). Soils will be sampled at 0–20 cm depth for verifying COMET-Farm predictions of SOC and at 0–30 cm depth for potential utility in C market opportunities. SOC will be analyzed by combustion. Soil bulk density will be measured by the core method (corrected for stone content, if applicable). In addition to assessing SOC, soils will also be analyzed for potentially mineralizable organic C, and aggregate stability. These three soil health indicators will help motivate farmers to adopt and sustain climate-smart and soil health practices. Fields selected for soil sampling will be sampled in the same location (verified with GPS coordinates) in a baseline and a follow-up sample later in the grant to quantify management practice impacts on soil C stocks (sequestration) and soil health. SHI will train those selected for sampling soils in the proper techniques needed for sampling, labeling, and shipping soils. SHI will also instruct and verify that the laboratory analyzing samples follows standard and broadly accepted scientific laboratory and handling protocols, with oversight by SHI.

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FSH's 20-state focus area includes not only a substantial portion of the Mississippi River Basin, but also the Chesapeake Bay and Great Lakes watersheds. These are all areas with significant water quality issues. Consequently, it is notable that in addition to reducing <u>GHG emissions by over two million metric tonnes of CO_2e, this project is estimated to reduce soil loss by 9.65 million metric tonnes and reduce N leaching to groundwater by over 20 million pounds. Research shows these practices will also reduce N and P losses through runoff, improve surface water quality, and increase soil permeability and water holding capacity.</u>

E. <u>Agreement to participate in the Partnership Network</u>

FSH and its partners will participate in the Partnership Network.

iv. Plan to develop and expand markets for climate-smart commodities

A. <u>Any partnerships designed to market resulting climate smart commodities</u>

A third and equally important project component is the <u>marketplace interface</u> powered by the integrated MRV platform which will market climate-smart agricultural commodities to interested parties (i.e., biofuel, food, animal feed, package goods companies, etc.). This program will enable each commodity group to achieve its industry-wide goals on GHG emission reductions while also supporting its farmer members in advancing more productive and sustainable practices. These practices can be shared and promoted with other commodity groups and end-users through the platform.

This program is designed to engage farmers in climate-smart practices which will then propel them into the climate-smart commodities marketplace. On the platform, farmers will be able to measure, report, and verify their climate-smart benefits, such as carbon and ecosystem services benefits, to receive certification. For example, interested parties, such as a renewable fuels producer, wanting to reduce its carbon footprint, will be able to interact on the platform to conduct their own transactions directly with farmers and/or crush plants. FSH/DTN will *not* be involved in the actual sale of climate-smart commodities.

The Sustainability Consortium (TSC) will provide services to FSH by conducting market research with a Corporate Advisory Committee composed of potential marketplace buyers. The results of the research will be used to inform design of the marketplace platform. TSC will provide access to its network as a service to FSH and recruit retailers and CPG companies through its marketing and communications networks. FSH will bring additional financial support to farmers for adopting climate-smart practices from buyers who participate in the marketplace. FSH will also enable new partnerships between new and expanded projects of state affiliates and potential buyers to support the sale of climate-smart commodities. Finally, FSH is forming partnerships with 3rd party organizations, such as SustainCERT, which are expected to later aid in the certification and registration of carbon and other economic benefits to increase their marketability. Third-party certification is likely to later be incorporated into the marketplace platform at DTN expense separate from the Climate Smart Commodities grant.

B. <u>A plan to track climate-smart commodities through the supply chain</u>

Led by TSC, FSH will strive to define standards and processes from field-to-food which will leverage and be integrated in the MRV and marketplace. Because all sustainability practice and outcome (e.g., GHG benefits) data will be captured and reported at a field level, these data points will be incorporated in grain transactions and carried through the supply chain to food

