

# NOTICE OF GRANT AND AGREEMENT AWARD

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Award Identifying Number	2. Amenan	nent Number	3. Award /Project Per	100	4. Type of award instrument:		
NR233A750004G107			Date of final signat	ure -	Grant Agreement		
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Washington, DC 20250			UEI Number: TU1KRPB	RPBLD717	PBLD717		
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Original funds total		\$4,999,233.00		\$4,663,727.00			
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Additional funds total		\$0.00		\$0.00			
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Grand total \$4,999,		\$4,999,233.00	\$4,663,727.00		7.00		
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18. Approved Budget							

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Personnel	\$1,156,003.00	Fringe Benefits	\$129,891.00
Travel	\$27,500.00	Equipment	\$50,000.00
Supplies	\$419,296.00	Contractual	\$483,251.00
Construction	\$0.00	Other	\$2,733,292.00
Total Direct Cost	\$4,999,233.00	Total Indirect Cost	\$0.00
		Total Non-Federal Funds	\$4,663,727.00
		Total Federal Funds Awarded	\$4,999,233.00
		Total Approved Budget	\$9,662,960.00

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: 2023.09.27 14:04:58 -05'00'	Date
Name and Title of Authorized Recipient Representative DALE BUGAJSKI CFO	Signature Dale J_ Bugajski	Digitally signed by Dale J_ Bugajski DN; C=US, O="Proximity Malt, LLC", CN=Dale J_ Bugajski. E=Dale@@proximityMalt.com Reason: I am approving this document with my legally binding signature Location: Date: 2023-09-27 13:20:22 Foxit PhattomPDF Version: 9.3.0	Date 9/27/2023

#### NONDISCRIMINATION STATEMENT

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

# PRIVACY ACT STATEMENT

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

#### Statement of Work

### Purpose

The purpose of this agreement, between the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) and Proximity Malt LLC (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 \$ 9,662,960

TOTAL FEDERAL FUNDS \$4,999,233
PERSONNEL \$1,156,003
FRINGE BENEFITS \$129,891
TRAVEL \$27,500
EQUIPMENT \$50,000
SUPPLIES \$419,296
CONTRACTUAL \$483,251
CONSTRUCTION \$0
OTHER \$2,733,292 (includes PRODUCER INCENTIVES \$2,236,782)
TOTAL DIRECT COSTS \$4,999,233
INDIRECT COSTS \$0

TOTAL NON-FEDERAL FUNDS \$4,663,727
PERSONNEL \$2,555,159
FRINGE BENEFITS \$1,169,016
TRAVEL \$0
EQUIPMENT \$200,000
SUPPLIES \$224,027
CONTRACTUAL \$82,172
CONSTRUCTION \$0
OTHER \$433,353 (includes PRODUCER INCENTIVES \$433,353)
TOTAL DIRECT COSTS \$4,663,727
INDIRECT COSTS \$0

Recipient has elected to voluntarily waive 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

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# Proximity Climate Smart Partnership Executive Summary

Contact Information:

Zach Gaines

Director of Raw Materials and Logistics 644 S. 5th St, Milwaukee, WI 53204

Phone: 970-402-2934

Email: zach.g@proximitymalt.com

## List of Project Partners

Partner	Background and Role
Proximity Malt, LLC	Over five years of experience working with barley growers and supply chain partners, with recent success in working with barley farmers directly on GHG reductions through CSA practices. Proximity Malt is the project lead.
Sustainable Environmental Consultants (SEC)	Industry leading MRV partner and will lead MRV activities for the project.

## List of underserved/minority-focused project supporters

Project Supporter	Background
Grey Snow Management, Iowa Tribe of Kansas and Nebraska	Grey Snow Management is the economic development arm of the Iowa Tribe of Kansas and Nebraska, a federally recognized tribe. The tribe covers approximately 12,038 acres across portions of Brown County and Doniphan County in Northeast Kansas and Richardson County in Southeast Nebraska.
Rio Grande Water Conservation District	A local government district serving Alamosa, Rio Grande, Conejos and portions of Saguache and Mineral Counties where a large number of barley producers are located.

# Summary of Budget and Federal Request

This project seeks Federal funding of \$4,999,233. It will be supported by \$4,666,997 in non-Federal funding from Proximity Malt for a total estimated project cost of \$9,666,230. Details outlined in Budget Narrative.

## Geographic Focus

Colorado, Delaware, Kansas, Maryland, Nebraska, New Mexico, North Carolina, Pennsylvania, Wyoming, Virginia. This project impacts congressional districts CO-all. See attachment for a description of additional congressional districts.

## Project Summary

In partnership with 3<sup>rd</sup> party sustainability verification provider, Sustainable Environmental Consultants (SEC), Proximity Malt will track field by field production practices, including crop rotation, for enrolled Climate Smart Commodities (CSC) participant farms, and encourage farms using conventional production practices to take steps towards growing regeneratively produced barley utilizing Climate Smart Agriculture (CSA) practices.

A portion of the Partnership for Climate Smart Commodities Grant will be used to financially incentivize practices to use 4 quantifiable key performance indicators (KPIs) into their production practices:

- Carbon Sequestration | Tillage practices including no-till (or minimum till in scenarios with broadcast planting is combined with minimum 2" depth vertical tillage utilizing a turbo-chop implement)
- Soil Health | Utilization of cover crops barley produced on ground that has been continuously cropped for a minimum of 1 year prior to planting
- Water Utilization (applicable in irrigated settings) | Incorporation of drop-down nozzles, soil moisture probes, per pivot volume tracking throughout season
- Crop Rotation Diversity | Avoidance of mono-cropping production cycles by planting barley on acres as part of a rotation

Malting barley produced within the guidelines of some or all of these regenerative agricultural practices will be used to produce saleable high quality malt products that have a documented and valuable story of the positive impacts generated in the regions where they were grown. Standards and documentation would result in a Certificate of Analysis (COA) providing assurance to the entire food value chain that the science-backed standards were met and the regenerative agriculture distinction is credible and valuable.

The following outcomes will be recorded, and when possible quantified, for each individual producer enrolled as a Climate-Smart Commodity Partner:

- Greenhouse emissions reduced | Measured in: Tons of CO₂E / Acre
- Soil carbon sequestered | Measured in: Tons C / Acre
- Estimated water savings | Measured in: Acre-Feet / Acre
- Estimated reduction in soil erosion | Measured in: Tons / Acre
- Nutrients saved from leaching and runoff | Measured in: Pounds / Acre
- Increase in quantity of and diversity of soil organic matter content
- · Increase in soil water & nutrient retention capacity

#### Compelling need for the project

There are increased costs borne by farmers and the supply chain for food and beverage production due to climate change, long supply chain transport distances, degradation of soil health, and lack of awareness around CSC and CSA practices that

can ultimately reduce costs, increase soil health, and build competitive markets for CSCs, like regenerative barley. Consumers, governments, and financial institutions need more information and have a compelling interest in purchasing CSCs, but they lack information and assurance that science-backed practices are actually implemented and worth the investment or purchase of CSCs. Additionally, malting operations in the U.S. have the opportunity to greatly reduce the GHGs in the barley supply chain through clear standards, partnerships, and closer proximity to barley farmers that reduce transportation GHG emissions in contrast to importing malt from other countries that generate higher GHGs. Ensuring American regenerative barley is malted and branded with science-backed standards reduces GHGs, increases financial incentives for farmers, and promotes broader adoption of other CSC and CSA practices in adjacent supply chains.

This project promotes CSA practices such as use of cover crops, crop rotation and reduced tillage currently used by regenerative farmers in the U.S. to help restore and build soil health while reducing GHGs.

Cover crops protect the soil between crop rotations by reducing runoff, feeding beneficial soil microbes, increasing soil organic matter and thereby improving water holding capacity and natural nutrient cycling, preventing soil loss, and sequestering carbon. Each pound of carbon added to the soil has the potential to remove more than three and a half times that amount of CO<sub>2</sub> from the atmosphere. Organic carbon sequestration can be increased by as much as 83% through cover crop utilization in notill systems as found by studies in the southeastern U.S. (R. van den Brink, 2021) and perennial pasture and conservation tillage can amplify the amount of CO<sub>2</sub> sequestered. Water infiltration was found to increase as well, by as much as six-fold, by comparing soils with cover crops to those without and these improvements have been found to reduce soil loss by up to 96% (Haruna et al., 2020).

Reduction in tillage improves soil health and reduces the amount of irrigation water application needed. According to a University Nebraska-Lincoln study conducted in central Nebraska, producers that switch from conventional tillage to no-till under center pivot irrigation can save 3 to 5 inches of water annually. Less water usage in the Mountain West region, which this project targets, also means less damage to over drafted aquifers, and less water and energy costs for farming operations.

Small and underserved farmers are underrepresented as participants in CSA practices and the broader CSC markets. This project will seek to enroll a percentage of small and / or underserved producers, targeting 20 percent of enrollees.

Regenerative agriculture is becoming a more widely known concept at both larger and small and underserved levels, but many producers lack an understanding of what these practices are and how they can be successfully implemented. This project addresses that problem and targets an estimated 50 farms to be enrolled in the program, representing an estimated 10 thousand acres of barley. The actual educational reach of the project could be as high as 120+ farms and more than 20 thousand acres through efforts to engage with participating farm communities. By holding annual educational field days, supporting existing programs and actively communicating with regional farmers, some of whom will be categorized as small and underserved, this project will provide both participants and those interested in learning

more about regenerative agriculture with knowledge, networks, and equipment that will assist them in CSA practice implementation and meeting verification requirements.

As a means to incentivize adoption, this project will provide an additional \$0.75 premium over conventional barley contract pricing (conventional pricing estimated to be \$8.00/bushel). That additional premium combined with the financial and educational assistance this project will provide, generates new opportunities for smaller farms that have historically been reserved for larger farms with higher risk tolerance and larger budgets. Some of these opportunities include: accessing a premium market network, benefitting from retailer and product supplier marketing, measuring and verification of CSC data and accessing ecosystem services markets.

In addition to promoting CSA practices, this project aims at building a regenerative barley market through standards and a verification model that offers a financially beneficial pathway for farmers, including underserved and small farmers. Major U.S. brewing and distilling companies are highly interested in the development of regenerative barley as a leading CSC market segment to supply their operations as evident by the letters supporting this project. Intergovernmental (United Nations-IPCC) and private sector Corporate Social Responsibility (CSR) reporting, and consumer pressures related to Environmental Social Governance investments (ESG) drivers create demands on agricultural sector supply chains for enhancements in ESG and CSR performance. Yet, standardized approaches are still needed to optimize the value proposition for farms and supply chains. Lack of standardization leads to confusion and inaccuracies in the supply chain.

