



NOTICE OF GRANT AND AGREEMENT AWARD

1. Award Identifying Number NR233A750004G110	2. Amendment Number	3. Award /Project Period 09/30/2023 - 09/30/2027	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) CHICO STATE ENTERPRISES 25 MAIN STREET CHICO CA 95928-5388 UEI Number / DUNS Number: C4VMQLSU1LF4 / 612177162 EIN:	
7. NRCS Program Contact Name: JEREMIAH BOWERS	8. NRCS Administrative Contact Name: Daniel Curtis	9. Recipient Program Contact Name: MICHELE AUZENNE	10. Recipient Administrative Contact Name: MICHELE
(b)(6)			
11. CFDA 10.937	12. Authority 15 USC 714 et seq	13. Type of Action New Agreement	14. Program Director Name: CYNTHIA DALEY (b)(6)
15. Project Title/ Description: Expands climate-smart specialty, vegetable and fruit crop markets (almonds, walnuts, rice, tomatoes, stone fruits) in CA and supports farmer climate-smart practice implementation and monitoring.			
16. Entity Type: M = Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education)			
17. Select Funding Type			
Select funding type:	<input checked="" type="checkbox"/> Federal		<input type="checkbox"/> Non-Federal
Original funds total	\$4,999,795.00	\$0.00	
Additional funds total	\$0.00	\$0.00	
Grand total	\$4,999,795.00	\$0.00	
18. Approved Budget			

Personnel	\$2,039,011.00	Fringe Benefits	\$844,817.00
Travel	\$70,679.00	Equipment	\$273,853.00
Supplies	\$10,113.00	Contractual	\$0.00
Construction	\$0.00	Other	\$1,761,322.00
Total Direct Cost	\$4,071,268.00	Total Indirect Cost	\$928,527.00
		Total Non-Federal Funds	\$0.00
		Total Federal Funds Awarded	\$4,999,795.00
		Total Approved Budget	\$4,999,795.00

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

Name and Title of Authorized Government Representative KATINA HANSON Acting Senior Advisor for Climate-Smart Commodities	Signature KATINA HANSON Digitally signed by KATINA HANSON Date: 2023.09.29 15:50:08 -05'00'	Date
Name and Title of Authorized Recipient Representative MARY SIDNEY CEO	Signature Mary Sidney Digitally signed by Mary Sidney Date: 2023.09.29 11:56:19 -07'00'	Date 09/29/2023

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, audiotope, 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 Chico State Enterprises (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 \$ 4,999,795

TOTAL FEDERAL FUNDS \$4,999,795

PERSONNEL \$1,440,997

FRINGE BENEFITS \$597,044

TRAVEL \$49,950

EQUIPMENT \$273,853

SUPPLIES \$7,147

CONTRACTUAL \$0

CONSTRUCTION \$0

OTHER \$1,702,277 (includes PRODUCER INCENTIVES \$1,560,000)

TOTAL DIRECT COSTS \$4,071,268

INDIRECT COSTS \$928,527

TOTAL NON-FEDERAL FUNDS \$0

PERSONNEL \$0

FRINGE BENEFITS \$0

TRAVEL \$0

EQUIPMENT \$0

SUPPLIES \$0

CONTRACTUAL \$0

CONSTRUCTION \$0

OTHER \$0 (includes PRODUCER INCENTIVES \$0)

TOTAL DIRECT COSTS \$0

INDIRECT COSTS \$0

Recipient has an approved Negotiated Indirect Cost Rate Agreement (NICRA) with a rate of 41.5 percent and a base of Modified total direct costs, consisting of all direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel and up to the first \$25,000 of each subaward (regardless of the period of performance of the subawards under the award). Modified total direct costs shall exclude equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs and the portion of each subaward in excess of \$25,000. Other items may only be excluded when necessary to avoid a serious inequity in the distribution of indirect costs, and with the approval of the cognizant agency for indirect costs.

When equipment is purchased with Federal funds it must be used until no longer needed as described in the General Terms and Conditions and 2 CFR 200. If the residual value of the equipment is \$5,000 or more at the time it is no longer needed, the recipient must request disposition instructions. The disposition instructions may direct the recipient to: 1) sell the equipment and return a proportionate share of the proceeds to the Federal agency; 2) transfer title to another

eligible entity identified by the Federal agency; or 3) keep the equipment if desired and compensate the Federal agency for its proportionate share of the value.

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

Withheld pursuant to exemption

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of the Freedom of Information and Privacy Act

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Executive Summary Of Pilot Project

Contact Information: Project Director Dr. Cindy Daley; (530) 898-6280; cdaley@csuchico.edu

Producing more than 400 different crops, California's farmers lead the nation in agriculture production and are responsible for growing more than 70 percent of the United States' fruits and vegetables and nearly 100 percent of the nation's almonds and walnuts. California stands as the second largest producer of rice in the nation, and many of the crops grown in California are not commercially grown anywhere else in the country. As such, California's producers hold an extraordinary—and irreplaceable—role in our nation's food system.



California's Fourth Climate Change Assessment

Much of this production takes place in California's fertile Sacramento Valley, a geographic region where an abundance of the nation's almonds, walnuts, rice, tomatoes, peaches, prunes, and other crops are grown. More than 70 percent of the medium-grain rice produced in the United States comes from the Sacramento Valley.

Yet, this region faces incredible challenges as it relates to the climate crisis: warming temperatures are devastating crop yields; destructive wildfires are destroying valuable farmland and damaging crop quality from smoke taint; and the region is in the midst of some of the worst drought conditions in the history of the state, with some farmers' wells running dry and others faced with the inability to irrigate their crops with mandatory cut-backs on water allocation.

These conditions are all direct results of the climate crisis—which is only deepening in the Sacramento Valley, threatening the ability of the region's producers to provide commodities to our nation's consumers and compromising the very livelihoods of the producers of these crops. The most recent Climate Change Assessment specific to the Sacramento Valley and published by the California Governor's Office of Planning and Research, the California Natural Resources Agency, and the California Energy Commission noted that Sacramento Valley producers will face longer growing seasons; insufficient cold for some tree crops; low elevation flooding; and changes in productivity of current crop varieties.

The report notes: "Climate change is expected to alter the variety of crops that can be grown in the region (CalCAN 2011) and diminish the productivity of some crops... Within the Sacramento Valley, the total cultivated acreage is expected to decrease for nearly all crop groups, especially field crops, despite increases in expected yields of some the crop groups (Howitt et al. 2009)." The report states that in this region "Integrating multiple strategies and a diversity of

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practices will be needed to offset climate change impacts on agricultural production and the effects of agricultural production on climate change (Byrnes et al. 2017).”

Given this, there is a **tremendous need** for more transformative change and an **urgent case** to accelerate the rate of adoption of Climate Smart Agricultural and Forestry (CSAF) practices by Sacramento Valley producers, particularly historically underserved producers, who are disproportionally impacted by the climate crisis. According to the most recent USDA Census of Agriculture, considering just Butte County—one of the largest counties in the Sacramento Valley—63 percent of farms in the region make less than \$49,999 in sales per year; and 66 percent of farms are less than 49 acres. At least 38 percent of all producers are socially-disadvantaged (identifying as women, American Indian/Alaska Native Asian; Black or African American; Native Hawaiian/Pacific Islander; or Hispanic); and 23 percent of producers are new and beginning farmers. This is reflective of the Sacramento Valley, with a substantial number of producers in the region small or socially disadvantaged producers.

Given the small size and financial scale of these farms, the costs to implement CSAF practices; the lack of technical assistance to support producers in practice implementation; and insufficient resources to comprehensively and independently monitor and verify benefits are **substantial barriers** to producers adopting CSAF practices on their farms. This also inhibits the ability for these producers to realize premiums for their commodities that may come from marketing and promoting these commodities as climate-smart.



The Center for Regenerative Agriculture and Resilient Systems (CRARS) at California State University, Chico (a Minority Serving Institution), seeks to work collaboratively with regional small and historically underserved producers to launch the North Valley Food Hub for Climate-Smart Agriculture (“Hub”) to address these barriers. CRARS will leverage an investment of \$4,999,796 in United States Department of Agriculture funding through the Partnerships for Climate-Smart Commodities program to:

1. Implement climate-smart production practices, activities, and systems across key agriculture working lands in the **target geographic region** of Northern California’s Sacramento Valley. CRARS proposes to support producers in implementing practices on approximately 1,000 acres over five years, conservatively assuming 100 participating producers implementing practices on at least 10 acres per producer.
2. Measure, quantify, monitor, and verify the carbon and greenhouse gas (GHG) benefits associated with the implementation of these CSAF practices on at least 100 participating farms, primarily focused on regional small and historically underserved producers. Initial projections assume GHG mitigation and carbon sequestration benefits alone of 3,000 metric tons CO₂e from the adoption of new on-farm CSAF practices (*Merit/Technical Criteria a.i.*).