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companies. The FSH contract with DTN will provide the ability for the data to move easily from farmer to grain buyers or to end-buyers. The grain buyers will be able to access this information with the farmer's permission and can then attach that data to the scale tickets or internal systems to facilitate tracking beyond the scale. The grain companies can use this to provide full traceability or to enhance their mass balance calculations and reporting. This can be done via a "share" capability within the marketplace platform but we will be researching other technologies including assigning a QR code leveraging blockchain. This will provide the ability for the data to move through the marketplace platform and greater supply chain and follow chain of custody. This data includes the 5 year history, field boundaries, crop and acreage information, farm practice information, farmer self-verification, output of climate models (e.g. COMET), etc.. For example, if a farmer delivers his or her commodity at a grain elevator, the grain company can scan the farmer's QR code and access the field-level sustainability data created through the MRV process. The FSH Corporate Advisory Committee will work with grain and food companies to educate about climate-smart processes and standards and to ensure this information can be carried through to final products. The data will also improve grain companies' ability to report on sustainable sourcing by improving the mass balance approach.

C. Estimated economic benefits for participating producers, including market returns.

As stated above, each farmer will receive $50/acre over a three-year period to assist with practice implementation. A 2019 report by the USDA Sustainable Agriculture Research and Education program entitled "Cover Crop Economics" showed that it typically takes three years for farmers to break even, but beyond that point, the cover crops return a net profit due to modestly higher yields and lower input costs. After five years of cover crop use, the report estimated cover crop users would have a resulting net profit annually of $17/acre for corn and $10/acre for soybeans (at 2019 prices, significantly more at current prices).

In addition, farmers will gain economic benefits through the climate-smart marketplace created by this project. Although it is difficult to predict the precise added value until it is well established, preliminary market indicators suggest that farmers will be able to **sell their climate-smart commodity** attributes for $10 to $20 more per acre based on current conditions, resulting in $13.6 million to $27.3 million in total economic returns for farmers participating in this project.

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

FSH's program will be sustainable long after the USDA grant funds have expired.
- The cover crop program effort will bolster the knowledge base and sustainability capacity within the national and state commodity groups to educate farmers about the productivity and profitability of sustainable farming. They will continue to promote the platform and encourage cover crop adoption, conservation tillage and other sustainability practices and opportunities in the climate-smart commodity marketplace.
- Various supply chain participants (biofuels, major brands, food producers, and more) are already seeking access to connect with climate-smart growers. Once the marketplace platform is in place, the economic benefits will carry it forward in perpetuity.

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- Team members will participate in the USDA Partnership for Climate Smart Commodities Learning Network to promote this project, exchange ideas, and invite others to participate and improve on the tool.
- FSH believes this project <u>will generate valuable data and reports that will be available to the USDA, industry, and individual farmers without compromising confidentiality</u>. USDA can leverage the platform and MRV process for other climate-smart initiatives. Visualization, GHG reductions, location, farm demographics, and crop size data will be valuable to USDA and the industry beyond the life of the grant. It could help inform USDA about where additional incentives may be needed.
- Most importantly, <u>this grant will create an open, transparent, and independent marketplace</u> that will provide a "sustainability premium" to farmers so these financial farm benefits are not exclusively from government programs.

FSH will develop a CSAF marketplace platform to be used for the cover crop initiative that will allow various organizations (e.g., nonprofits, food companies, renewable fuels, retailers) to present business opportunities to compensate farmers for their sustainable farm practices. The platform will allow organizations to meet GHG, other sustainability goals, and/or branding and labeling initiatives. At its core is the MRV process, described above, which uses technology to automate many tasks while maintaining analytical rigor for data and processes. Key components to the platform include:
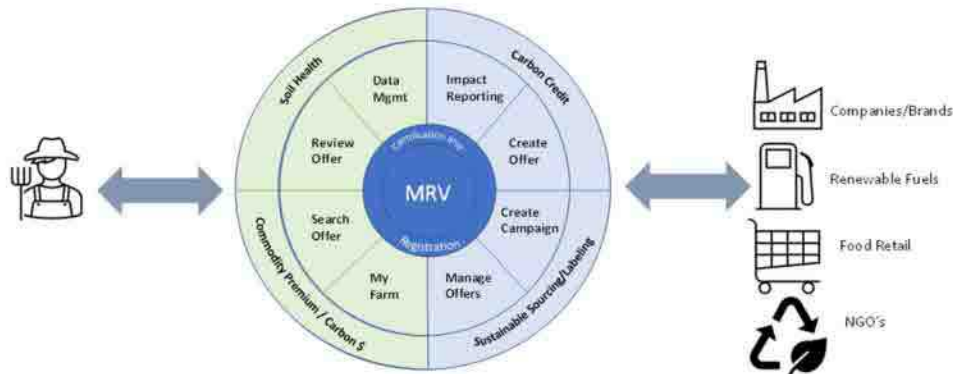
Farmers will receive:
1. Access to review and enroll in various offers that are available to them.
2. Access to necessary and required, pre-populated program data through the DTN database, including remote sensing data used to generate farm specific data (with permission) using various agronomic and machinery systems (*This is key for user experience and adoption and is cost effective for all.*). This includes:
   a. Ability to update, maintain, and share farm data (i.e., portability to carbon programs or to share with agronomist);
   b. Ability to invite/manage/control access to farm data;[1]
3. Verification emails or text messages (SMSs) are pushed to the enrolled farmers requiring them to verify key, pre-populated data;