Consumer insights data demonstrate that most consumers are interested in more sustainable food options and desire transparency into how their food is grown. These consumers need indicators like clear branding and trusted verification to assist in their purchase decisions that favor retailers and products that align with their values.

30% of the GHG emissions from brewing beer (Scope 3 Emissions) come from barley growing operations. As environmental sustainability and GHG impact becomes increasingly a cost of doing business or license to operate for many mainstream food and beverage companies, it will be imperative to identify cost efficiencies, improve resilience, and lower price volatility gained via CSA activities so that brands and retailers can offer a wider selection of price-competitive options of CSA commodities to as many demographics of consumers as possible.

Another large contributor to GHGs is the transportation of barley in the supply chain that makes the carbon footprint of many brewers and distillers larger than they should be. As more regenerative barley is grown in existing and new regions, the proximity of malting operations to those farmers and supply chain actors will make more sense, thus reducing the entire supply chain (Scope 3 Emissions) transportation emissions.

Developing the regenerative barley market through partnerships, standards, and incentives will add to the overall CSC market development and increase competitiveness both domestically and internationally. This project will target early adopters as well as small and underserved farmers by promoting and educating in regions farmed by those barley growers. Connecting farmers of all backgrounds and sizes to the regenerative barley market will improve financial opportunities for those

farmers, increase access to educational resources to transition to CSA practices, and improve the environment their communities share.

The project intends to assist farmers in reducing risks, increasing financial and environmental farmer benefits, and reducing costs to enter the CSC markets. As the supply chain adopts the Certificate of Analysis (COA) for regenerative barley and consumers show a willingness to pay a marginal premium for regenerative barley products, the tools, support, and economics will create a self-sustaining market and regenerative barley transition subsidies will no longer be needed due to increases in acreage, yields, efficiency, and profit for participating farmers.

Given the needs described above, the Proximity Climate Smart Partnership seeks to employ existing and emergent CSA practices to achieve a range of climate smart outcomes, including but not limited to increased understanding, awareness, and value of climate smart commodities (CSC) among regional farming operations and among the commercial markets; development of and entry into new markets, including tactics that reduce risks for growers such as crop rotations with CSCs, standardization in the definition of CSC, increased adoption of CSA practices, testing and evaluation of efficient traceability, empowerment of farmers to drive CSA markets and practice adoption, and improved quality and ability to verify GHG emissions reductions including carbon dioxide.

#### Overcoming barriers to adoption

Farmers face a host of challenges when switching to CSA practices with small and underserved farmers climbing an even steeper hill. The financial barriers to switching to regenerative agriculture are a deterrent to many farmers, most notably for small and underserved farmers. This project will assist that transition by (1) providing premium payments for regenerative barley, (2) providing access to education to make the transition easier, (3) developing clear standards to build trust in the market taking into account standard farming practices like crop rotation, and (4) building a competitive market with supply chain partners that begins to de-risk a farmers decision to try CSA practices and develop CSCs, namely regenerative barley.

Another barrier for many farmers is the lack of awareness and educational opportunities that explain the benefits of regenerative agricultural practices. This is addressed by this project in two main ways: (1) annual field days for each project region, two total per year, that bring farmers together to share and learn from experts and each other about regenerative barley and (2) educational materials and discussions.

Additionally, lack of proper equipment training is a barrier, depending on crops in the grower's rotation, to apply CSA practices and meet the regenerative barley certification requirements that will be in development as part of this project. Increased revenue for climate-smart commodities crops will provide accelerated ROI timelines on larger equipment investments such as modification to planting drills. Education through field days and community driven resources also reduce barriers to utilizing new equipment. Together, these benefits enabled by the project will significantly reduce the time to make a transition and the time it takes for a farmer to realize the financial gain from that transition. This acceleration will increase adoption of CSA practices, increase participation in the CSC market, and increase positive outcomes for the environment.

The proximity of producer fields to malting production facilities is an additional financial barrier to barley growers. Transportation costs can fluctuate based on fuel costs and distance to an available malting plant, and can be close to one-third of what the farmer is paid for the barley. That reduction in profit margin makes farmers less likely to take on the risk of changing practices to CSA. This project, through financial incentives, market building partnerships and shorter overall distances to Proximity malting facilities (average distance from Proximity plants to producer farms is less than 40 miles) creates an environment where supply chain partners can realize an optimized Scope 3 scenario from a lifecycle analysis perspective. When compared to European maltsters who ship product across the ocean, or even domestic malting operations with multiple sourcing regions across the western U.S., the carbon footprint of Proximity Malt facilities enhances the opportunity for producing CSC products.

Proximity Malt and the project supporters are committed to providing financial incentives and educational opportunities that help farmers make a transition to CSA practices in the short-term, but also build confidence in the CSC markets through marketing strategies that engage the entire supply chain. Proximity Malt has over five years of experience working with barley growers and supply chain partners, with recent success in working with barley farmers directly on GHG reductions through CSA practices through partnership with SEC. Support from some of the biggest companies in the beer brewing and spirits industry is evidence of Proximity Malt's ability to promote CSCs and build strategies necessary for competitive CSC market success.

#### **Project Plan**

The Proximity Climate Smart Project will require participating farmers to adopt, track and measure the following practices:

**Soil Health and Carbon Sequestration** | Tillage practices including no-till (or minimum till in scenarios with broadcast planting is combined with minimum 2" depth vertical tillage utilizing a turbo-chop implement) | Utilization of cover crops

**Emissions avoidance** | Transportation distance reductions across barley production and processing supply chains. This includes inputs and processing transport distances for malt.

Water Utilization (applicable in irrigated settings) | Incorporation of drop-down nozzles, soil moisture probes, per pivot volume tracking throughout season in irrigated settings.

**Crop Rotation Diversity** | Avoidance of mono-cropping production cycles by planting barley on ground that has been in different crops for 3 consecutive growing cycles when possible

NRCS Codes: 328, 329, 340\*, 449, 442\*\*.

\*Currently cover crops cannot be harvested but this NRCS code may change during the 5-year project timeline and may be applicable.

\*\* May be implemented outside the scope of this project.

Code	Name	GHG benefits (yes/no)	Facilitating practice
328	Conservation Crop Rotation (Ac.)	Yes	595,340,449

329	Residue and Tillage Management, No-Till (Ac.)	Yes	
340	Cover Crop (Ac.)	Yes	
442	Sprinkler System (Ac.)	No	590, 449
449	Irrigation Water Management	No	449

Recruitment activities will include mail, in-person meetings, and electronic communications to targeted farmers that would benefit from this project. Targeted acres will be on land that is currently used for agricultural production. Expected farmer recruitment will steadily increase over the five years of the project:

Project Year	Growers	Acres
1	8	4,300
2	12	5,400
3	24	6,800
4	36	8,500
5	50	10,600

## Plan to Provide Education, Outreach, Training and Technical Assistance

The project will provide opportunities for education, technical assistance, and networking with existing conservation programs, university extension experts, agronomists trained in CSA practices and other farmers that implement CSA practices. The annual field days, one for each project geographic region, represent an opportunity to share current best practices, learn about CSA and CSCs, visit other farms to see how they are implementing CSA practices, and network with other farmers and food value chain participants to learn about and to promote regenerative barley.

#### Plan to Provide Financial Assistance

The project will financially assist farms, and other partners, in developing and implementing regenerative barley practices and building a climate smart barley market. Financial assistance in the form of subsidized verification service is also part of this project to facilitate the transition to CSA and facilitate accurate data collection. Based on the status of farmers as small or underserved, those farmers will receive special consideration for additional communications with educational materials and invitations to the annual field days.

## Measurement/Quantification, Monitoring, Reporting, and Verification Plan

Project partners are dedicated to the highest quality measurement, quantification, monitoring, reporting and verification (MMRV) systems to enable development of climate smart commodities (CSC). The MMRV system proposed here builds upon the robust, scalable, and transparent infrastructure provided by project partners. This MMRV system will build additional trust with farmers and bring transparency in delivering CSC.

This project will utilize a combination of first, second- and third-party measurement systems, along with third party reporting and verification protocols. Proximity Malt and producer participants will receive third-party verified data and tailored outcome reports based on their operations, scientific research, and industry sustainability practices. This verified data will also play a critical role in the development of this new raw material market segment for brewing and distilling customers. The ability for verified CSC data to travel with these ingredients through the supply chain from farms to brewers and distillers will play a critical role in the development of a reputable and transparent new market.

Data Collection and Producer Relations:

Remote sensing of participating farmer fields:

In order to verify records received from the farm, remote sensing will be utilized to verify in-field practices such as crop type, presence of a cover crop or overwintering species, and tillage practices.

Operational, farm data collection and management:

Farm data collection will be prioritized based on direct impacts to GHG emissions and verifiability, and will be collected via farm management software, precision ag technology, or by leveraging existing relationships with farm and partner staff. SEC ag data specialists and Proximity staff will leverage existing relationships to meet farmers where they are and engage all producers (especially the underserved farmers in this project) to make the data collection process as seamless as possible while building trust with producer participants.

SEC EcoPractices software stores and verifies customer specified inputs, farm output attributes and metrics to meet desired outcomes, including but not limited to seed type, chemical type, fertilizer quantities, yield, soil sampling results, precision agricultural files, aerial imagery files, invoices and input purchase records and any other operational data or farm commodities.

EcoPractices also uses local governmental data resources (e.g. USDA NASS Stats, NRCS CMZ data, and local NRCS best management practices) to benchmark the operational data collected from the farmer. All collected data is verified and stored in the EcoPractices EcoProducer cloud-based data storage and archival platform.

Sustainable Environmental Consultants will deliver third-party verification and quantification services using their EcoPractices platform as outlined below. The solution will consist of these services:

- Field and Farm Data Verification & Validation
- Precision Data Collection & Storage
- Farm Level and Project Scope Environmental Performance Metrics (i.e. RUSLE2, WEPS, Nutrient Tracking Tool, and COMET-Farm)
- Farm Level and Project Scope Environmental Outcomes

## Modeling methodology:

Model or simulation approaches will provide environmental quantification services that estimate ecosystem impact reductions associated with farmer practices and regionally-specific baseline (benchmark) practices. Environmental metrics including GHG emissions (CO₂, N₂O, CH₄), soil organic carbon (SOC) change, NO₃⁻ leaching, phosphorus losses, and soil loss due to water erosion and wind erosion are quantified for each specific site. These metrics are estimated for each subfield soil type within farmer fields using EPA and NRCS-standard process-based quantification tools for GHGs and soil loss including Nutrient Tracking Tool, COMET-Farm, RUSLE2, and WEPS. Results of the site-specific environmental analyses can be used to generate tangible outcomes for the farmer project participants and aggregated reports, dashboards, and the development of Sustainable Continuous Improvement Plans™ (SCIP) detailing land management practice changes that may be most environmentally impactful and cost-effective at each site.