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3. Develop markets and promote the resulting crops as climate smart commodities through the North Valley Food Hub—a unique collaborative marketing platform that will connect regional buyers to producers growing climate-smart commodities. Efforts will primarily focus on marketing to institutional and restaurant customers, a market niche that project personnel have strong experience serving and that provides a new market channel for most producers served by this project.



This project will leverage the vast expertise and experience of CRARS, whose purpose is to promote regenerative farming practices to reduce greenhouse gasses, restore soil resiliency, increase the sustainability of farms and ranches, and address food and water insecurity—a purpose directly aligned with the goals of this funding opportunity. CRARS experts regularly conduct research related to the implementation of climate-smart practices and have deep relationships with regional producers, providing technical service on implementing climate-smart practices on a day-to-day basis. This is most exemplified through CRARS' recent efforts funded through a partnership with the United States Department of Agriculture Natural Resources Conservation Service through its

Regional Conservation Partnership Program (RCPP) to help orchard and vineyard, rangeland, dairy, and row crop producers implement soil health management systems to improve soil function, water infiltration, and availability, and protect biodiverse habitats in Northern California agroecosystems.

CRARS furthermore oversees a service lab for the assessment of soil quality and health, along with food quality and nutrient density, to demonstrate that growers who transition to regenerative practices improve the quality of their soil and the food they grow over time. As such, there is perhaps no other entity with more expertise in climate-smart practices, and in providing technical assistance to producers considering and implementing climate-smart practices than CRARS in this target geographic region. The **organizational capacity** of CRARS to execute a project of this scale is unmatched (*Merit/Technical Criteria d.iv*).



CRARS will build on its strong reputation in the target geographic region to expand efforts to specifically serve historically underserved producers in the Sacramento Valley. Project efforts

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will primarily focus on supporting these producers in the implementation of cover crops; no-till or minimum-till practices; nutrient management; enhanced efficiency fertilizers; planting for high carbon sequestration rates; and soil amendments. All of the practices targeted for adoption build soil health, directly corresponding to the need to reduce GHG emissions in the target geographic region.

To meaningfully **address and reduce the barriers** Sacramento Valley producers face in **implementing CSAF practices**, on-farm demonstration field days and direct producer outreach will be conducted to allow producers to observe actual on-farm practices; learn first-hand from peer farmers; and acquire fact-based, real-time information on practices, encouraging adoption and implementation.

To **reduce barriers in project monitoring and verification**, CRARS will support producers with needed technology, testing costs, and a dedicated Climate-Smart Implementation Specialist, who will support producers in implementing practices and conducting in-field verification measurements of GHG reductions. Soil quality measurements (pre- and post-practice implementation) will be conducted.

To reduce **economic barriers** to producers implementing CSAF practices, incentives will be provided to producers to implement advanced CSAF practices. This allows for immediate project implementation, with no required time to build infrastructure. Incentives—and project results—can therefore be expeditiously realized. On a longer-term basis, market premiums are expected to sustain producers in continued implementation of CSAF practices through the innovative marketing and promotional efforts of the North Valley Food Hub, which will aggregate climate-smart commodities produced through this project and directly promote and market these commodities to regional institutional and restaurant buyers.

The benefits of this project will be astounding. Initial projections assume **GHG mitigation and carbon sequestration benefits alone of 3,000 metric tons CO₂e from the adoption of new CSAF practices (*Merit/Technical Criteria a.i.*)**. Though it is difficult to estimate annual incremental market returns to Sacramento Valley producers as a result of this project, given the varied crops and volumes anticipated, ongoing market premiums per producer are anticipated to be \$15,000 annually with continued CSAF practices post-grant, a long-term economic benefit (see explanation of market returns in *Plan To Develop And Expand Markets For Climate-Smart Commodities As A Result Of Project Activities* for support; ***Merit/Technical Criteria c.i.***). Perhaps most importantly, though, efforts will build and sustain a long-term viable market channel, through which producers can continue to market their commodities.

The unparalleled collaboration and support CRARS has generated for this project further affirms their organizational capacity to execute a project of this scale. Several of these entities agreed to serve on a Technical Advisory Committee for this project, supporting continuous industry involvement and engagement in the project. CRARS has **longstanding existing partnerships** with the California Association of Resource Conservation Districts; the Carbon Cycle Institute; California Climate Action Network; the Regenerative Agriculture Network Web Forum; an extensive network of Mentor Farmers; the California Farm Bureau Network; Fibershed Network;

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California Foodshed Funders Network and others, that will be leveraged through this project to reach and support Sacramento Valley producers. Furthermore, project outreach and engagement efforts will be conducted in partnership with the Farmer Veteran Coalition; National Black Farmers Association; National Latino Farmers and Ranchers Trade Association; National Latino Farmers and Ranchers Association; Young Farmers & Ranchers Association; and Women for the Land—California: Council for Native American Farming and Ranching.

Additional project partners and supporters include (please see *Letters of Commitment* attached to this proposal; *Merit/Technical Criteria d. iii.*):

- **Non-profit organizations (serving small and historically underserved producers):** Butte County Farm Bureau; North State Hulling Cooperative
- **Producers, including small and historically underserved producers:** Douglass Ranch; GRUB Farms; Chico State Organic Vegetable Project; Big Bluff Ranch
- **Climate-Smart Commodity End-Users:** Chico State Basic Needs Hungry Wildcat Pantry

To CRARS' knowledge, this project is the only application being submitted to this program to exclusively reach and provide benefits to Sacramento Valley producers, who are integral to the viability of the nation's agriculture industry (*Merit/Technical Criteria e.v.*). Partnering with a number of entities to leverage CRARS' expertise and direct reach to producers and use of CRARS own service lab **minimizes transaction costs** associated with project activities (*Merit/Technical Criteria e.ii.*). Furthermore, with substantial partner contributions of \$15,359,142 to amplify project efforts (see *Budget Narrative*), project costs are heavily directed to producers to ensure the highest level of economic and environmental benefits.

Plan To Pilot Climate-Smart Agriculture Practices On A Large Scale

CRARS seeks to support 100 Sacramento Valley producers in adopting CSAF practices on approximately 1,000 acres of land (conservatively assuming practices are adopted on 10 acres of land per producer, well below the average region's farm size, based on the most recent USDA Census of Agriculture data) (*Merit/Technical Criteria e.iv.*).

This effort would therefore be a **large-scale pilot** that seeks to meaningfully address the United States climate crisis on a **substantial scale**. Though the number of producers targeted through this project may appear to be limited, these producers are the hardest to reach and the most vulnerable to climate-change impacts. Reaching these producers is imperative and strongly aligns with the spirit of the Justice40 initiative. Monitoring and verification data and experiential information on CSAF practices will be transferable and available to producers well beyond the Sacramento Valley, given the extensive reach of CRARS throughout the Western United States.

The advanced CSAF practices implemented will have a dramatic impact on likely GHG reductions per producer. As noted above, it is anticipated this project will result in direct GHG reductions of 3,000 metric tons should this project achieve the objective of 100 producers adopting advanced CSAF on their farms. It is estimated that GHG emission reductions per acre could average three metric tons CO₂e annually; **which would make the USDA investment of achieving these reductions just \$1,666 per metric ton over a five-year period**. Furthermore,

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baseline projections estimate annual **incremental market returns** to participating producers of \$15,000 annually should producers continue CSAF practices post-grant.

CSAF Practices To Be Deployed and Plan to Provide Financial Assistance To Producers:

The **primary CSAF practices** that CRARS seeks to deploy on existing working Sacramento Valley farms are advanced practices that promote soil health. Among others, these include cover crops; no-till or minimum-till practices; nutrient management; enhanced efficiency fertilizers; planting for high carbon sequestration rates; and soil amendments. All of these practices build soil health, directly corresponding to the need to reduce nitrous oxide and GHG emissions in the target geographic region. The California Air Resources Board (CARB) claims cropland is a primary emission source of nitrous oxide—a potent GHG—with crop production contributing more than 50 percent of the state’s total nitrous oxide emission inventory. Scientific studies largely attribute the production of nitrous oxide to soil microorganisms’ activity, with the improvement of on-farm soil health a key factor in reducing emissions of this GHG (CARB).

All of these practices have been proven to result in GHG emissions and nitrogen reductions, though the monitoring, quantification, and verification of these reductions have yet to be completed on a pilot-scale that is broad enough to generate confidence from producers and commodity buyers in their climate-smart benefits.