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[1] Allow the farmer to access and "take with them" the data collected and any model results. No farmer provided data will be accessible by any organization without farmer permission.

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4. Summarized report and analysis of their climate-smart data along with the ability to push or share this data to participate in other non-conflicting incentives. Pending the results of market research FSH will conduct with downstream commodity buyers, FSH may generate and provide farmers with a quantifiable and verifiable ecosystem record (tentatively to be called an "EcoScore") specific to his/her farm and acres planted and

5. Access to other models' output (e.g., COMET).

Various organizations extending offers/incentives to farmers will receive:

6. Access to the platform to offer farmers incentives for organizational goals, such as:
    a. Paying sustainability premiums to farmers for climate-smart commodities (e.g., Kellogg wants to off-set 100 million bushels of corn by incentivizing 100 million bushels of sustainably grown corn),
    b. Creating/buying carbon offsets/credits,

7. Assurances there is no "double-counting" of acres within the platform and farmer attestation as required by USDA and others, and

8. Access to standardized and customized reporting which will show GHG benefits and other sustainability data and practices for their internal/external reporting.

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Withheld pursuant to exemption

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of the Freedom of Information and Privacy Act

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of the Freedom of Information and Privacy Act

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Farmers for Soil Health Benchmarks

Thresholds that need to be met prior to each category of USDA reimbursement
- NFWF administrative expenses: Executed grant agreement between USDA and NFWF
- DTN, MBSH, and TSC contract expenses: Executed NFWF contracts with DTN, MBSH, and TSC
- FSH partner subaward expenses: Activated grant agreements between NFWF and each of the following: SHI, CRA, NACD, NCAT
- State TA grantee expenses: Activated NFWF grant agreements with state TA grantees
- Temporary Staffing Services and Soil sampling contract: completed competitive selection process and executed contract between NFWF and the selected contractor
- Farmer SIP and TIP payments: Farmer enrollment, and annual 1) eligibility self-certification, 2) remote sensing verification, and 3) DTN data transfer to NFWF

FSH Quarterly Activity Milestones

See Appendix A (attached). Quarterly Qualitative (Activity-based) Milestones for the Farmers for Soil Health Climate Smart Commodities Partnership.

FSH Quarterly Quantitative Targets

See Appendix B (attached). Quarterly Quantitative Targets for the Farmers for Soil Health Climate Smart Commodities Partnership.