Reductions in irrigation water use resulting from system efficiency improvements and/or the adoption of soil moisture probes can also be tracked within the EcoPractices platform to actively account for water savings.

LCA Methodology

A limited Life Cycle Analysis will be based on the methodology developed in the PAS:2060 standards for life-cycle-assessment to analyze effects of transport distance on regenerative barley carbon intensity. The LCA analysis will be conducted using OpenLCA, a life cycle assessment modeling software developed by GreenDelta. When available, emissions factors will be taken from the U.S. Federal Life Cycle Inventory (US LCI), a centralized government database formatted for OpenLCA by the United States Department of Energy. Emissions factors for manure and enteric emissions will be sourced from primary research literature and uploaded into OpenLCA.

#### Quantifying climate smart barley commodities:

Quantifying climate smart barley, and other crops in field rotation, commodities will include the following processes:

- A historical GHG emissions and nutrient loss (business as usual (BAU) prior to the adoption of climate smart practice interventions) baseline will be established to predict the potential impacts of the alternative management practices that were adopted under a given carbon and/or nutrient marketplace. BAU practices will include crop rotation, tillage, fertilizer and manure application timing and rates, and irrigation frequency and water use.
- Overall carbon and GHG benefit of the adopted management practices and model predictions associated with the adoption of a conservation practice (e.g., reducing tillage intensity, the use of cover crops, N-fertilizer reduction, improved N-timing) are compared to baseline model results.
- The COMET-Farm tool requires multiple years of historical "spin-up" data (2000-available data year) to ensure weather and crop rotation variability are captured. It will also establish a baseline carbon stock trajectory prior to predicting SOC changes associated with years of actual management data.

- For years prior to the availability of farm management data, we will
  parameterize the data by augmenting existing data with NASS Cropland
  Data Layers and USDA Crop Management Zone operations templates,
  which will provide regionally and crop specific operations and dates
  representing typical land management practices.
- Average annual SOC emissions estimates are calculated based on a 10year projection (length of projection may be altered).
- LCA assessments will compare BAU transport distances to shortened transport across the Proximity supply chain for their effects on barley carbon intensity.

The modeling approach for SOC will ensure additionality of the calculated benefits of climate smart commodities. If the calculated SOC changes do not account for additionality, then the purchase of any climate smart commodity from a potential marketplace would not actually represent an overall reduction of carbon from the atmosphere.

Approach to Reporting and Tracking of Greenhouse Gas Benefits

Approaches to reporting and tracking of greenhouse gas will follow a dynamic pathway. This project will use SEC's EcoPractices platform to report and track practices, GHG benefits per farm, per commodity produced, dollar expended, and the anticipated longevity of GHG benefits. This will include environmental reporting on GHG emissions (CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub>), SOC change, NO<sub>3</sub>- leaching, phosphorus losses, and soil loss due to water erosion and wind erosion are quantified for each specific site, farm, and per commodity produced. These reports will then be used to track dollars expended and the anticipated longevity of GHG benefits. The same data used to deliver GHG quantification can then be used to drive farm specific ROI.

Results of the site-specific environmental analyses will be used to generate tangible outcomes for the farmer project participants, as well as aggregated reports, dashboards, and the development of Sustainable Continuous Improvement Plans™ (SCIP) detailing land management practice changes that may be most environmentally impactful and cost-effective at each site.

Deliverables

The service includes the following deliverables for participant producers:

- 1. Individual 2-page farm-level summary and environmental outcomes report
- 2. Farm level SCIP™ plan built on a regional basis

The service includes the following deliverables for **Proximity Malt**:

- 1. SEC's EcoPractices third-party verification
- 2. Aggregated reporting metrics against Proximity Malt KPI's
- 3. Executive reports and/or aggregated results data by Proximity Malt program clients
- Assistance with talking points and results summary information
- GHG benefits per commodities produced
- 6. Dollars expended
- Anticipated longevity of GHG benefits

 Executive reports and/or aggregated results data by supply chain partner program

## Future Project Monitoring

Project monitoring will continue past the USDA funded project timeline and occur at least every five years or before each verification event if it is less than five years. Project monitoring will utilize a combination of high credibility, low cost and low touch methods to ensure permanence requirements of these proposed projects. These methods will likely rely on indirect methods such as satellite imagery and low-cost sensing, but may include review of verification processes, farm operational records, challenges to verification processes at the farm or project level, credential checks on verifiers and key project personnel. These methods will reduce front-end administration costs and ensure greatest value is provided to participating farmers. *Verification* 

This project will utilize third party verification from an accredited and experienced verification service provider. Verification service providers will have training and experience in planning and successful execution of agricultural supply chain certification and verification programs utilizing standard frameworks such as ISO 14064, ISO 14065.

Verification activities will verify eligibility, review project and farm data, review management systems, and verify emissions estimates. Verification will be conducted at least annually following a risk-based, hybrid assessment to conduct desktop audits, virtual site visits and farm-field site visits. Risk based assessments will be based on effects on and risks to project eligibility. Example areas of risk could include:

- Ownership of GHG rights
- Project compliance with relevant local or federal regulations
- Maintenance and appropriate operation of project equipment
- Adequacy and QA/QC of data collection processes
- Training of project personnel
- Data storage, maintenance and curation
- Data and quantification calculations

All verification processes will be conducted in an iterative, comparable and consistent way across all project farms. Verification bodies and verifiers will demonstrate independence from the activity being verified and demonstrate ethical conduct and fair presentation of all findings and reports throughout verification processes.

- Verifiers will not enter into any agreement or participate in activities that could create a conflict of interest and will provide a written statement to attest to their impartiality in verification.
- Verifiers will agree to and maintain confidentiality obligations of all project partners and participating farmers.
- Verifiers will retain, maintain and make accessible upon project partner request all verification records and supporting data files for at least 7 years.

Contractual language in required contracts signed by participating farmers will ensure farmers understand they cannot report the same benefit to the program that they

are also receiving a benefit elsewhere. Additional measures will be taken to track participating barley versus non-participating barley.

This project will continue to work with the USDA through the Partnerships Network to share the innovations coming out of the project. For example, NRCS Conservation Practice "Cover Crop" - 340 is currently prohibitive for harvesting a cover crop. However, through this project, there might be data generated to assist in the evolution of that conservation practice that benefits farmers and the environment.

#### Climate Smart Commodities Market Plan

This Proximity Climate Smart Partnership intends to develop new market opportunities for climate smart agriculture commodities by working across the supply chain, connecting farmer regenerative agricultural practices to consumer purchasing decisions.

### **Partnerships**

Market partners, including New Belgium Brewing, brewer with a footprint in all 50 states, and Brown-Forman, the largest American distiller, support this project as market partners as a way to build on existing commitments to climate smart agriculture and position themselves as leaders in CSC markets. An additional letter of support has been provided by the Brewers Association, a 6,000-member organization representing the US craft brewing industry. Working in conjunction with marketing partner efforts to promote regenerative barley-based products promotes consumer adoption of the brand and strengthens the CSC market.

## Market Building

The market for regenerative agricultural branded products has potential that is yet to be developed. In order to provide a pathway for farmers to realize profits and add incentives to adopt CSA practices, CSCs need partnerships throughout the supply chain to educate the consumer on the benefits provided by these practices, so that they will value the products, and thus the farmers who produced them. This project fills that need by 1) empowering farmers through education, support, and incentives, 2) building regenerative agriculture CSA standards through quality certification for barley, 3) ensuring those standards are met through MRV and Certification of Analysis that assures the supply chain partners that standards were met, and 4) working with supply chain partners to promote branded regenerative barley certified products. *Empowering Farmer Partners* 

Farmers that participate in this project will benefit from increased awareness of CSA practices, access to new pathways for financial gain, increased health of their soil, and continuing support for ongoing regenerative agricultural activities. By the end of the project, 50 farms with up to 11,000 acres of land will benefit from CSA practices, and many more will learn about options for regenerative farming.

First, awareness of the benefits of CSA practices is a major barrier to getting farmers to adopt such practices. This project raises awareness through educational opportunities such as an annual field day event and educational materials on the benefits of regenerative agricultural practices.

Second, partnerships between farmers and the project provide access to methodologies and technical support for implementing CSA practices: (1) The project financially incentivizes production of CSCs through higher contract prices, and (2) increased revenue for CSC crops will provide accelerated ROI timelines on larger

equipment investments such as modification to planting drills and the project's technical assistance will help optimize the use of such equipment.

Third, financial incentives at the farm level will come in the form of a premium pricing structure for these producers and a transition to CSA practices fund. Regeneratively produced barley will have a higher contract price over our conventional price through a premium for enrollment and subsequently meeting the COA requirements - allowing participating farmers to increase their dollar per acre revenue, and the transition costs are reduced for five years with the transition subsidy.

Fourth, Farmers implementing CSA practices will benefit from improvements in soil health, reduction in water needed per irrigated acre, and an increase in nutrient density that reduces reliance and costs for synthetic fertilizers. One study from the University of Nebraska-Lincoln found that no-till practices reduced irrigation water application needed by 3 to 5 inches, which will result in huge operational cost savings for farmers participating in this project.

Finally, validating the market for regenerative barley is a major market opportunity for farmers. By becoming aware of CSA practices and receiving the proper technical and financial incentives to implement CSA practices, farmers are able to access a new regenerative agricultural branded product market where their barley can be malted and sold with the added benefit of an important distinction, attractive to the consumer. Consumers will select products with this regenerative agriculture label over other products because it supports the growing consumer awareness of the benefits for regenerative agriculture as a climate smart alternative to standard products.

This project will measure the return on investment or ROI for each participating farm, via Sustainable Environmental Consultants quantification tools, for new climate-smart agricultural activities, including the R3 tool. This tool bridges the gap between purpose and profit. The toll benchmarks and compares possible impacts of in-field changes, provides profitability for current and new climate-smart practices, and encourages sustainable practice adoption. A price for GHG impact or carbon credits will not be a sole determinant of profitability for farms.