The implementation of these practices have **greater environmental co-benefits and climate adaptation benefits**, in addition to GHG reduction benefits (*Merit/Technical Criteria a.iv. and a.v.*). One of the most significant is the positive impact on water quality. Water quality in the Sacramento Valley’s Sacramento and Feather Rivers has been identified by the State of California as impaired by copper, mercury, and more than 15 pesticides including diazinon, chlorpyrifos, and lindane. Improved CSAF practices reduce groundwater contamination, increase organic, renewable and affordable nitrogen for farmers, and reduce reliance on commercial fertilizer. Improved air quality (reductions in reactive organic gases [ROG], oxides of nitrogen [NOx] and fine particulate matter [PM]) is also a greater co-benefit of this project.

Furthermore, the USDA California Climate Hub states that “soil amendments that increase soil organic matter may improve the water holding capacity and infiltration in soils, which promotes resilience to climate-related impacts such as drought, heat waves, or heavy rains. Additionally, research shows that amendments can promote biological activity and supply vital nutrients, resulting in healthier plants that are less vulnerable to pests and disease.”

These are significant climate adaption benefits that can help producers better respond to changing climate conditions. In the case of soil amendments, documented co-benefits and climate adaption benefits also include increased crop yields; improved crop quality; and reduced need for chemical fertilizers (USDA California Climate Hub). Each of these co-benefits results in lower input costs and higher prices for producers, ultimately impacting their bottom line positively, greatly needed given the size and scale of most producers in the Sacramento Valley.

In total, CRARS has allocated **\$1.5 million in direct producer incentives** to encourage CSAF adoption by producers (*Merit/Technical Criteria e.i.D.*). Based on CRARS’s extensive

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knowledge of the Sacramento Valley agriculture industry and close collaboration with partnering organizations in the design of the producer incentives component of this project, an incentive of \$6000 per acre will be offered for each producer implementing an advanced CSAF practice through this project (see list of CSAF practices above).

CRARS already has the established infrastructure to readily distribute incentives, given its efforts currently underway through its nearly \$7 million RCPP project in the same target geographic region. CRARS has the process already developed and time-tested to collect producer information; monitor practice implementation; facilitate direct payments; and provide needed reporting to USDA.

It is estimated that GHG emission reductions per farm could average 3,000 metric tons CO₂e once the project is fully implemented; **which would make the USDA investment of achieving these reductions just \$1,666 per metric ton over a five-year period** (see explanation of market returns in *Plan To Develop And Expand Markets For Climate-Smart Commodities As A Result Of Project Activities* for support; *Merit/Technical Criteria c.i.*).

Plan To Recruit Producers and Landowners and Outreach Efforts:

A dynamic, multi-faceted, and inclusive outreach plan is one of the key strengths of this project. To recruit Sacramento Valley producers to participate in this project's activities, messaging and digital and printed materials will be developed and shared. Once messaging and materials are developed, they will be shared through direct emails and through the social media platforms for entities that CRARS has **longstanding existing partnerships** with, including the California Association of Resource Conservation Districts; the Carbon Cycle Institute; California Climate Action Network; the Regenerative Agriculture Network Web Forum; an extensive network of Mentor Farmers; the California Farm Bureau Network; Fibershed Network; California Foodshed Funders Network and others, that will be leveraged through this project to reach and support Sacramento Valley producers. Furthermore, project outreach and engagement efforts will be conducted in partnership with the Farmer Veteran Coalition; National Black Farmers Association; National Latino Farmers and Ranchers Trade Association; National Latino Farmers and Ranchers Association; Young Farmers & Ranchers Association; Women for the Land—California; Council for Native American Farming and Ranching.

CRARS will collaborate with experienced partners to provide outreach and direct on-farm technical assistance. In Years 1-4 of the program, a combination of printed and digital materials will be developed and shared to conduct outreach to Sacramento Valley producers. The CRARS team will coordinate virtual meetings with partner organizations to discuss producer participation and enrollment. Partner organizations will also be invited to attend producer field days (see below).

CRARS will also identify producer advocates/farmer mentors within each demographic to promote the program among their producer networks and by word of mouth. On-farm demonstration field days will be executed with successful CSAF growers involved in the program; elevating early adopters as advocates/farmer mentors and potential recruiters to improve rates of participation among under-represented grower groups. This will provide

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producers the opportunity to observe advanced CSAF practices on regional farms, learn firsthand from peer farmers, and acquire fact-based, real-time information on practices to encourage project participation.

This project's activities are anticipated to generate great interest from regional producers. As described above, the most significant barriers to implementation of advanced CSAF practices on Sacramento Valley farms is not producer interest, but the costs, lack of technical support, and lack of documented and verified GHG benefits (and other environmental and economic benefits). With these barriers addressed through project activities, there will be no shortage of interest in participating in this project.

Plan to enroll underserved and small producers:

Promotional materials created for this project will be shared with all project partners and many have committed to share them through their own expansive outreach channels. Among others, these include **organizations directly serving small and historically underserved producers** including the Farmer Veteran Coalition; National Black Farmers Association; National Latino Farmers and Ranchers Trade Association; National Latino Farmers and Ranchers Association; Young Farmers & Ranchers Association; Women for the Land—California; Council for Native American Farming and Ranching (*Merit/Technical Criteria c.iii.*).

Each of these **innovative partnerships** ensure appropriate, trusted, and culturally relevant outreach to best meet the needs of small and historically underserved producers. CRARS anticipates that through these efforts at least 40 percent of the participating producers will be either small and/or historically underserved producers (*Merit/Technical Criteria c.ii.*).

Plan for technical assistance and training

To ensure the objective of adopting CSAF practices to mitigate GHG emissions is achieved, CRARS will provide robust technical assistance, outreach, and training support to Sacramento Valley producers through the entire project period. Technical assistance will begin within three months of the project start date and will be ongoing, with funding for this technical assistance allocated for all five years of the project period. Once producers are enrolled in the project, they will be provided a broad range of personalized direct one-on-one assistance from the project team, including staff and CRARS expertise in CSAF practices.

As described in the Budget Narrative, technical assistance will primarily be provided by a Climate-Smart Implementation Specialist, a Data Management Specialist, and Dr. Cynthia Daley, Director and Co-Founder of the CRARS; Rawlins Endowed Professor for Environmental Literacy; Organic Dairy Program Supervisor; and Professor in the CSU, Chico College of Agriculture. These individuals will meet one-on-one with interested producers to discuss resource concerns and evaluate the most effective CSAF practices to implement on their farms. A CSAF plan and associated contract will be drafted, with producers committing to implement practices and CRARS committing to provide producer incentives based on practice implementation.

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Once this occurs, producers will be enrolled in the project activities, and will be provided additional ongoing support, including regular check-ins from CRARS personnel; access to the CRARS robust team of mentor farmers and soil health experts; access to web-based resources and tools already developed by CRARS; and access to web-based resources and tools already developed by CRARS; and baseline and annual soil testing results. Although primarily a tool for outreach, the large scope of information provided through on-farm demonstration field days will also serve as technical assistance, providing participating producers the opportunity to observe and learn from advanced CSAF practices implemented on regional farms and learn first-hand from peer farmers, and acquire fact-based, real-time information on practices.

Technical assistance will also be provided in the marketing and promotion of climate-smart commodities through the North Valley Food Hub (see *Plan To Develop & Expand Markets for Climate-Smart Commodities as a Result Of Project Activities*). This project will hire a Food Hub Manager and Marketer to provide direct assistance to producers in ensuring a market channel for these climate-smart commodities. This role will be responsible for: 1) Establishing networks to connect Hub producers with regional markets; 2) Managing the Hub web site and all orders, collection processes, and delivery; 3) Overseeing inventory system and management of all products; 4) Provide guidance for the implementation of food safety plans as needed, including scheduled cleaning, reporting, and testing; 5) Supervising student employees; and 6) Performing other tasks, as needed, to ensure effective management of the Hub. Furthermore, in her role as Project Co-PI, Noelle Ferdon Brimlow, will use her extensive background in food hub development to serve as an advisor to producers in the areas of marketing, outreach for the buyer and producer network, food safety regulations, cold-storage research and other start-up responsibilities as needed. In addition, she will provide research on regulations related to operation of the food hub and will participate in project meetings to assist in ensuring project goals and objectives are met according to established timelines. This deeper level of technical assistance on both an agriculture production and a marketing level ensures viable, long-term markets for producers, supporting the high likelihood of success and continued implementation of CSAF practices post-project.



Providing technical assistance in CSAF practices is a core strength of CRARS. CRARS currently oversees and executes a technical assistance provider (TAP) training program, a multi-partner coordinated effort to enhance conservation in California. This comprehensive and adaptive training opportunity supports pathways for multiple layers of TAP certification, from addressing specific resource categories (for example, grazing management and forestry management) to developing

Resource Management System (RMS) level conservation plans for farms, ranches and non-industrial timber lands. The program draws on a combination of skills and knowledge gained by

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experienced conservation professionals and practical applications by producers, including individuals who have successfully implemented conservation plans and practices. Trainings are carried out in coordination with NRCS specialists using established NRCS conservation planning templates. Through this program CRARS integrates Conservation Plan Activities (CPAs) into the planning process to develop robust inventory, management and monitoring strategies.