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Category	Milestone Activity	Responsible FSH Partners	2022 Oct-Dec FY 23-1 Q0	2023 Jan-Mar FY 23-2 Q1	2023 Apr-Jun FY 23-3 Q2	2023 Jul-Sep FY 23-4 Q3	2023 Oct-Dec FY 24-1 Q4	2024 Jan-Mar FY 24-2 Q5	2024 Apr-Jun FY 24-3 Q6	2024 Jul-Sep FY 24-4 Q7	2024 Oct-Dec FY 25-1 Q8	2025 Jan-Mar FY 25-2 Q9	2025 Apr-Jun FY 25-3 Q10	2025 Jul-Sep FY 25-4 Q11	2025 Oct-Dec FY 26-1 Q12	2026 Jan-Mar FY 26-2 Q13	2026 Apr-Jun FY 26-3 Q14	2026 Jul-Sep FY 26-4 Q15	2026 Oct-Dec FY 27-1 Q16	2027 Jan-Mar FY 27-2 Q17	2027 Apr-Jun FY 27-3 Q18	2027 Jul-Sep FY 27-4 Q19	2027 Oct-Dec FY 28-1 Q20	2028 Jan-Mar FY 28-2 Q21	2028 Apr-Jun FY 28-3 X
1-Project Management	Notification of award	USDA																							
	Execute NFWF FSH CSC grant with USDA	NFWF, all																							
	FSH grant period of performance	NFWF, all																							
	Execute DTN, TSC, MBSH contracts	NFWF, DTN, TSC, MBSH																							
	Execute MBSH, SHI, CRA, NCAT, NACD subawards	NFWF, MBSH, SHI, CRA, NCAT, NACD																							
	DTN contract period of performance	DTN																							
	TSC contract period of performance	TSC																							
	MBSH period of performance	MBSH																							
	SHI period of performance	SHI																							
	CRA period of performance	CRA																							
	NCAT period of performance	NCAT																							
	NACD period of performance	NACD																							
	Request for proposals for state TA grants	NFWF, MBSH, USB, NCGA, NPB																							
	State TA grants announced	NFWF, MBSH, USB, NCGA, NPB																							
	Execute state TA grants	NFWF, state																							
	TA grants period of performance	State grantees																							
	FSH MOU Alliance Leadership Team meetings (Quarterly)	MBSH, USB, NCGA, NPB																							
	Quarterly progress reports to USDA	NFWF, all																							
	Final programmatic report to USDA	NFWF, all																							
2-MARCOM (Marketing and Communications)	DTN marketing tools available to state TA grantees	DTN, state grantees																							
	DTN programmatic marketing (email, ads)	DTN, MBSH, USB, NCGA, NPB																							
3-Technical Assistance	State TA grants provide enrollment, MRV, cover crop TA																								
	Cover crop webinars & workshops for grantees &	CRA, SHI, state grantees																							
	State TA grantee webinar: communicating with HU farmers	NCAT, state grantees																							
	Quarterly briefings for SWCDs	NACD																							
4-Enrollment	Enrollment Platform development and testing	DTN, MBSH, NFWF																							
	TA grantee trainings on FSH Enrollment Platform	DTN, NFWF, MBSH, state grantees																							
	State TA grantee SIP promotion and enrollment support	State grantees																							
	Farmer SIP enrollment (Platform open for SIP)	DTN, state grantees			SIP Cohort 1 (SIP C1)			SIP Cohort 2 (SIP C2)																	
	State TA grantee TIP promotion and enrollment support	State grantees																							
	Farmer TIP enrollment (Platform open for TIP)	DTN, state grantees			TIP Cohort 1 (TIP C1)			TIP Cohort 2 (TIP C2)																	
	TIP enrolled farmers plant cover crops	TIP farmers, state grantees				TIP C1			TIP C1 & C2				TIP C1 & C2				TIP C2								

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Attachment - Benchmarks Table

Farmers for Soil Health Climate Smart Commodities Partnership

Category	Milestone Activity	Responsible FSH Partners	Q0	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	X
5-MRV Platform/ MMRV	MRV Platform development and testing	DTN, MBSH, NFWF				▓	▓																		
	MRV Platform operational	DTN					▓																		
	SIP verification (MRV Platform and farmer self-certification)	DTN, SIP farmers					SIP C1				SIP C2														
	SIP payments sent	NFWF, DTN						SIP C1				SIP C2													
	TIP verification (MRV Platform and farmer self-certification)	DTN, TIP farmers						TIP C1				TIP C1&2				TIP C1&2				TIP 2					
	TIP payments sent	NFWF, DTN							TIP C1				TIP C1&2				TIP C1&2				TIP C2				
	GHG Benefits Estimated	DTN, SHI							TIP C1				TIP C1&2				TIP C1&2				TIP C1&2				TIP C1&2
	Soil sampling contractor RFQ and selection	NFWF, SHI, MBSH						▓																	
	Soil sampling contractor period of performance	Soil contractor							▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓			
	Field soil sampling	Soil contractor, SHI								Baseline									Follow-up						
6-Marketplace Platform	Marketplace Platform market research	TSC, DTN, MBSH		▓	▓																				
	Marketplace Platform development and testing	DTN, MBSH, USB, NCGA, NPB			▓	▓																			
	Marketplace Platform operational	DTN					▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓			