#### Scalability

In order to scale the regenerative barley market there needs to be standards, certifications, and clear financial incentives for barley growers. This project addresses all three and seeks to validate the regenerative barley market and increase its competitiveness both domestically and internationally. The current project activities will start in Colorado, Delaware, Kansas, Maryland, Nebraska, New Mexico, North Carolina, Pennsylvania, Wyoming, and Virginia.

#### Cost efficiency

As acres implementing these practices increase, costs will need to decrease to ensure farmers continue to utilize CSA practices. Once new equipment and training on CSA practices are implemented, there will be efficiencies gained over the 5-year life of the project with long-term post-project gains as CSA practices continue. Cost efficiencies include:

- Decrease in water use per acre for similar yields due to irrigation efficiency equipment implementation and increased soil water retention.
- Increased nutrient density, which reduces fertilizer costs.

 Decrease in fuel costs as less equipment passes are required over acreage utilizing CSA practices.

## Traceability

This project is validating the idea that there is value in regenerative ag branding and that value can be traced from the CSA practices to the CSC and eventually to the consumer's purchase decision.

One barrier to mass adoption of regenerative agriculture as a marketing brand is the lack of standardization and definitions of what is considered a regenerative agriculture approved product. Purchasers and retailers in the supply chain want the confidence they have when they promote organic or non-GMO products to consumers, which is assurance that the premium associated with those labels is verified and actual positive impact occurred. This has never been more important in the current market where government regulations and consumer expectations are aligning around better climate information disclosure by food and beverage companies.

Currently, Proximity Malt has a COA that signals standards are set and met by the malt; a regenerative COA is needed so that the supply chain can have the same confidence in that regenerative barley meets a science-based standard and supply chain partners can promote their involvement with CSC, namely regenerative barley and malt products. The COA would inform further development of trust building for the market such as the Environmental Product Declaration to promote the supply chain's sustainable procurement. This project will use the CSA practices and MRV methodologies to create a set of standards that will result in a COA for regenerative barley that can be applied across barley growers in the U.S. and their corresponding supply chains.

The ability to segregate store and identity preserve barley and malt produced utilizing CSA practices will play a critical role in the tracking and movement of CSC data from participating farms to end consumers. Similar to organic production tracking methodologies, Proximity Malt will develop a strategy to maintain data integrity through supply chain movements.

## Marketing partnership strategy

Malting operations take a raw material and process it into an ingredient that will be further processed in the brewery, distillery or food manufacturing plant. Thousands of acres of barley run through this malting channel. Hundreds of farmers and brewers are connected through maltsters like Proximity Malt, making the maltster the perfect touchpoint in this food value chain to institute COA standards and financial incentives.

The marketing partnership strategy starts with subsidizing the beginning of this regenerative barley supply chain and then connecting that chain to consumers who recognize that the beer and spirits they are buying have science-backed standards indicating the consumer is benefiting the environment, as well as small and underserved farmers.

The strategy continues to work with partners in the supply chain linking the partners' environmental and social goals to the production of regenerative barley. For example, non-binding commitments by New Belgium Brewing, Brown-Forman and several other national brands, that they would purchase regenerative barley from this

project is linked to each organization's commitment to reduce GHG and make a positive social impact in the environment, in the lives of farmers and in their communities. Efforts by supporting partners to promote sustainable procurement practices and ESG reporting show that the market is both a value to consumers and to the sellers that incorporate CSCs into their consumer products.

Execution of this strategy involved working with supporting partners and farmers to understand what the CSA practices are for the regenerative barley COA and then communicate that effectively from farmer to consumer. This will involve the creation of a separate brand of regenerative barley-based product line that has added market value due to the regenerative barley COA. The strategy will take five years to implement through these partnerships to build a market where subsidies on premiums are replaced by market demand for regenerative barley branded products. Growth of regenerative barley as a value-added product supports the growth of the entire CSC market as an example of scientifically verified standards, certifications, and supply chain partnerships that provide financial, social, and environmental benefits to the supply chain actors and communities.

#### Continued Growth and Increased Competitiveness

The continued success of the Proximity Climate Smart Partnership is linked to the increase in transparency that the government, financial sector, and consumers are demanding from the food value chain. As that need increases, the need for COAs in regenerative agriculture, clear standards for purchasers and retailers, and worthwhile and accessible incentives for farmers, will continue to increase. This link is not unique to the U.S., and other jurisdictions such as the EU and Australia, are continuing to require better standards and increased CSA practice adoption in agriculture. To remain competitive in both domestic and international markets, practical and science-backed standards and systems need development and validation today. This project adds to that effort by increasing regenerative barley competitiveness both in the U.S. and internationally.

5/ 8	Benchmark / Milestone	Measure	Responsible		Oct - Dec 2023 Qtr 1	Jan - Mar 2024 Qtr 2	Apr - Jun 2024 Qtr 3	Jul-Sep 2024 Qtr 4	Total Yr 1
Producer	S	water stringer of selection and are readily	HOLDING WASTE	Terror and				1	
	Prroducer enrollment	Total number enrolled during quarter	Proximity Malt	Benchmark Actual	8			-	8
	WASSINGS SO COUR DOT WHICH HIS ONE SAT MUTS TO HEAVE HER COURS HAVE	Total number enrolled during quarter	Proximity Malt	Benchmark				1	100
	Small/Underserved producer enrolled			Actual				Y .	Ne
	***************************************	Total number enrolled during quarter	Proximity Malt	Benchmark	4,375				4,375
	Acres enrolled			Actual					38
	Premium provided to enrolled producers for barley	Total dollars per quarter provided to all producers enrolled	Proximity Malt	Benchmark	351,563				351,563
	Tremam provided to emolica producers for barrey	in program		Actual					38
	Premium provided to small & underserved producers	Total dollars per quarter provided to small & underserved	Proximity Malt	Benchmark					1721
		producers enrolled in program		Actual					198
	Number of outreach / training activities - Mountain West	Total number of activities hosted per quarter	Proximity Malt	Benchmark	1				1
	15		440000000000000000000000000000000000000	Actual					192
	Number of outreach / training activities - Mid Atlantic	Total number of activities hosted per quarter	Proximity Malt	Benchmark	1				1
				Actual					KRI.
ommercia									
ommercia		Total new marketing channels established per quarter	Proximity Malt	Benchmark	1				1
	Marketing channels	Total new marketing chainless established per quarter	Frominity Wate	Actual	3.			-	
	2	Total number of new customers who've signed contracts to	Proximity Malt	Benchmark	-	9	9	9	27
	Customer establishment	purchase ReGenMalt per quarter	risaning mate	Actual	8				
	WWW. Head See Tallia et SW	Total number of dollars provided to support marketing of	Proximity Malt	Benchmark	195,146	20,146	20,146	20,146	255,583
	Marketing support	ReGenMalt products	(Control of Control	Actual	130,110	20,210		20,210	200,000
	.!		-		H:				
MR									
	6.00	Total dollars per quarter provided to SEC for MRV and	Proximity Malt	Benchmark	47,250				47,250
	Dollars provided to subawardee SEC	reporting services		Actual					13-21
	March 10 Color 10 March 10 Mar	Number of tools utilized per quarter	Sustainabile Environmental	Benchmark					1/21
	Measurement Tools		Consultants (SEC)	Actual					393
	Climate Smart Technologies	Number of technologies utilized per quarter	Sustainabile Environmental	Benchmark					1/2
	Climate Smart reciniologies		Consultants (SEC)	Actual					:20
	GHG benefits: Soil Greenhouse Gas Emissions Reduced	Measured in tons of CO2e	Sustainabile Environmental	Benchmark	4,104				4,104
	Ond benefits, 3011 dicentificase das Emissions necuceu		Consultants (SEC)	Actual					188
	GHG benefits: Soil Carbon Sequestered	Measured in tons carbon	Sustainabile Environmental	Benchmark	1,046				1,046
	ond perients, son carbon sequestered		Consultants (SEC)	Actual				j.	188
	Soil health benefits: Reduction in Soil Erosion	Measured in tons soil	Sustainabile Environmental	Benchmark	7,550				7,550
	Son realth benefits. Neddodon in Son Erosion		Consultants (SEC)	Actual					199
	Soil health benefits: Nutrients saved from Leaching and Runnoff	Measured in pounds of nitrogen and phosphorus	Sustainabile Environmental	Benchmark	25,664				25,664
	Son hearth benefits. Natherica Saved from Leadining and Nathron		Consultants (SEC)	Actual					198
GO (0 1)									
Budge			The transfer and a support to the support	1/	-		NAMES AND ADDRESS.		
	Federal Contribution	Total dollars requested for reimbursement	Proximity Malt	Benchmark	433,516	312,474	108,444	108,444	962,878
			220000000000000000000000000000000000000	Actual	gaanaa		1.31.20.20.12.1112.1		(2)
	Proximity Contribution	Total dollars contributed by Proximity Malt	Proximity Malt	Benchmark	207,428	185,457	190,442	190,442	773,770
	175	MACO TO THE CONTROL OF THE CONTROL O	Assessed the Carlo	Actual	Garante de la constitución de la			200	4 700 040
	Combined Contribution	Total dollars contributed to project	Proximity Malt	Benchmark	640,945	497,931	298,886	298,886	1,736,648
				Actual					*