CRARS furthermore leverages its Leadership Council and a pool of 30 mentor farmers to serve as resources to producers implementing climate-smart practices. This will expand through a newly developed platform that CRARS recently launched entitled the Regenerative Agriculture Network (RAN). RAN is a virtual collaborative space where the regenerative agriculture (RA) community can gather to have focused/targeted conversations to address gaps in knowledge of RA and address barriers to transition.

The Network is composed of farmers/ranchers, scientists, consultants, agency personnel, foundations, brands, and community activists: diversity is key to a rich dialog and innovative thought. Currently, RAN operates in a Google group web forum and is organized into categories or topics of interest. Each topic has its own forum. Currently 140 members are organized around 10 topic areas that address gaps in our scientific understanding or work to overcome barriers to RA transition. There is also space to share and plan events and share curriculum.

These existing efforts demonstrate CRARS' organizational capacity to broaden their scope and reach through this new project to specifically serve historically underserved producers seeking to implement CSAF practices on their farms. The comprehensive technical assistance proposed to be provided through this project—with significant attention to serving the needs of small and historically underserved producers—provides a great level of confidence to this project achieving its goals and objectives.

Measurement/Quantification, Monitoring, Reporting, And Verification Plan

Approach to greenhouse gas benefit quantification:

A key strength of this project is the planned **methodology** to quantify greenhouse gas benefits of adopted practices. All enrolled producers will receive annual reports that document their practices, soil data, and overall impact on soil carbon accrual and GHG inventories in a user-friendly format.

Many of the climate-smart practices that will be encouraged and incentivized for adoption through this project are practices already defined by the National Conservation Practice standards. In fact, in cooperation with the USDA, the California Department of Food and Agriculture (CDFA) and the California Air Resources Board (CARB) already have an online calculator through COMET-Planner, used for CDFA's Healthy Soils Program specific to practices that improve soil health (CDFA Healthy Soils Program Calculator Tool) in regards to California's growing conditions. This project will leverage this already existing tool, minimizing project transaction costs, and ensuring a strong and accurate reporting of results through a proven and COMET-Farm compatible framework (***Merit/Technical Criteria e.i.B and e.i.C.***).

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The methodology development for this tool is sound. As documented in the published Quantification Methodology from May 20, 2021: “CARB and CDFA developed this Quantification Methodology consistent with the guiding principles of California Climate Investments, including ensuring transparency and accountability. The implementing principles ensure that the methodology would: apply at the project-level; provide uniform methods to be applied statewide, and be accessible by all applicants; use existing and proven tools and methods; use project-level data, where available and appropriate; and result in net GHG benefit estimates that are conservative and supported by empirical literature.”

To develop the methodology “CARB assessed peer-reviewed literature and tools and consulted with experts, as needed, to determine methods appropriate...CARB also consulted with CDFA to determine project-level inputs available. The methods were developed to provide estimates that are as accurate as possible with data readily available at the project level. In addition, the University of California, Berkeley, in collaboration with CARB, developed assessment methodologies for a variety of co-benefits such as providing cost savings, lessening the impacts and effects of climate change, and strengthening community engagement.”

To supplement this credible quantification tool, CRARS will conduct an additional level of verification of GHG benefits for participating producers by conducting soil analysis through its own Regenerative Agriculture Demonstration Lab. At the end of each project year, soil samples will be taken on all participating producer farms and tested to determine any improvements from the baseline samples conducted when producers are enrolled in the project.

The RAD-Lab regularly provides the following physical, chemical and biological testing:

- Aggregate stability; aggregate particle size fractions; aggregate fractionation
- Quantitative soil color; pH and electrical conductivity (EC)
- Permanganate oxidizable carbon (POx-C)
- Incubation experiments (evolved CO₂ / soil respiration)
- Total carbon and nitrogen assessment
- Hot water extractable carbon (in development)

Providing this no-cost service to participating producers in this project will further provide critical information to verify the benefits of CSAF practices and commodities.

Approach to monitoring of practice implementation

As noted, above, CRARS’ objective is to support 100 Sacramento Valley producers in the implementation of CSAF practices. The monitoring of practice implementation will be completed by CRARS, primarily through the Climate-Smart Implementation Specialist.

Technical assistance from the Climate-Smart Implementation Specialist will facilitate collection and monitoring of data on practice implementation. On-farm visits to participating producers will be made at least once per year, preferably through the growing season for their specific crop. This process will ensure that the selected practices have been implemented per the contract.

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To receive an incentive, producers would verify the CSAF practice was implemented on their farm through on farm visits, photos and invoices related to the practice costs. To meet any potential needs of small and historically underserved producers to access incentives, producers will be provided the opportunity to request an incentive advance payment up to 50 percent of the total incentive amount. As a condition of the incentive, producers will also agree to a post-project site visit by CRARS staff to monitor progress, verify practice implementation, and provide any support that may be needed.

Approach to reporting, tracking, and verification of greenhouse gas benefits:

Initial projections assume **GHG mitigation and carbon sequestration benefits alone of 3,000 metric tons CO₂e (by year 5) from the adoption new CSAF practices (Merit/Technical Criteria a.i.)**. Both the quantification data input into the web-based COMET-Farm calculator by CRARS staff, and the soil data collected each year, will facilitate the reporting, tracking, and verification of the benefits of the implemented practices to this target.

The approach to reporting and tracking of GHG benefits will be multi-faceted. Firstly, CRARS staff will input data into USDA's COMET-Farm Planner tool based on the practices selected for implementation. If the practices producers are implementing are not in the USDA's COMET-Farm Planner, the best available practice will be selected. This data will be included in the annual report to USDA and its project's Technical Advisory Committee—as well as to the participating producer. This will provide a high level of transparency in reporting and a convenient method of tracking GHG emission reductions for producers.

To further ensure the **sustainability of this project's benefits long-term**, it is recognized that additional verification of collected on-farm data will be critical. The substantiation of GHG emission reductions will play a crucial role in the adoption of future market incentives for producers implementing CSAF practices. Climate-smart commodity buyers must have confidence in the generation of GHG benefits to warrant a market premium and to be able to reliably convey to consumers that their products are made with climate-smart commodities.

Participating producers will be provided a summary of their results, and will be offered the opportunity to participate in a one-on-one meeting to understand them. In addition, CRARS will aggregate all findings, which will be summarized and included in a final project impact report.

As described in the *Plan To Develop and Expand Markets for Climate-Smart Commodities as a Result of Project Activities* section, all project results will be made available to all participating producers, industry partners, and future climate-smart commodity buyers, allowing for transparency of data (**Merit/Technical Criteria e.i.A.**). This promotes confidence in this data, leading to the higher marketability potential for climate-smart commodities and greater **longevity of GHG benefits** associated with this project.

Agreement to participate in the Partnerships Network:

CRARS will designate Project Director Dr. Cindy Daley to serve as the representative to the USDA Partnerships for Climate Smart-Communities Learning Network.

Plan To Develop & Expand Markets For Climate-Smart Commodities As A Result Of Project Activities

Partnerships designed to market resulting climate-smart commodities:

One of this project's key distinctions is the partnership between CRARS and the North Valley Food Hub, which will provide farm-to-fork integration through marketing and sales support for project climate-smart commodities. The Hub will serve as a marketplace for CSAF products, utilizing the marketing expertise of the Hub's cofounders Noelle Ferdon Brimlow, J.D. and Jake Brimlow, PhD, along with a market manager, to develop sales for project producers through local intermediated market channels (e.g., sales to institutional and foodservice buyers).

Prior research conducted by project co-PI's Brimlow and Ferdon Brimlow found producers in the study region reported increased barriers when selling through local intermediated marketing channels. However, the larger volumes possible in these marketing



channels give them the best chance to provide producers with long term, sustainable premiums for CSAF products. The Hub will provide critical services to both growers and wholesale buyers that include consolidating transaction costs, creating a one-stop shopping platform for buyers and a marketplace for growers to post and promote their products, and serving as a centralized facilitator for creating and expanding the regional food market in the Sacramento Valley.

For each market cycle (e.g., daily, weekly), producers will post their available products by a specified time, when buyers will be provided with a virtual "fresh sheet" of products for that market. The online marketplace will take orders for a specified amount of time, after which producers who have sold products will be provided an order sheet and terms of the sale (e.g., pick up, delivery by the Hub). Monetary transactions between buyers and sellers will be managed by the Hub.

Beyond simply aggregating the CSAF commodities and serving as the marketing platform, the Hub will work to expand markets for climate-smart commodities through outreach and education. Wholesale buyers will better understand the value of supporting climate-smart agricultural practices, and be provided with information upon request to help develop messaging for their consumers. In addition to marketing assistance, producers will be provided with outreach and education aimed as needed to address the challenges of direct/intermediated local food marketing (e.g., food safety, production planning).