(Year/quarter header reference: Q0 = Oct-Dec 2022 / FY 23-1; Q1 = Jan-Mar 2023 / FY 23-2; Q2 = Apr-Jun 2023 / FY 23-3; Q3 = Jul-Sep 2023 / FY 23-4; Q4 = Oct-Dec 2023 / FY 24-1; Q5 = Jan-Mar 2024 / FY 24-2; Q6 = Apr-Jun 2024 / FY 24-3; Q7 = Jul-Sep 2024 / FY 24-4; Q8 = Oct-Dec 2024 / FY 25-1; Q9 = Jan-Mar 2025 / FY 25-2; Q10 = Apr-Jun 2025 / FY 25-3; Q11 = Jul-Sep 2025 / FY 25-4; Q12 = Oct-Dec 2025 / FY 26-1; Q13 = Jan-Mar 2026 / FY 26-2; Q14 = Apr-Jun 2026 / FY 26-3; Q15 = Jul-Sep 2026 / FY 26-4; Q16 = Oct-Dec 2026 / FY 27-1; Q17 = Jan-Mar 2027 / FY 27-2; Q18 = Apr-Jun 2027 / FY 27-3; Q19 = Jul-Sep 2027 / FY 27-4; Q20 = Oct-Dec 2027 / FY 28-1; Q21 = Jan-Mar 2028 / FY 28-2; X = Apr-Jun 2028 / FY 28-3)

Appendix A. Quarterly Qualitative (Activity-based) Milestones for the Farmers for Soil Health Climate Smart Commodities Partnership. Responsible partners and contractors for the Farmers for Soil Health Climate Smart Commodities Partnership (FSH) include: National Fish and Wildlife Foundation (NFWF), United Soybean Board (USB), National Pork Board (NPB), National Corn Growers Association (NCGA), MBSH Consulting – Farmers for Soil Health coordination contract (MBSH), Data Transmission Network (DTN), The Sustainability Consortium (TSC), Soil sampling contractor chosen by competitive bid (Soil contractor), University of Missouri Center for Regenerative Agriculture (CRA), Soil Health Institute (SHI), National Center for Appropriate Technology (NCAT), National Association of Conservation Districts (NACD), State technical assistance providers selected through a NFWF competitive Request for Proposals (state grantees). Shaded quarter depicts when each activity is expected to take place.

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

Withheld pursuant to exemption

(b)(4)

of the Freedom of Information and Privacy Act

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

NRCS Practice Code (if applicable)	Practice Name
340	Cover Crop

Partnerships for Climate-Smart Commodities

Data Dictionary for Recipients

February 2023
Version 1.0

USDA Partnerships for Climate-Smart Commodities Data Dictionary for Recipients
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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."

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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

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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

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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

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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)

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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

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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

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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 CO_2 emission reductions for field	Annual
Total CH4 estimated	Estimate of total CH_4 emission reductions for field	Annual
Total N2O estimated	Estimate of total N_2O emission reductions for field	Annual

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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

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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

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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.

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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

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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

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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

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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

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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

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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

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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

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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

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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

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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

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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

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<u>Marketing Activities</u>

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

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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

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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

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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

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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

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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

Measurement unit: Category

Select multiple values: No

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

Measurement unit: Category

Select multiple values: No

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

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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

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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

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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

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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

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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

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<u>Field Enrollment</u>

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

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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

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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

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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

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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.

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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

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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

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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

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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

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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

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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

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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

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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

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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

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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

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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

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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

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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

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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

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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

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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

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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

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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

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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

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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)

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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

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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

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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

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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

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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

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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

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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

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<u>Other CSAF Practices</u>
Traditional or cultural practices
Microbial products
Solar power generation
Grain bin construction
Pre-season drainage

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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

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

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.