Benchmark / Milestone	Measure	Responsible		Oct - Dec 2024 Qtr 1	Jan - Mar 2025 Qtr 2	Apr - Jun 2025 Qtr 3	Jul-Sep 2025 Qtr 4	Total Yr 2
roducers				Qui	Qti 2	Quis	QII 4	Total II Z
Prroducer enrollment	Total number enrolled during quarter	Proximity Malt	Benchmark Actual	12				12
Small/Underserved producer enrolled	Total number enrolled during quarter	Proximity Malt	Benchmark Actual	3				3
Acres enrolled	Total number enrolled during quarter	Proximity Malt	Benchmark Actual	5,469				5,469
Premium provided to enrolled producers for barley	Total dollars per quarter provided to all producers enrolled in program	Proximity Malt	Benchmark Actual	439,453				439,453
Premium provided to small & underserved producers	Total dollars per quarter provided to small & underserved producers enrolled in program	Proximity Malt	Benchmark Actual	109,863				109,863
Number of outreach / training activities - Mountain West	Total number of activities hosted per quarter	Proximity Malt	Benchmark Actual	1				1
Number of outreach / training activities - Mid Atlantic	Total number of activities hosted per quarter	Proximity Malt	Benchmark Actual	1				1.
nmercial					,			
Marketing channels	Total new marketing channels established per quarter	Proximity Malt	Benchmark Actual					
Customer establishment	Total number of new customers who've signed contracts to purchase ReGenMalt per quarter	Proximity Malt	Benchmark Actual	6	6	6	6	24
Marketing support	Total number of dollars provided to support marketing of ReGenMalt products	Proximity Malt	Benchmark Actual	20,051	20,051	20,051	20,051	80,203
MRV								
Dollars provided to subawardee SEC	Total dollars per quarter provided to SEC for MRV and reporting services	Proximity Malt	Benchmark Actual	33,266				33,266
Measurement Tools	Number of tools utilized per quarter	Sustainabile Environmental Consultants (SEC)	Benchmark Actual					
Climate Smart Technologies	Number of technologies utilized per quarter	Sustainabile Environmental Consultants (SEC)	Benchmark Actual					(E)
GHG benefits: Soil Greenhouse Gas Emissions Reduced	Measured in tons of CO2e	Sustainabile Environmental Consultants (SEC)	Benchmark Actual	5,131				5,131
GHG benefits: Soil Carbon Sequestered	Measured in tons carbon	Sustainabile Environmental Consultants (SEC)	Benchmark Actual	1,307				1,307
Soil health benefits: Reduction in Soil Erosion	Measured in tons soil	Sustainabile Environmental Consultants (SEC)	Benchmark Actual	9,437				9,437
Soil health benefits: Nutrients saved from Leaching and Rui	Measured in pounds of nitrogen and phosphorus	Sustainabile Environmental Consultants (SEC)	Benchmark Actual	32,080				32,080
Budget								
Federal Contribution	Total dollars requested for reimbursement	Proximity Malt	Benchmark Actual	214,834	214,834	214,834	214,834	859,337 -
Proximity Contribution	Total dollars contributed by Proximity Malt	Proximity Malt	Benchmark Actual	164,194	164,194	164,194	164,194	656,776
Combined Contribution	Total dollars contributed to project	Proximity Malt	Benchmark Actual	379,028	379,028	379,028	379,028	1,516,113

	Benchmark / Milestone	Measure	Responsible		Oct - Dec 2025 Qtr 1	Jan - Mar 2026 Qtr 2	Apr - Jun 2026 Qtr 3	Jul-Sep 2026 Qtr 4	Total Yr 3
Producers			at months (a) in Approximately Addis						7-70X
	Prroducer enrollment	Total number enrolled during quarter	Proximity Malt	Benchmark Actual	24				24
	Small/Underserved producer enrolled	Total number enrolled during quarter	Proximity Malt	Benchmark Actual	6				6
	Acres enrolled	Total number enrolled during quarter	Proximity Malt	Benchmark Actual	6,836				6,836
	Premium provided to enrolled producers for barley	Total dollars per quarter provided to all producers enrolled in program	Proximity Malt	Benchmark Actual	512,695				512,695
	Premium provided to small & underserved producers	Total dollars per quarter provided to small & underserved producers enrolled in program	Proximity Malt	Benchmark Actual	128,174				128,174
	Number of outreach / training activities - Mountain West	Total number of activities hosted per quarter	Proximity Malt	Benchmark Actual	1				1
	Number of outreach / training activities - Mid Atlantic	Total number of activities hosted per quarter	Proximity Malt	Benchmark Actual	1	-			1
Commercial				Actual	. L	1		Д.	
- Commercial	Marketing channels	Total new marketing channels established per quarter	Proximity Malt	Benchmark Actual					3,
	Customer establishment	Total number of new customers who've signed contracts to purchase ReGenMalt per quarter	Proximity Malt	Benchmark Actual	12	12	12	12	48
	Marketing support	Total number of dollars provided to support marketing of ReGenMalt products	Proximity Malt	Benchmark Actual	18,772	18,772	18,772	18,772	75,088
MRV		Nederiwait products	_L	Actual	.! <u>!</u>			<u> </u>	
IVIKV	Dollars provided to subawardee SEC	Total dollars per quarter provided to SEC for MRV and reporting services	Proximity Malt	Benchmark Actual	41,161				41,161
	Measurement Tools	Number of tools utilized per quarter	Sustainabile Environmental Consultants (SEC)	Benchmark Actual					#\ F
	Climate Smart Technologies	Number of technologies utilized per quarter	Sustainabile Environmental Consultants (SEC)	Benchmark Actual					31
	GHG benefits: Soil Greenhouse Gas Emissions Reduced	Measured in tons of CO2e	Sustainabile Environmental Consultants (SEC)	Benchmark Actual	6,413				6,413
	GHG benefits: Soil Carbon Sequestered	Measured in tons carbon	Sustainabile Environmental Consultants (SEC)	Benchmark Actual	1,634				1,634
	Soil health benefits: Reduction in Soil Erosion	Measured in tons soil	Sustainabile Environmental Consultants (SEC)	Benchmark Actual	11,797				11,797
	Soil health benefits: Nutrients saved from Leaching and Runnoff	Measured in pounds of nitrogen and phosphorus	Sustainabile Environmental Consultants (SEC)	Benchmark Actual	40,100				40,100
Budget		1		3			7/1	- I	
Duuget	Federal Contribution	Total dollars requested for reimbursement	Proximity Malt	Benchmark Actual	235,213	235,213	235,213	235,213	940,852
	Proximity Contribution	Total dollars contributed by Proximity Malt	Proximity Malt	Benchmark Actual	204,616	204,616	204,616	204,616	818,463
	Combined Contribution	Total dollars contributed to project	Proximity Malt	Benchmark	439,829	439,829	439,829	439,829	1,759,315
				Actual					

	Benchmark / Milestone	Measure	Responsible		Oct - Dec 2026 Qtr 1	Jan - Mar 2027 Qtr 2	Apr - Jun 2027 Qtr 3	Jul-Sep 2027 Qtr 4	Total Yr 4
roducer	S	MI	In:						
	Prroducer enrollment	Total number enrolled during quarter	Proximity Malt	Benchmark Actual	36				36
	1	Total number enrolled during quarter	Proximity Malt		8				8
	Small/Underserved producer enrolled	rotal number enrolled during quarter	Proximity Mate	Benchmark Actual	8				
	<u> </u>	Total number enrolled during quarter	Proximity Malt	Benchmark	8,545				8,545
	Acres enrolled	Total number entoned during quarter	Proximity Mate	Actual	6,343				0,343
		Total dollars per quarter provided to all producers enrolled	Proximity Malt	Benchmark	622,559				622,559
	Premium provided to enrolled producers for barley	in program	Proximity man	Actual	022,555				022,333
		Total dollars per quarter provided to small & underserved	Proximity Malt	Benchmark	155.640				155,640
	Premium provided to small & underserved producers	producers enrolled in program	Proximity mate	Actual	133,040				133,040
		Total number of activities hosted per quarter	Proximity Malt	Benchmark	1				1
	Number of outreach / training activities - Mountain West	Total Harrison of activities floated per quarter	r committy mate	Actual	+				-
	12	Total number of activities hosted per quarter	Proximity Malt	Benchmark	1				1
	Number of outreach / training activities - Mid Atlantic	Total number of activities hosted per quarter	Frominity Maic	Actual	1				
	<u> </u>			Actual					
mmercia	î								
illiliercia	Y <del></del>	Total new marketing channels established per quarter	Proximity Malt	Benchmark	Ī			1	
	Marketing channels	Total new marketing chainless established per quarter	Frominity Maic	Actual					
	1 2	Total number of new customers who've signed contracts to	Proximity Malt		11	11	11	11	44
	Customer establishment	purchase ReGenMalt per quarter	Proximity Mate	Benchmark	11	11	11	11	1992
		46.	MUZINGUIA I KASTA	Actual	10.772	10.770	10 772	10.772	7F 000
	Marketing support	Total number of dollars provided to support marketing of	Proximity Malt	Benchmark	18,772	18,772	18,772	18,772	75,088
	A 227	ReGenMalt products		Actual					TE:
MR									
IVIK		Total dollars per quarter provided to SEC for MRV and	Proximity Malt	Benchmark	51,524				51,524
	Dollars provided to subawardee SEC	in the control of the	Proximity Mate		31,324				51,524
		reporting services	e successions en secondosculor	Actual				-	
	Measurement Tools	Number of tools utilized per quarter	Sustainabile Environmental	Benchmark					15
		K1 T T E F N APP 4	Consultants (SEC)	Actual					
	Climate Smart Technologies	Number of technologies utilized per quarter	Sustainabile Environmental	Benchmark					
		Experience Profession Profession	Consultants (SEC)	Actual					(F)
	GHG benefits: Soil Greenhouse Gas Emissions Reduced	Measured in tons of CO2e	Sustainabile Environmental	Benchmark	8,017				8,017
	ļ	Expression of the property of the control of the co	Consultants (SEC)	Actual	27272				(F)
	GHG benefits: Soil Carbon Sequestered	Measured in tons carbon	Sustainabile Environmental	Benchmark	2,043				2,043
	7	##POWER CONTROL CONTRO	Consultants (SEC)	Actual	****				F 22 22 22 22 22 22 22 22 22 22 22 22 22
	Soil health benefits: Reduction in Soil Erosion	Measured in tons soil	Sustainabile Environmental	Benchmark	14,746				14,746
		Transfer over the Market and the control that the Section of the Control of the C	Consultants (SEC)	Actual	7.172771140447				700000000000000000000000000000000000000
	Soil health benefits: Nutrients saved from Leaching and Runnoff	Measured in pounds of nitrogen and phosphorus	Sustainabile Environmental	Benchmark	50,125				50,125
			Consultants (SEC)	Actual					· •
Budge	<u> </u>	4	ip:						
	Federal Contribution	Total dollars requested for reimbursement	Proximity Malt	Benchmark	272,435	272,435	272,435	272,435	1,089,740
	A STATE OF THE SECOND STAT			Actual					DE:
	Proximity Contribution	Total dollars contributed by Proximity Malt	Proximity Malt	Benchmark	259,806	259,806	259,806	259,806	1,039,224
	, , , , , , , , , , , , , , , , , , ,			Actual					363
	Combined Contribution	Total dollars contributed to project	Proximity Malt	Benchmark	532,241	532,241	532,241	532,241	2,128,963
	Comonica Condition	The state of the s	II.	Actual					162