Plan to track climate-smart commodities through the supply chain:

The North Valley Food Hub will track inventory and sales through its online portal developed through this project, so tracking climate-smart commodities marketed through the Hub will be

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easily implemented and reportable to producers, partners, and funders. The online marketplace will allow buyers to search by commodity and CSAF practice. The market manager will be able to track demand and communicate that information back through the supply chain to producers.

All participating producers and buyers will be provided a final project impact report to share with their customers. This information will also be made available to all project partners, industry partners, and potential future climate-smart commodity buyers, allowing for transparency of data (*Merit/Technical Criteria e.i.A.*). This promotes confidence in this data, leading to the higher marketability potential for climate-smart commodities and greater **longevity of GHG benefits** associated with this project.

Estimated economic benefits for participating producers:

This project will result in significant economic benefits for participating producers. It is anticipated that all of the efforts executed by this project will create confidence in the benefits and higher-value of climate-smart commodities, fostering greater marketability. Baseline projections informed by conversations with wholesale buyers estimate **annual incremental market returns** to Sacramento Valley producers of \$15,000 per producer with continued CSAF practices post-grant, a long-term economic benefit. These benefits are just for the producers participating in this project's activities. It is highly likely that post-project, with incentives supported by markets, economic benefits could extend to producers beyond those reached through this project, with a great potential for scalability (*Merit/Technical Criteria b.i.*).

Post-project potential:

This project has significant potential to be sustained post-grant funding. Most importantly, this project is expected to result in long-term GHG emission reductions post-project, a critical outcome needed to address the climate crisis. With demand existing for regional climate-smart commodities evidenced by the letters included with this proposal—and the likelihood of buyers paying a market premium for climate-smart commodities—the case will be built for producers participating in this project to maintain CSAF practices, and for new producers to implement CSAF practices. At a minimum, it is anticipated that over the five-year period this project will generate GHG emission reductions of 3,000 metric tons CO₂e. It is highly likely and well-supported that market incentives for climate-smart commodities will continue post-project as well, encouraging the continuation of CSAF practices on Sacramento Valley farms, and ensuring **longevity of GHG benefits associated with this project (Merit/Technical Criteria a.iii.)**. Post project, this project's activities and model will be highly scalable to other regional food systems.

Case For Funding

This project provides direct, meaningful benefits to a strong cross-section of production agriculture. To CRARS's knowledge, this project is the only application being submitted to this program to exclusively reach and provide benefits to Sacramento Valley producers. There is perhaps no more impactful project that could be targeted to better drive a reduction of GHG emissions among historically underserved producers in this region than this effort, which is allocating **\$1.5 million in direct producer incentives, with matching support equivalent to three times the grant funding requested** (see *Budget Narrative*).

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As such, this project presents a compelling case for an investment of USDA funding through the Partnerships for Climate-Smart Commodities program, with a high return for producers, climate-smart commodity buyers, USDA, and the general public at a cost of **just \$1,666 per metric ton.**

Milestone (Quantitative)	By	Year 1			
		Q1	Q2	Q3	Q4
a. # of producers involved in CSA practices		0	0	5	10
b. # of producers involved in the food hub marketing		0	0	0	5
c. # of underserved producers involved (40%)		0	0	2	5
d. # of acres involved		0	0	20	50
e. # and kind of CSA practices employed					
f. # of head involved (if applicable)					
g. Dollars distributed to producers		\$ -	\$ -	\$ -	\$ 105,000
Dollars per producer involved by year					
h. GHG Benefits (Metric tons)		0	0	0	150
i. # of new marketing channels established	Jake/Noelle	0	0	0	1
j. # of marketing channels expanded	Jake/Noelle	0	0	0	0
Milestone (Qualitative)					
Project Progress Reports (Milestone Metrics a - j)		1	1	1	1
Outreach, training & other TA					
Informational Webinars on NVFH and how to participate		1	1	1	1
On Farm Field Days on Climate Smart Agriculture		1	1	1	1
Independent Grower Meetings (between growers and staff)	NVFH and CSA	5	5	5	5
Project landing page on CRARS website		1	0	0	0
Mentor Farmer (advocates) Profiles posted to CRARS website		0	0	0	0
Other MMVR (Measure, Monitor, Verify, & Report) supply chain	Jake/Noelle				
Attribute: Climate Smart Practices Employed		0	0	0	1
Attribute: GHG emission data reports/farm		0	0	0	1
Attribute: Soil Carbon Analysis/farm					
Hub Producers		0	0	0	5
CSA Producers		0	0	5	10
Demonstrated engagement of major partners (buyers and supporters)	Team				
Annual Partner Focus Group Discussion and Report		0	0	0	1
Annual Partner Survey		0	0	0	1

Milestone (Quantitative)	By	Year 2			
		Q1	Q2	Q3	Q4
a. # of producers involved in CSA practices		15	20	25	30
b. # of producers involved in the food hub marketing		10	10	10	10
c. # of underserved producers involved (40%)		5	10	10	15
d. # of acres involved		100	150	200	250
e. # and kind of CSA practices employed					
f. # of head involved (if applicable)					
g. Dollars distributed to producers		\$ 157,500	\$ 210,000	\$ 262,500	\$ 315,000
Dollars per producer involved by year					
h. GHG Benefits (Metric tons)		300	450	600	750
i. # of new marketing channels established	Jake/Noelle	1	2	2	2
j. # of marketing channels expanded	Jake/Noelle	1	1	2	2
Milestone (Qualitative)					
Project Progress Reports (Milestone Metrics a - j)		1	1	1	1
Outreach, training & other TA					
Informational Webinars on NVFH and how to participate		1	1	1	1
On Farm Field Days on Climate Smart Agriculture		1	1	1	1
Independent Grower Meetings (between growers and staff)	NVFH and CSA	10	10	10	10
Project landing page on CRARS website		0	0	0	0
Mentor Farmer (advocates) Profiles posted to CRARS website		0	0	0	0
Other MMVR (Measure, Monitor, Verify, & Report) supply chain	Jake/Noelle				
Attribute: Climate Smart Practices Employed		1	1	1	1
Attribute: GHG emission data reports/farm		1	1	1	1
Attribute: Soil Carbon Analysis/farm					
Hub Producers		10	10	10	10
CSA Producers		15	20	25	30
Demonstrated engagement of major partners (buyers and supporters)	Team				
Annual Partner Focus Group Discussion and Report		0	0	0	1
Annual Partner Survey		0	0	0	1

Milestone (Quantitative)	By	Year 3			
		Q1	Q2	Q3	Q4
a. # of producers involved in CSA practices		35	40	45	50
b. # of producers involved in the food hub marketing		15	15	15	15
c. # of underserved producers involved (40%)		15	15	20	20
d. # of acres involved		325	400	475	500
e. # and kind of CSA practices employed					
f. # of head involved (if applicable)					
g. Dollars distributed to producers		\$ 393,750	\$ 472,500	\$ 551,250	\$ 630,000
Dollars per producer involved by year					
h. GHG Benefits (Metric tons)		975	1200	1475	1500
i. # of new marketing channels established	Jake/Noelle	3	3	3	3
j. # of marketing channels expanded	Jake/Noelle	2	3	3	3
Milestone (Qualitative)					
Project Progress Reports (Milestone Metrics a - j)		1	1	1	1
Outreach, training & other TA					
Informational Webinars on NVFH and how to participate		1	1	1	1
On Farm Field Days on Climate Smart Agriculture		1	1	1	1
Independent Grower Meetings (between growers and staff)	NVFH and CSA	10	10	10	10
Project landing page on CRARS website		0	0	0	0
Mentor Farmer (advocates) Profiles posted to CRARS website		0	0	0	0
Other MMVR (Measure, Monitor, Verify, & Report) supply chain	Jake/Noelle				
Attribute: Climate Smart Practices Employed		1	1	1	1
Attribute: GHG emission data reports/farm		1	1	1	1
Attribute: Soil Carbon Analysis/farm					
Hub Producers		15	15	15	15
CSA Producers		35	40	45	50
Demonstrated engagement of major partners (buyers and supporters)	Team				
Annual Partner Focus Group Discussion and Report		0	0	0	1
Annual Partner Survey		0	0	0	1

Milestone (Quantitative)	By	Year 4			
		Q1	Q2	Q3	Q4
a. # of producers involved in CSA practices		55	60	65	70
b. # of producers involved in the food hub marketing		20	20	20	20
c. # of underserved producers involved (40%)		20	25	25	30
d. # of acres involved		525	600	675	750
e. # and kind of CSA practices employed					
f. # of head involved (if applicable)					
g. Dollars distributed to producers		\$ 735,000	\$ 840,000	\$ 945,000	\$ 1,050,000
Dollars per producer involved by year					
h. GHG Benefits (Metric tons)		1575	1800	2025	2250
i. # of new marketing channels established	Jake/Noelle	3	3	3	3
j. # of marketing channels expanded	Jake/Noelle	3	3	3	3
Milestone (Qualitative)					
Project Progress Reports (Milestone Metrics a - j)		1	1	1	1
Outreach, training & other TA					
Informational Webinars on NVFH and how to participate		1	1	1	1
On Farm Field Days on Climate Smart Agriculture		1	1	1	1
Independent Grower Meetings (between growers and staff)	NVFH and CSA	15	15	15	15
Project landing page on CRARS website		0	0	0	0
Mentor Farmer (advocates) Profiles posted to CRARS website		0	0	0	5
Other MMVR (Measure, Monitor, Verify, & Report) supply chain	Jake/Noelle				
Attribute: Climate Smart Practices Employed		1	1	1	1
Attribute: GHG emission data reports/farm		1	1	1	1
Attribute: Soil Carbon Analysis/farm					
Hub Producers		20	20	20	20
CSA Producers		55	60	65	70
Demonstrated engagement of major partners (buyers and supporters)	Team				
Annual Partner Focus Group Discussion and Report		0	0	0	1
Annual Partner Survey		0	0	0	1

Milestone (Quantitative)	By	Year 5				TOTAL
		Q1	Q2	Q3	Q4	
a. # of producers involved in CSA practices		75	80	90	100	100
b. # of producers involved in the food hub marketing		25	25	25	25	25
c. # of underserved producers involved (40%)		30	35	35	40	40
d. # of acres involved		825	900	975	1000	1000
e. # and kind of CSA practices employed						
f. # of head involved (if applicable)						To be tracked
g. Dollars distributed to producers		\$1,155,000	\$1,260,000	\$1,365,000	\$ 1,470,000	
Dollars per producer involved by year						
h. GHG Benefits (Metric tons)		2475	2700	2925	3000 (2-3 MT/acre)	
i. # of new marketing channels established	Jake/Noelle	3	3	3	3	3
j. # of marketing channels expanded	Jake/Noelle	3	3	3	3	3
Milestone (Qualitative)						
Project Progress Reports (Milestone Metrics a - j)		1	1	1	1	
Outreach, training & other TA						
Informational Webinars on NVFH and how to participate		1	1	1	1	
On Farm Field Days on Climate Smart Agriculture		1	1	1	1	
Independent Grower Meetings (between growers and staff)	NVFH and CSA	25	25	25	25	
Project landing page on CRARS website		0	0	0	0	
Mentor Farmer (advocates) Profiles posted to CRARS website		0	0	0	5	
Other MMVR (Measure, Monitor, Verify, & Report) supply chain	Jake/Noelle					
Attribute: Climate Smart Practices Employed		1	1	1	1	
Attribute: GHG emission data reports/farm		1	1	1	1	
Attribute: Soil Carbon Analysis/farm						
Hub Producers		25	25	25	25	
CSA Producers		75	80	90	100	
Demonstrated engagement of major partners (buyers and supporters)	Team					
Annual Partner Focus Group Discussion and Report		0	0	0	1	
Annual Partner Survey		0	0	0	1	

PROJECTED BUDGET EXPENDITURES BY QUARTER	Year 1			
	Q1	Q2	Q3	Q4
Personnel	\$64,654.00	\$64,654.00	\$64,654.00	\$64,654.00
Fringe Benefits	\$27,607.50	\$27,607.50	\$27,607.50	\$27,607.50
Travel	\$2,497.50	\$2,497.50	\$2,497.50	\$2,497.50
Equipment	\$49,058.00	\$0.00	\$0.00	\$0.00
Operating Expenses	\$15,293.50	\$15,293.50	\$15,293.50	\$15,293.50
Other Direct Costs	\$4,252.00	\$230.00	\$230.00	\$230.00
Producer Incentives	\$0.00	\$0.00	\$30,000.00	\$30,000.00
F&A (Indirect cost rate: 41.5%)	\$46,184.75	\$46,184.75	\$46,184.75	\$46,184.75
Totals	\$209,547.25	\$156,467.25	\$186,467.25	\$186,467.25

PROJECTED BUDGET EXPENDITURES BY QUARTER	Year 2			
	Q1	Q2	Q3	Q4
Personnel	\$66,709.00	\$66,709.00	\$66,709.00	\$66,709.00
Fringe Benefits	\$28,582.75	\$28,582.75	\$28,582.75	\$28,582.75
Travel	\$2,497.50	\$2,497.50	\$2,497.50	\$2,497.50
Equipment	\$0.00	\$0.00	\$0.00	\$0.00
Operating Expenses	\$16,518.50	\$16,518.50	\$16,518.50	\$16,518.50
Other Direct Costs	\$230.00	\$230.00	\$230.00	\$230.00
Producer Incentives	\$90,000.00	\$30,000.00	\$30,000.00	\$30,000.00
F&A (Indirect cost rate: 41.5%)	\$47,533.25	\$47,533.25	\$47,533.25	\$47,533.25
Totals	\$252,071.00	\$192,071.00	\$192,071.00	\$192,071.00

PROJECTED BUDGET EXPENDITURES BY QUARTER	Year 3			
	Q1	Q2	Q3	Q4
Personnel	\$68,830.75	\$68,830.75	\$68,830.75	\$68,830.75
Fringe Benefits	\$29,595.00	\$29,595.00	\$29,595.00	\$29,595.00
Travel	\$2,497.50	\$2,497.50	\$2,497.50	\$2,497.50
Equipment	\$0.00	\$0.00	\$0.00	\$0.00
Operating Expenses	\$18,118.50	\$18,118.50	\$18,118.50	\$18,118.50
Other Direct Costs	\$230.00	\$230.00	\$230.00	\$230.00
Producer Incentives	\$210,000.00	\$30,000.00	\$30,000.00	\$30,000.00
F&A (Indirect cost rate: 41.5%)	\$49,497.75	\$49,497.75	\$49,497.75	\$49,497.75
Totals	\$378,769.50	\$198,769.50	\$198,769.50	\$198,769.50

PROJECTED BUDGET EXPENDITURES BY QUARTER	Year 4			
	Q1	Q2	Q3	Q4
Personnel	\$71,021.50	\$71,021.50	\$71,021.50	\$71,021.50
Fringe Benefits	\$30,642.75	\$30,642.75	\$30,642.75	\$30,642.75
Travel	\$2,497.50	\$2,497.50	\$2,497.50	\$2,497.50
Equipment	\$0.00	\$0.00	\$0.00	\$0.00
Operating Expenses	\$19,718.50	\$19,718.50	\$19,718.50	\$19,718.50
Other Direct Costs	\$230.75	\$230.75	\$230.75	\$230.75
Producer Incentives	\$330,000.00	\$30,000.00	\$30,000.00	\$30,000.00
F&A (Indirect cost rate: 41.5%)	\$51,506.00	\$51,506.00	\$51,506.00	\$51,506.00
Totals	\$505,617.00	\$205,617.00	\$205,617.00	\$205,617.00

PROJECTED BUDGET EXPENDITURES BY QUARTER	Year 5			
	Q1	Q2	Q3	Q4
Personnel	\$73,284.00	\$73,284.00	\$73,284.00	\$73,284.00
Fringe Benefits	\$31,726.00	\$31,726.00	\$31,726.00	\$31,726.00
Travel	\$2,497.50	\$2,497.50	\$2,497.50	\$2,497.50
Equipment	\$0.00	\$0.00	\$0.00	\$0.00
Operating Expenses	\$22,118.50	\$22,118.50	\$22,118.50	\$22,118.50
Other Direct Costs	\$231.25	\$231.25	\$231.25	\$231.25
Producer Incentives	\$450,000.00	\$30,000.00	\$60,000.00	\$60,000.00
F&A (Indirect cost rate: 41.5%)	\$53,890.75	\$53,890.75	\$53,890.75	\$53,890.75
Totals	\$633,748.00	\$213,748.00	\$243,748.00	\$243,748.00

PROJECTED BUDGET EXPENDITURES BY QUARTER	TOTAL
Personnel	\$1,377,997.00
Fringe Benefits	\$592,616.00
Travel	\$49,950.00
Equipment	\$49,058.00
Operating Expenses	\$367,070.00
Other Direct Costs	\$8,630.00
Producer Incentives	\$1,560,000.00
F&A (Indirect cost rate: 41.5%)	\$994,450.00
Totals	\$4,999,771.00