	Benchmark / Milestone	Measure	Responsible		Oct - Dec 2027 Qtr 1	Jan - Mar 2028 Qtr 2	Apr - Jun 2028 Qtr 3	Jul-Sep 2028 Qtr 4	Total Yr 5	Cum. Total
Producer					Qu'I	X., 2	Qu 3	30.7	total 113	cuiii, rotai
	Prroducer enrollment	Total number enrolled during quarter	Proximity Malt	Benchmark Actual	50				50	N/A N/A
	Small/Underserved producer enrolled	Total number enrolled during quarter	Proximity Malt	Benchmark Actual	12				12	N/A N/A
	Acres enrolled	Total number enrolled during quarter	Proximity Malt	Benchmark Actual	10,682				10,682	35,907
	Premium provided to enrolled producers for barley	Total dollars per quarter provided to all producers enrolled in program	Proximity Malt	Benchmark Actual	743,866				743,866	2,670,136
	Premium provided to small & underserved producers	Total dollars per quarter provided to small & underserved producers enrolled in program	Proximity Malt	Benchmark Actual	185,967				185,967	579,643
	Number of outreach / training activities - Mountain West	Total number of activities hosted per quarter	Proximity Malt	Benchmark Actual	1				1	5
	Number of outreach / training activities - Mid Atlantic	Total number of activities hosted per quarter	Proximity Malt	Benchmark Actual	1				1	5
Commercia	<u> </u>				ALC			.//	***	
	Marketing channels	Total new marketing channels established per quarter	Proximity Malt	Benchmark Actual						N/A N/A
	Customer establishment	Total number of new customers who've signed contracts to purchase ReGenMalt per quarter	Proximity Malt	Benchmark Actual	9	9	9	8	35	178
	Marketing support	Total number of dollars provided to support marketing of ReGenMalt products	Proximity Malt	Benchmark Actual	18,771	18,771	18,771	18,771	75,086	561,046
MR	<u>.</u>	W.	4		·				47	<u> </u>
	Dollars provided to subawardee SEC	Total dollars per quarter provided to SEC for MRV and reporting services	Proximity Malt	Benchmark Actual	85,125				85,125 -	258,326
	Measurement Tools	Number of tools utilized per quarter	Sustainabile Environmental Consultants (SEC)	Benchmark Actual					¥ .	
	Climate Smart Technologies	Number of technologies utilized per quarter	Sustainabile Environmental Consultants (SEC)	Benchmark Actual					<u> </u>	(S)
	GHG benefits: Soil Greenhouse Gas Emissions Reduced	Measured in tons of CO2e	Sustainabile Environmental Consultants (SEC)	Benchmark Actual	10,021				10,021	33,686
	GHG benefits: Soil Carbon Sequestered	Measured in tons carbon	Sustainabile Environmental Consultants (SEC)	Benchmark Actual	2,553				2,553	8,584
	Soil health benefits: Reduction in Soil Erosion	Measured in tons soil	Sustainabile Environmental Consultants (SEC)	Benchmark Actual	18,432				18,432	61,961
	Soil health benefits: Nutrients saved from Leaching and Runnoff	Measured in pounds of nitrogen and phosphorus	Sustainabile Environmental Consultants (SEC)	Benchmark Actual	62,656				62,656	210,626
Budge	<u>.</u>	W			in .			30	40	<u> </u>
	Federal Contribution	Total dollars requested for reimbursement	Proximity Malt	Benchmark Actual	286,606	286,606	286,606	286,606	1,146,426	4,999,233
	Proximity Contribution	Total dollars contributed by Proximity Malt	Proximity Malt	Benchmark Actual	343,874	343,874	343,874	343,874	1,375,496	4,663,727
	Combined Contribution	Total dollars contributed to project	Proximity Malt	Benchmark Actual	630,480	630,480	630,480	630,480	2,521,921	9,662,960

## GHC & SOIL HEALTH ESTIMATION

LBS Regen Malt		17,578,125	21,972,656	27,465,820	34,332,275	42,915,344
Tons Regen malt		8,789.06	10,986.33	13,732.91	17,166.14	21,457.67
100 tons Regen Malt		87.89	109.86	137.33	171.66	214.58
GHG emmissions reduced	46.7	4,104.49	5,130.62	6,413.27	8,016.59	10,020.73
Carbon Sequestered	11.9	1,045.90	1,307.37	1,634.22	2,042.77	2,553.46
Soil Erosion	85.9	7,549.80	9,437.26	11,796.57	14,745.71	18,432.14
Nutrient leaching	292	25,664.06	32,080.08	40,100.10	50,125.12	62,656.40

## **Climate-Smart Practices and Limitations**

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

NRCS Practice Code	Practice Name
328	Conservation Crop Rotation
329	Residue and Tillage Management, No-Till
340	Cover Crop
590	Nutrient Management
595	Pest Management Conservation System

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

N/A



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients February 2023 Version 1.0



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#### Overview of Reporting Requirements

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

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

**Project level**: Information about activities and impacts at a whole project/aggregate level (i.e., reflecting all activities under the grant agreement). Some project-level reporting is further subdivided by commodity type or a combination of commodity and CSAF practice(s) (commodity x practice).

**Partner level:** Information about activities related to a single organization (recipient, subrecipient, contractor, or other partner) within a project.

**Producer level**: Information about individual producers who have one or more farms enrolled in a project. **Field level**: Information about individual fields enrolled in a project.

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

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

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

#### **Project Summary**

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

Table 1. Project Summary elements

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

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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

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

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#### Marketing Activities

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

Table 3. Marketing Activities elements

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

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#### **Producer Enrollment**

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

Table 4. Producer Enrollment elements

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

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#### Field Enrollment

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

Table 5. Field Enrollment elements

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

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#### Farm Summary

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

Table 6. Farm Summary elements

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

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#### Field Summary

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

Table 7. Field Summary elements

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

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#### GHG Benefits - Alternate Modeled

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

Table 8. GHG Benefits - Alternate Modeled elements

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

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#### Additional Environmental Benefits

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

Table 10. Additional Environmental Benefits elements

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

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#### Supplemental Data Submission

Project MMRV Plan

Definition of MMRV elements:

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

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

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

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

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

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

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

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

#### Field modeled GHG benefit reports

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

#### Field direct measurement results

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

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

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#### **Data Descriptions**

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

#### Unique IDs

Project ID: Unique ID at the project level – "Award Identifying Number" shown on award documentation

Partner ID: Unique ID at the partner level - use EIN; if no EIN, a unique ID will be assigned for use in these reports

State or territory of operation: State or territory name

County of operation: Physical county name

Farm ID: Unique ID at the operation level assigned by Farm Service Agency (FSA)

**Tract ID:** Unique ID at the tract level assigned by FSA **Field ID:** Unique ID at the field level assigned by FSA

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## **Project Summary**

Project Summary	
Commodity type	
Data element name: Commodity type	<b>Reporting question:</b> What climate-smart commodity types are produced by this project?
Description: Type of commodity incentivize	zed by the project. These commodities include those for whom
farmers are directly receiving incentives o	r other types of marketing support. See full list of commodity options
in Appendix B. List one commodity per rov	
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 commod	ity(ies) related to project activities. If sales are reported, complete the
	is part of the quarterly performance report.
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
	<ul> <li>Yes</li> </ul>
	• No
Logic: None – all respond	Required: Yes
Data collection level: Project	Data collection frequency: Quarterly
Farms enrolled	
Data element name: Farms enrolled	<b>Reporting question:</b> Did the project enroll any producers or fields this quarter?
	rolled producers or fields. If enrollment activities occurred this quarter, eld Enrollment worksheets (Tables 4 and 5) as part of the quarterly
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
inning the Bullet Mark As (St. State and relative Auth Common Co.) of Collection (And Collection Collection)	• Yes
	• No
Logic: None – all respond	Required: Yes
Data collection level: Project	Data collection frequency: Quarterly
GHG calculation methods	
Data element name: GHG calculation	Reporting question: What methods is the project using to
methods	calculate GHG benefits?
	efits 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     Roth
Logic: None – all respond	Both  Required: Yes
	A STATE OF THE STA
Data collection level: Project	Data collection frequency: Quarterly

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GHG cumulative calculation

Data element name: GHG cumulative Reporting question: What method(s) was used to calculate the

calculation total cumulative GHG benefits reported here?

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

project this quarter.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Models

Direct field measurements

• Both

Logic: None – all respond Required: Yes

Data collection level: Project Data collection frequency: Quarterly

**Cumulative GHG benefits** 

Data element name: Cumulative GHG Reporting question: What are the project's estimated total GHG

benefits emission reductions (CO2eq) to date?

Description: Total cumulative estimated greenhouse gas emission reductions from practice implementation.

This is updated quarterly. If there are no changes, enter the same number as the previous quarter.

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons CO<sub>2</sub>eq Allowed values: 0-10,000,000

Logic: None – all respond Required: Yes

Data collection level: Project Data collection frequency: Quarterly

Cumulative carbon stock

Data element name: Cumulative carbon Reporting question: How much carbon has the project

stock sequestered to date?

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

one ton of carbon = 3.67 tons of CO2eq.

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons CO<sub>2</sub>eq Allowed values: 0-10,000,000

Logic: None – all respond Required: Yes

Data collection level: Project Data collection frequency: Quarterly

Cumulative CO2 benefit

Data element name: Cumulative CO2 Reporting question: What are the project's estimated total

benefit cumulative CO2 emission reductions to date?

Description: Estimated total cumulative carbon dioxide emission reductions based on practice implementation.

This is updated quarterly. If there are no changes, enter the same number as the previous quarter.

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons CO<sub>2</sub> Allowed values: 0-10,000,000

Logic: None – all respond Required: Yes

Data collection level: Project Data collection frequency: Quarterly

**Cumulative CH4 benefit** 

Data element name: Cumulative CH4 benefit Reporting question: What are the project's estimated total

CH4 emission reductions to date?

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

of CH<sub>4</sub> = 25 tons of CO<sub>2</sub>eq.

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons CH4 reduced in Allowed values: 0-10,000,000

CO<sub>2</sub>eq

Logic: None – all respond Required: Yes

Data collection level: Project Data collection frequency: Quarterly

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Cumulative N20 benefit

Data element name: Cumulative N2O benefit Reporting question: What are the project's estimated total

N2O emission reductions to date?

Allowed values: 0-10,000,000

**Description:** Estimated total cumulative nitrous oxide reduction based on practice implementation. This is updated quarterly. If there are no updated numbers enter the same number as the previous quarter.

Conversion rate is one ton of  $N_2O = 298$  tons of  $CO_2eq$ .

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons N2O reduced in

CO<sub>2</sub>eq

Data collection level: Project Data collection frequency: Quarterly

Offsets produced

Logic: None - all respond

Data element name: Offsets produced Reporting question: How many carbon offsets have been

produced in the project?

Required: Yes

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?

Allowed values: 0-500

**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

Logic: Respond if >0 to 'Offsets produced'

Required: Yes

Data collection level: Project

Data collection frequency: Quarterly

Insets produced

Data element name: Insets produced Reporting question: How many carbon insets have been

produced in the project?