Climate-Smart Practices and Limitations

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

NRCS Practice Code	Practice Name
216	Soil Health Testing
311	Alley Cropping
327	Conservation Cover
328	Conservation Crop Rotation
329	Residue and Tillage Management, No-Till
336	Soil Carbon Amendment
340	Cover Crop
342	Critical Area Planting
345	Residue and Tillage Management, Reduced Till
380	Windbreak/Shelterbelt Establishment and Renovation
381	Silvopasture
384	Woody Residue Treatment
386	Field Border
390	Riparian Herbaceous Cover
391	Riparian Forest Buffer
393	Filter Strip
422	Hedgerow Planting
484	Mulching
490	Tree/Shrub Site Preparation
512	Pasture and Hay Planting
528	Prescribed Grazing
550	Range Planting
585	Stripcropping
590	Nutrient Management
595	Pest Management Conservation System
612	Tree/Shrub Establishment

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

N/A



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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 (CO ₂ e) emission reductions	Quarterly
Cumulative carbon stock	Whole project estimate of total carbon sequestration	Quarterly
Cumulative CO ₂ benefit	Whole project estimate of total CO ₂ emission reductions	Quarterly
Cumulative CH ₄ benefit	Whole project estimate of total CH ₄ emission reductions	Quarterly
Cumulative N ₂ O benefit	Whole project estimate of total N ₂ O 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



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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 CO ₂ ER	Official estimate of total CO ₂ emission reductions for field	Quarterly
Field official CH ₄ ER	Official estimate of total CH ₄ emission reductions for field	Quarterly
Field official N ₂ O ER	Official estimate of total N ₂ O 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 CO2 emission reductions for field	Annual
Total CH4 estimated	Estimate of total CH4 emission reductions for field	Annual
Total N2O estimated	Estimate of total N2O emission reductions for field	Annual



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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 CO ₂ reduction calculated	Calculation of total CO ₂ reduction	Annual
Total carbon stock change calculated	Calculation of change in carbon stock	Annual
Total CH ₄ reduction calculated	Calculation of total CH ₄ reduction	Annual
Total N ₂ O reduction calculated	Calculation of total N ₂ O 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



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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

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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**Description:** List the method(s) that was used to calculate the total cumulative GHG benefits reported by the project this quarter.**Data type:** List**Measurement unit:** Category**Logic:** None – all respond**Data collection level:** Project**Reporting question:** What method(s) was used to calculate the total cumulative GHG benefits reported here?**Select multiple values:** No**Allowed values:**

- Models
- Direct field measurements
- Both

Required: Yes**Data collection frequency:** Quarterly**Cumulative GHG benefits****Data element name:** Cumulative GHG benefits**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**Measurement unit:** Metric tons CO₂eq**Logic:** None – all respond**Data collection level:** Project**Reporting question:** What are the project's estimated total GHG emission reductions (CO₂eq) to date?**Select multiple values:** No**Allowed values:** 0-10,000,000**Required:** Yes**Data collection frequency:** Quarterly**Cumulative carbon stock****Data element name:** Cumulative carbon stock**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 CO₂eq.**Data type:** Decimal**Measurement unit:** Metric tons CO₂eq**Logic:** None – all respond**Data collection level:** Project**Reporting question:** How much carbon has the project sequestered to date?**Select multiple values:** No**Allowed values:** 0-10,000,000**Required:** Yes**Data collection frequency:** Quarterly**Cumulative CO₂ benefit****Data element name:** Cumulative CO₂ benefit**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**Measurement unit:** Metric tons CO₂**Logic:** None – all respond**Data collection level:** Project**Reporting question:** What are the project's estimated total cumulative CO₂ emission reductions to date?**Select multiple values:** No**Allowed values:** 0-10,000,000**Required:** Yes**Data collection frequency:** Quarterly**Cumulative CH₄ benefit****Data element name:** Cumulative CH₄ benefit**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 CH₄ = 25 tons of CO₂eq.**Data type:** Decimal**Measurement unit:** Metric tons CH₄ reduced in CO₂eq**Logic:** None – all respond**Data collection level:** Project**Reporting question:** What are the project's estimated total CH₄ emission reductions to date?**Select multiple values:** No**Allowed values:** 0-10,000,000**Required:** Yes**Data collection frequency:** Quarterly



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Cumulative N2O 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 N₂O = 298 tons of CO₂eq.

Data type: Decimal**Select multiple values:** No**Measurement unit:** Metric tons N2O reduced in CO₂eq**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 CO₂eq**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 CO₂eq**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**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
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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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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



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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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Marketing Activities**Commodity type**

Data element name: Commodity type	Reporting question: What type of commodity is produced by the farmers enrolled in this project?
Description: List a single commodity produced or marketed through incentives from this project. If multiple commodities are produced by the project, use additional rows of the worksheet to report each commodity. Use the FSA commodity list in Appendix B and choose the commodity from the list.	
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values: FSA commodity list
Logic: None – all respond	Required: Yes
Data collection level: Project	Data collection frequency: Quarterly

Marketing channel type

Data element name: Marketing channel type	Reporting question: What type of marketing channel is used to sell this commodity?
Description: List a single type of marketing channel used to sell the commodity produced by farmers enrolled in the project. If a single commodity is marketed through multiple channels, use additional rows of the worksheet to report each combination of commodity and marketing channel. If “other” is chosen, use the additional column to enter the other marketing channel type(s) as free text.	
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values: <ul style="list-style-type: none"> • 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



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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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Underserved status**Data element name:** Underserved status**Reporting question:** Is this producer considered an underserved and/or a small producer?

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

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

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

Logic: None – all respond**Required:** No**Data collection level:** Producer**Data collection frequency:** Initial enrollment**Total area****Data element name:** Total area**Reporting question:** What is the total area of the farm?

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

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

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

Logic: None – all respond**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Initial enrollment and subsequent enrollment(s), if applicable



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Producer outreach**Data element name:** Producer outreach 1-3**Reporting question:** What types of outreach were provided to producers?

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

Data type: List**Select multiple values:** Yes**Measurement unit:** Category**Allowed values:**

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

Logic: None – all respond**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Initial enrollment**CSAF experience****Data element name:** CSAF experience**Reporting question:** Has the primary operator implemented CSAF practices in the last ten years anywhere on the farm?

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

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No
- I don't know

Logic: None – all respond**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Initial enrollment



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Field Enrollment**Unique IDs**

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

Field data change**Data element name:** Field data change**Reporting question:** Has the information previously reported for this field changed?**Description:** Indicator that this entry is being used to report any relevant changes, such as a new Field ID number or changes to the commodity or practice combinations, for a field that has previously been enrolled in the project.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Re-enrollment**Contract start date****Data element name:** Contract start date**Reporting question:** What is the start date of the contract with the producer that includes this field?**Description:** Start date listed on the contract that enrolls the field in the project.**Data type:** Date**Select multiple values:** NA**Measurement unit:** MM/DD/YYYY**Allowed values:** 01/01/2023 – 12/31/2030**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollment**Total field area****Data element name:** Total field area**Reporting question:** What is the total size of the enrolled field?**Description:** Total size of the field enrolled with the project.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Acres**Allowed values:** .01-500**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollment



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

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)

Required: Yes**Logic:** None – all respond**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)

Required: Yes**Logic:** None – all respond**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

Required: Yes**Logic:** None – all respond**Data collection level:** Field**Data collection frequency:** Initial enrollment



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Practice past extent - farm**Data element name:** Practice past extent - farm**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**Measurement unit:** Category**Reporting question:** What percent of the farm has implemented this CSAF practice (combination) previously?**Select multiple values:** No**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

Required: Yes**Logic:** None – all respond**Data collection level:** Field**Data collection frequency:** Initial enrollment**Field any CSAF practice****Data element name:** Field any CSAF practice**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**Measurement unit:** Category**Reporting question:** What is this field's prior experience with CSAF practices?**Select multiple values:** No**Allowed values:**

- Yes
- No
- I don't know

Required: Yes**Logic:** None – all respond**Data collection level:** Field**Data collection frequency:** Initial enrollment**Practice past use - this field****Data element name:** Practice past use - 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**Measurement unit:** Category**Reporting question:** Have this CSAF practice (combination) been implemented previously in this field?**Select multiple values:** No**Allowed values:**

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

Required: Yes**Logic:** None – all respond**Data collection level:** Field**Data collection frequency:** Initial enrollment



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

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 enrollmentCSAF 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.



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Incentive reason

Data element name: Incentive reason 1-4 **Reporting question:** Why were incentives provided to this producer?

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

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

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

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly

Incentive structure

Data element name: Incentive structure 1-4 **Reporting question:** What are the units for the financial incentives provided to this producer?

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

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

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

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

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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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

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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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

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



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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



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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: <ul style="list-style-type: none"> • 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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

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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**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 CO₂eq**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 CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CO₂eq**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 CO₂**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 CH₄ = 25 tons of CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CH4 reduced in CO₂eq**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly**Field official N2O 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 N₂O = 298 tons of CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons N2O reduced in CO₂eq**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 CO₂eq**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 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 CO₂eq

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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

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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 CO₂eq**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 CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CO₂eq**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 CO₂**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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

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 CH₄ = 25 tons of CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CH4 reduced in CO₂eq**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 N2O 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 N₂O = 298 tons of CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons N2O reduced in CO₂eq**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**Measurement unit:** Category**Select multiple values:** No**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)

Required: If a project conducts soil samples or takes carbon stock or greenhouse gas emission measurements in this field**Logic:** None – all respond**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 CO₂**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 CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CO₂eq**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 CH₄ = 25 tons of CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CH4 reduced in CO₂eq**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 N2O 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 N₂O = 298 tons of CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons N2O reduced in CO₂eq**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



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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**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**Measurement unit:** Category**Reporting question:** What is the unit for how much reduction in nitrogen losses have been measured in the field?**Select multiple values:** No**Allowed values:**

- Kilograms
- Metric tons
- Pounds
- Other (specify)

Required: Yes**Logic:** Respond if yes to 'Reduction in nitrogen loss'**Data collection level:** Field**Data collection frequency:** Annual**Reduction in nitrogen loss purpose****Data element name:** Reduction in nitrogen loss purpose**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**Measurement unit:** Category**Reporting question:** What is the purpose of tracking reduction in nitrogen losses?**Select multiple values:** No**Allowed values:**

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

Required: Yes**Logic:** Respond if yes to 'Reduction in nitrogen loss'**Data collection level:** Project**Data collection frequency:** Annual**Reduction in phosphorus loss****Data element name:** Reduction in phosphorus loss**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**Measurement unit:** Category**Reporting question:** Are reductions in phosphorus losses being tracked in the field?**Select multiple values:** No**Allowed values:**

- Yes
- No
- I don't know

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



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Reduction in phosphorus loss amount unit**Data element name:** Reduction in phosphorus loss amount unit**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**Measurement unit:** Category**Reporting question:** What is the unit for the reduction in phosphorus losses measured in the field?**Select multiple values:** No**Allowed values:**

- Kilograms
- Metric tons
- Pounds
- Other (specify)

Required: Yes**Logic:** Respond if yes to 'Reduction in phosphorus loss'**Data collection level:** Field**Data collection frequency:** Annual**Reduction in phosphorus loss purpose****Data element name:** Reduction in phosphorus loss purpose**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**Measurement unit:** Category**Reporting question:** What is the purpose of tracking reductions in phosphorus losses?**Select multiple values:** No**Allowed values:**

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

Required: Yes**Logic:** Respond if yes to 'Reduction in phosphorus loss'**Data collection level:** Field**Data collection frequency:** Annual**Other water quality****Data element name:** Other water quality**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**Measurement unit:** Category**Reporting question:** Are other water quality metrics being tracked in the field?**Select multiple values:** No**Allowed values:**

- Yes
- No
- I don't know

Required: Yes**Logic:** Respond if yes to 'Environmental benefits'**Data collection level:** Field**Data collection frequency:** Annual



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Other water quality type**Data element name:** Other water quality type**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**Measurement unit:** Category**Logic:** Respond if yes to 'Other water quality'**Data collection level:** Field**Reporting question:** What type of other water quality metric have been measured in the field?**Select multiple values:** No**Allowed values:**

- Sediment load reduction
- Temperature
- Other (specify)

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

- Degrees F
- Kilograms
- Kilograms per liter
- Metric tons
- Pounds
- Other (specify)

Required: Yes**Data collection frequency:** Annual



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Other water quality purpose**Data element name:** Other water quality purpose**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**Measurement unit:** Category**Reporting question:** What is the purpose of tracking other water quality benefits?**Select multiple values:** No**Allowed values:**

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

Required: Yes**Logic:** Respond if yes to 'Other water quality'**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**Measurement unit:** Category**Select multiple values:** No**Allowed values:**

- Yes
- No
- I don't know

Required: Yes**Logic:** Respond if yes to 'Environmental benefits'**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**Measurement unit:** Amount**Select multiple values:** No**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**Measurement unit:** Category**Select multiple values:** No**Allowed values:**

- Acre-feet
- Cubic feet
- Other (specify)

Required: Yes**Logic:** Respond if yes to 'Water quantity'**Data collection level:** Field**Data collection frequency:** Annual



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Water quantity purpose**Data element name:** Water quantity purpose**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**Measurement unit:** Category**Reporting question:** What is the purpose of tracking water conservation?**Select multiple values:** No**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**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**Measurement unit:** Category**Reporting question:** What is the purpose of tracking reduced erosion in the field?**Select multiple values:** No**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



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Reduced energy use purpose**Data element name:** Reduced energy use purpose**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**Measurement unit:** Category**Logic:** Respond if yes to 'Reduced energy use'**Data collection level:** Field**Reporting question:** What is the purpose of tracking reduced energy use in the field?**Select multiple values:** No**Allowed values:**

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

Required: Yes**Data collection frequency:** Annual**Avoided land conversion****Data element name:** Avoided land conversion**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**Measurement unit:** Category**Logic:** Respond if yes to 'Environmental benefits'**Data collection level:** Field**Reporting question:** Is avoided land conversion being tracked in the field?**Select multiple values:** No**Allowed values:**

- Yes
- No
- I don't know

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

- Acres
- Other (specify)

Required: Yes**Data collection frequency:** Annual



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Avoided land conversion purpose**Data element name:** Avoided land conversion purpose**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**Measurement unit:** Category**Reporting question:** What is the purpose of tracking avoided land conversion in the field?**Select multiple values:** No**Allowed values:**

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

Required: Yes**Logic:** Respond if yes to 'Avoided land conversion'**Data collection level:** Field**Data collection frequency:** Annual**Improved wildlife habitat****Data element name:** Improved wildlife habitat**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**Measurement unit:** Category**Reporting question:** Are improvements to wildlife habitat being tracked in the field?**Select multiple values:** No**Allowed values:**

- Yes
- No
- I don't know

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

- Acres
- Linear feet
- Other (specify)

Required: Yes**Logic:** Respond if yes to 'Improved wildlife habitat'**Data collection level:** Field**Data collection frequency:** Annual



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Improved wildlife habitat purpose

Data element name: Improved wildlife habitat purpose

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

Measurement unit: Category

Reporting question: What is the purpose of tracking improved wildlife habitat in the field?

Select multiple values: No

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
		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)
		Food waste Straw or bedding Wastewater Other (specify)



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Combustion System Improvement (CPS 372)	Fuel type before installation	Coal
		Diesel
	Fuel amount before installation	Electricity
		Gasoline
		Kerosene
		Liquified petroleum gas (LPG)
		Natural gas
		Propane
		Wood
		Other (specify)
	Fuel amount unit before installation	0-1,000,000
Conservation Cover (CPS 327)	Fuel type after installation	Cubic feet (natural gas)
		Gallons (diesel, gasoline, propane, LPG, kerosene)
	Fuel amount unit after installation	Kilowatt-hours (electricity)
		Pounds (wood, coal)
		Other (specify)
		Coal
		Diesel
		Electricity
		Gasoline
		Kerosene
		Liquified petroleum gas (LPG)
		Natural gas
	Fuel type after installation	Propane
		Wood
	Fuel amount unit after installation	Other (specify)
		0-1,000,000
		Cubic feet (natural gas)
		Gallons (diesel, gasoline, propane, LPG, kerosene)
		Kilowatt-hours (electricity)
		Pounds (wood, coal)
		Other (specify)
		Brassicas
	Species category (select most common/extensive type if using more than one)	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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	Strip width (feet)	20-1,000
Filter Strip (CPS 393)	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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

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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
	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
	Strip width (feet)	1-1,000
Stripcropping (CPS 585)	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



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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



Appendix A: Climate-smart Agriculture and Forestry Practices

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

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



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



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients
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Other CSAF Practices

Traditional or cultural practices

Microbial products

Solar power generation

Grain bin construction

Pre-season drainage



Appendix B: Commodity List

CROPS

ALFALFA
ALMONDS
AMARANTH GRAIN
APPLES
APRICOTS
ARONIA (CHOKEBERRY)
ARTICHOKES
ASPARAGUS
ATEMOYA
AVOCADOS
BAMBOO SHOOTS
BANANAS
BARLEY
BEANS
BEETS
BIRDSFOOT/TREFOIL
BLUEBERRIES
BREADFRUIT
BROCCOFLOWER
BROCCOLI
BROCCOLINI
BRUSSEL SPROUTS
BUCKWHEAT
CABBAGE
CACAO
CACTUS
CAIMITO
CALABAZA MELON
CALALOO
CAMELINA
CANARY MELON
CANARY SEED
CANEERRIES
CANISTEL
CANOLA
CANTALOUPE
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
JUNEERRIES
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	<u>LIVESTOCK</u>
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/DAGONFRUIT	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 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.