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

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons CO<sub>2</sub>eq 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: DecimalSelect multiple values: NoMeasurement unit: DollarsAllowed 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

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Partner ID Unique Project ID for each partner

Partner name

Data element name: Name of partner organization Reporting question: What is the official name of the

recipient or partner organization?

Description: Legal name of recipient or partner organization

Data type: Text

Measurement unit: NA

Allowed values: Text

Allowed values: Text

Logic: None – all respond Required: Yes

Data collection level: Partner Data collection frequency: Partnership initiation

Partner type

Data element name: Type of partner organization Reporting question: What type of organization is this?

Description: Legal/financial structure of recipient or partner organization

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Commodity groups (501c5)

For-profitIndividualNonprofit

State or local agency

Tribal agencyUniversityRequired: Yes

Data collection level: Partner Data collection frequency: Partnership initiation

**Partner POC** 

Logic: None - all respond

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?
Data type: List Measurement unit: Category	Select multiple values: No
950 B	Allowed values:  • Yes  • No  • I don't know  Required: Yes
Logic: No response for recipient	<ul> <li>Yes</li> <li>No</li> <li>I don't know</li> <li>Required: Yes</li> </ul>
Logic: No response for recipient  Data collection level: Partner	<ul><li>Yes</li><li>No</li><li>I don't know</li></ul>
Logic: No response for recipient  Data collection level: Partner	<ul> <li>Yes</li> <li>No</li> <li>I don't know</li> <li>Required: Yes</li> <li>Data collection frequency: Partnership initiation</li> <li>Reporting question: What is the total amount of funding the partner has requested to date from this</li> </ul>
Logic: No response for recipient  Data collection level: Partner  Partner total requested  Data element name: Partner total requested  Description: Cumulative (total) amount of funds tha recipient from the start of the partnership to the envalue must be the sum of all previous entries plus the there are no changes, report the value from the previous to the partnership to the previous entries plus the there are no changes, report the value from the previous entries.	Yes No I don't know Required: Yes Data collection frequency: Partnership initiation  Reporting question: What is the total amount of funding the partner has requested to date from this project? It the partner has requested reimbursement for from the d of the reporting quarter. For each quarter's data entry, the amount of funds requested in the reporting quarter. If vious quarter.
Logic: No response for recipient  Data collection level: Partner  Partner total requested  Data element name: Partner total requested  Description: Cumulative (total) amount of funds tha recipient from the start of the partnership to the envalue must be the sum of all previous entries plus the there are no changes, report the value from the previous type: Decimal	Yes     No     I don't know Required: Yes Data collection frequency: Partnership initiation  Reporting question: What is the total amount of funding the partner has requested to date from this project?  It the partner has requested reimbursement for from the d of the reporting quarter. For each quarter's data entry, the amount of funds requested in the reporting quarter. If vious quarter.  Select multiple values: NA
Logic: No response for recipient  Data collection level: Partner  Partner total requested  Data element name: Partner total requested  Description: Cumulative (total) amount of funds tha recipient from the start of the partnership to the envalue must be the sum of all previous entries plus the there are no changes, report the value from the previous type: Decimal  Measurement unit: Dollars	Yes No I don't know Required: Yes Data collection frequency: Partnership initiation  Reporting question: What is the total amount of funding the partner has requested to date from this project? If the partner has requested reimbursement for from the d of the reporting quarter. For each quarter's data entry, the amount of funds requested in the reporting quarter. If vious quarter.  Select multiple values: NA Allowed values: \$0-\$100,000,000
Logic: No response for recipient  Data collection level: Partner  Partner total requested  Data element name: Partner total requested  Description: Cumulative (total) amount of funds tha recipient from the start of the partnership to the envalue must be the sum of all previous entries plus the there are no changes, report the value from the previous type: Decimal	Yes     No     I don't know Required: Yes Data collection frequency: Partnership initiation  Reporting question: What is the total amount of funding the partner has requested to date from this project?  It the partner has requested reimbursement for from the d of the reporting quarter. For each quarter's data entry, the eamount of funds requested in the reporting quarter. If vious quarter.  Select multiple values: NA

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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

Reporting question: What types of training has the Data element name: Training type 1-3 provided

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

Allowed values: Measurement unit: Category

- 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 frequency: Quarterly Data collection level: Partner

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. Select multiple values: No Data type: List

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 Reporting question: What type of marketing channel is used to

sell this commodity?

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Agricultural marketing board

Biorefinery

Commodity broker

Direct to consumer

Direct to institution

Direct to restaurant

Distributor (including grain elevators)

Food hub or cooperative

Food processor

Non-food byproducts processor

Retailer

USDA

Other (specify)

Logic: None - all respond Required: Yes

Data collection level: Project Data collection frequency: Quarterly

Number of buyers

Data element name: Number of buyers Reporting question: How many buyers are there in this

marketing channel?

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

Data type: Integer Select multiple values: No Allowed values: 1-500 Measurement unit: Count

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

Logic. None – an respond

Data collection level: Project Data collection frequency: Quarterly

Marketing channel geography

Data element name: Marketing channel Reporting question: What is the primary geography of the

geography 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:

LocalRegionalNational

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

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 Reporting question: What percent of the price premium is producer

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 Allowed values: 0-100 Measurement unit: Percent

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

Allowed values: Measurement unit: Category

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

Other (specify)

Logic: None - all respond Required: Yes

Data collection level: Project Data collection frequency: Quarterly

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#### Marketing channel identification method

**Data element name:** Marketing channel identification method 1-3

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

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

Data type: List Select multiple values: No

Measurement unit: Category

#### Allowed values:

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

Logic: None – all respond

Data collection level: Project

Data collection frequency: Quarterly

### Traceability method

Data element name: Traceability method

**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

Data collection level: Project

Required: Yes

Data collection frequency: Quarterly

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#### Producer Enrollment

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

Producer data change

Data element name: Producer data change Reporting question: Is there new/updated

information for a producer who is re-enrolling in the

project?

Description: Indicates that there is new or updated information for a producer who had previously enrolled in

the project and is re-enrolling.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Yes
 No

Logic: None – all respond Required: Yes

Data collection level: Producer Data collection frequency: Re-enrollment

Producer start date

Data element name: Producer start date Reporting question: When did the producer enroll in

the project?

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

Data type: Date Select multiple values: NA

Measurement unit: MM/DD/YYYY Allowed values: 01/01/2023 – 12/31/2030

Logic: None – all respond Required: Yes

Data collection level: Producer Data collection frequency: Initial enrollment

**Producer name** 

Data element name: Producer name Reporting question: What is the name of producer

enrolled in the project?

Description: Name of the producer enrolled in the project; the name must match the name contained in the

customer's Business Partner record and the Farm Operating Plan in FSA Business File for that Farm ID.

Data type: Text Select multiple values: NA

Measurement unit: NA Allowed values: Text

Logic: None – all respond Required: Yes

Data collection level: Producer Data collection frequency: Initial enrollment

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#### Underserved status

Data element name: Underserved status

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

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

Data type: List Select multiple values: No

Measurement unit: Category

Allowed values:

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

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

Logic: None - all respond

### Allowed values:

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

Logic: None - all respond

Required: Yes

Data collection level: Producer

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

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Total crop area

Data element name: Total crop area Reporting question: What percent of the current operation is

cropland?

**Description:** Area of the total farm that is currently used as cropland. If a producer is enrolled in the project for multiple years, review the total crop area each time a new contract is signed and provide any necessary

updates.

Data type: Integer Select multiple values: No
Measurement unit: Acres Allowed values: 0-100,000

Logic: None – all respond Required: Yes

Data collection level: Producer Data collection frequency: Initial enrollment and subsequent

enrollment(s), if applicable

Total livestock area

Data element name: Total livestock Reporting question: What amount of the current operation is used for

area livestock (by area)?

**Description:** Area of the total farm that is currently used for pasture, grazing, rangeland; or animal housing, feeding or milking. If a producer is enrolled in the project for multiple years, review the total livestock area each

time a new contract is signed and provide any necessary updates.

Data type: Integer Select multiple values: No Measurement unit: Acres Allowed values: 0-100,000

Logic: None – all respond Required: Yes

Data collection level: Producer Data collection frequency: Initial enrollment and subsequent

enrollment(s), if applicable

Total forest area

Data element name: Total forest area Reporting question: What amount of the current operation is forested

(by area)?

**Description:** Area of the total farm that is currently considered forest land use. Forest land use means that at least 10% of the land area is covered in trees that will be at least 13 feet tall when mature. If a producer is enrolled in the project for multiple years, review the total forest area each time a new contract is signed and

provide any necessary updates.

Data type: Integer Select multiple values: No
Measurement unit: Acres Allowed values: 0-100,000

Logic: None – all respond Required: Yes

Data collection level: Producer Data collection frequency: Initial enrollment and subsequent

enrollment(s), if applicable

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Livestock type

Data element name: Livestock type 1-3

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

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

Data type: List Select multiple values: No

Measurement unit: Category

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- 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)

Required: Yes

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

Livestock head

Data element name: Livestock head 1-3

Logic: Respond if 'Total livestock area' >0

Data collection level: Producer

**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

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Data element name: Organic farm

Reporting question: Is any part of the farm currently USDAcertified 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

Allowed values: Measurement unit: Category

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.

Select multiple values: No Data type: List

Measurement unit: Category

Allowed values:

Financial benefit

Environmental benefit

New market opportunity

Partnerships or networks

Other

Logic: None - all respond

Data collection level: Producer

Required: Yes

Data collection frequency: Initial enrollment

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Prog	ucer	outrea	cn

Data element name: Producer outreach 1- 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

Data collection level: Producer

Required: Yes

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

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CSAF federal funds

Data element name: CSAF federal funds Reporting question: Were prior CSAF practices supported by

federal funds?

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Yes

No

I don't know

Logic: Respond if yes to 'CSAF experience' Required: Yes

Data collection level: Producer Data collection frequency: Initial enrollment

CSAF state or local funds

Data element name: CSAF state or local Reporting question: Were prior CSAF practices supported by

unds 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

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#### **CSAF** market incentives

Data element name: CSAF market incentives Reporting question: Were CSAF practices supported by market

incentives?

**Description:** If this farm (under the primary operator) has implemented CSAF practices in the last ten years, was implementation supported by market incentives? Market incentives include premiums paid by a commodity

buyer or by a consumer based on branding or labeling as a climate-smart commodity.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Yes

No

I don't know

Logic: Respond if yes to 'CSAF experience'

Required: Yes

Data collection level: Producer Data collection frequency: Initial enrollment

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#### Field Enrollment

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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:

YesNo

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Re-enrollment

Contract start date

Data element name: Contract start date Reporting question: What is the start date of the

contract with the producer that includes this field?

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

Data type: Date Select multiple values: NA

Measurement unit: MM/DD/YYYY Allowed values: 01/01/2023 – 12/31/2030

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

Total field area

Data element name: Total field area Reporting question: What is the total size of the

enrolled field?

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

Data type: Decimal Select multiple values: No Measurement unit: Acres Allowed values: .01-500

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

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

Commodity category				
Data element name: Commodity category	Reporting question: What category of			
MOVE ON DIRECT SECTION MADE OF MADE OF ME OF MEDICAL PROPERTY.	commodity(ies) is (are) produced from this field			
Description: Category of commodity(ies) produced in fie	ld enrolled in the project			
Data type: List	Select multiple values: No			
Measurement unit: Category	Allowed values:			
	<ul> <li>Crops</li> </ul>			
	<ul> <li>Livestock</li> </ul>			
	<ul> <li>Trees</li> </ul>			
	<ul> <li>Crops and livestock</li> </ul>			
	<ul> <li>Crops and trees</li> </ul>			
	<ul> <li>Livestock and trees</li> </ul>			
B	<ul> <li>Crops, livestock and trees</li> </ul>			
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			
attractive transfer to the same of with the same	produced from this field?			
<b>Description:</b> Type of commodity produced in field enrolled				
worksheet provides a drop-down list of the allowed value	es. 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			
	turni de centatas			
Logic: None – all respond	Required: Yes			
Data collection level: Field	Data collection frequency: Initial enrollment			
Baseline yield				
Data element name: Baseline yield	<b>Reporting question:</b> What is the baseline yield of this field?			
Description: Average annual yield of commodity in 3 year				
field if possible. If not at field level, provide average annu	The state of the first of the state of the s			
Data type: Decimal	Select multiple values: No			
Data type: Decimal				
Measurement unit: Production per acre or animal	Allowed values: .01-100,000			
The state of the s	Allowed values: .01-100,000 Required: Yes			

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Base		

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 acreTons per acre

Other (specify)
 Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

**Baseline yield location** 

Logic: None - all respond

Data element name: Baseline yield location Reporting question: For what portion of the operation is the

baseline yield being reported?

Description: Location of the reported average annual yield of commodity in 3 years prior to enrollment. If

"other" is chosen, use the additional column to enter the appropriate location as free text.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Enrolled field

Whole operation

Other (specify)

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

Field land use

Data element name: Field land use Reporting question: What is this field's land use history?

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Crop land

Forest land

Non-agriculture

Other agricultural land

Pasture

Range

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

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Field irrigated

Data element name: Field irrigated Reporting question: What is this field's irrigation history?

Description: Prior to enrollment, what was the most common irrigation practice on this field the past 3 years?

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

. Na ledantina

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

Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

Field tillage

Logic: None - all respond

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

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Practice pas	st extent - farm	1
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Data element name: Practice past extent - Reporting question: What percent of the farm has

farm implemented this CSAF practice (combination) previously?

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Never used

Used on less than 25% of operation

Used on 25-50% of operation
 Used on 51-75% of operation

· Used on more than 75% of operation

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

Field any CSAF practice

Data element name: Field any CSAF practice Reporting question: What is this field's prior experience with

CSAF practices?

Description: Prior to enrollment, have any CSAF practice or practices been used in this field in the past 3 years?

CSAF practices are included in a list in Appendix A.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

YesNo

I don't know
 Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

Practice past use - this field

Logic: None - all respond

Data element name: Practice past use - this F

ield

Reporting question: Have this CSAF practice (combination)

been implemented previously in this field?

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

• Yes

SomeNo

I don't know

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

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Practice type

Data element name: Practice type 1-7 Reporting question: What CSAF practice is being implemented

in this field through the project?

**Description:** Which CSAF practice or practices will be implemented on this field as part of enrollment in the project? CSAF practices are included in a list in Appendix A. The worksheet provides seven columns for this data element. Enter one value for each column. If there are fewer than 7 practices being implemented on this field through enrollment in the project, leave unnecessary columns blank.

Data type: List Select multiple values: No

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

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

**Practice standard** 

Data element name: Practice standard 1-7 Reporting question: What standard does the CSAF practice

follow?

**Description:** Is the CSAF practice being implemented on the field as part of enrollment in the project following a defined practice standard? The worksheet provides seven columns for this data element. Enter one value for each column, corresponding to the practice types entered in the previous columns. If there are fewer than 7 practices being implemented on this field through enrollment in the project, leave unnecessary columns blank.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

NRCS

Other (specify)

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

Planned practice implementation year

Data element name: Practice 1-7 Reporting question: What year is the CSAF practice planned to

implementation year 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

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Practice extent unit

Data element name: Practice 1-7 Reporting question: Unit for extent of practice implementation

extent unit

Description: Unit for extent of practice implementation on the field specified by the contract. If "other" is

chosen, use the additional column to enter the appropriate unit.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Acres

Head of livestock

Linear feet

Square feet

Other (specify)

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

### **CSAF Practice Sub-questions**

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

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#### Farm Summary

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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 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 Allo

#### 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 Reporting question: What is the total value of financial

amount 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: DecimalSelect multiple values: NAMeasurement unit: DollarsAllowed values: \$0-\$5,000,000

Logic: None – all respond Required: Yes

Data collection level: Producer Data collection frequency: Quarterly

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#### Incentive reason

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

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

Select multiple values: No Data type: List

Allowed values: Measurement unit: Category

- 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)

Required: Yes

Data collection level: Producer Data collection frequency: Quarterly

#### Incentive structure

Logic: None - all respond

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

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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)

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly

Payment on enrollment

Logic: None - all respond

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 Alle

Allowed values:

Full payment

Partial payment

 No payment Required: Yes

Data collection level: Producer

Logic: None - all respond

Data collection frequency: Quarterly

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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 paymentPartial 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 paymentPartial paymentNo payment

Logic: None – all respond

Data collection level: Producer

Required: Yes

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 paymentPartial paymentNo payment

Logic: None – all respond Required: Yes

Data collection level: Producer Data collection frequency: Quarterly

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### Field Summary

Unique IDs	Unio	que	IDs
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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 Reporting question: What is the unit of volume?

unit

Description: The unit associated with the volume of the commodity produced on the enrolled field. If "other" is

chosen, enter the appropriate value in the additional column.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Bushels

· Carcass weight pounds

Gallons

Head

Linear feet

Liveweight pounds

Pounds

Tons

Other (specify)

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Quarterly

Cost of implementation

Data element name: Cost of implementation Reporting question: What is the cost of practice

implementation in the field?

Description: Total annual estimated cost per unit of implementing the practice(s) in the enrolled field.

Data type: Decimal Select multiple values: No

Measurement unit: Dollars Allowed values: \$1-\$10,000,000

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Quarterly

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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

no because

Per linear foot

Per pound

Per ton

Other (specify)

Logic: None – all respond

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

Required: Yes

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 Reporting question: How were GHG impacts monitored in this

1-3 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 **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

**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 Reporting question: What methods are used to calculate GHG

calculations 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 Reporting question: What method was used to calculate the

calculation 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 Reporting question: What are the estimated total GHG emission

emission reductions reductions (CO2eq) in this field?

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

or annually, as appropriate.

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons CO<sub>2</sub>eq 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 Reporting question: How much carbon has been sequestered in

stock 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 CO<sub>2</sub>eq 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 Reporting question: What are the estimated total CO2 emission

emission reductions reductions in this field?

**Description:** Estimated total carbon dioxide emission reductions based on practice implementation in this field that are reported as part of the project's aggregate impact. This data element must be entered upon practice

completion or annually, as appropriate.

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons CO<sub>2</sub> 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 Reporting question: What are the estimated total CH4

reductions 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

Allowed values: 0-10,000,000

Allowed values: 0-10,000,000

completion or annually, as appropriate. Conversion rate is one ton of  $CH_4 = 25$  tons of  $CO_2$ eq.

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons CH4 reduced in

CO<sub>2</sub>eq

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Quarterly

Field official N20 ER

Data element name: Field official N2O emission Reporting question: What are the estimated total N2O

reductions emission reductions in this field?

**Description:** Estimated total nitrous oxide emission reductions based on practice implementation in this field that are reported as part of the project's aggregate impact. This data element must be entered upon practice

completion or annually, as appropriate. Conversion rate is one ton of  $N_2O = 298$  tons of  $CO_2eq$ .

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons N2O reduced in

CO₂eq

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Quarterly

Field offsets produced

Data element name: Field offsets produced Reporting question: How many carbon offsets have been

produced in this field?

Description: Total carbon offsets produced in the field during the quarter (not cumulative). Offsets are defined

as having been verified and certified using an accepted standard and sold into the carbon marketplace.

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons CO<sub>2</sub>eq 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 CO<sub>2</sub>eq 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 Reporting question: Were data collected from the field for

measurement 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

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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
- CultivateAl'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

Data collection level: Field

Required: If project calculates GHG benefits using multiple methods

eld Data collection frequency: Annual

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Model start date	
Data element name: Model start date	Reporting question: For what time period are the GHG benefits modeled (model start date)?
Description: Date that the model parameter	rs 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	<b>Reporting question:</b> For what time period are the GHG benefits modeled (model end date)?
Description: Date that the model parameter	rs 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	<b>Reporting question:</b> What is the alternate estimate of the field's total GHG emission reductions?
<b>Description:</b> Total greenhouse gas emission using an alternate model.	reductions from practice implementation in the field estimated
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  Description: Total change in carbon stock balternate model. Conversion rate is one ton Data type: Decimal	Reporting question: What is the alternate estimate of how much carbon has the field has sequestered? ased on practice implementation in the field estimated using an of carbon = 3.67 tons of CO₂eq.  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	2 12
Data element name: Total CO2 estimated	<b>Reporting question:</b> What is the alternate estimate of the field's total CO2 emission reductions?
<b>Description:</b> Total carbon dioxide emission using an alternate model.	reductions based on practice implementation in the field estimated
Data type: Decimal	Select multiple values: No
Measurement unit: Metric tons CO <sub>2</sub>	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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Total CH4 estimated	
Data element name: Total CH4 estimated	Reporting question: What is the alternate estimate of the field's total CH4 emission reductions?
<b>Description:</b> Total methane emission reductions based on praction an alternate model. Conversion rate is one ton of CH <sub>4</sub> = 25 tons	
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
otal field N20 estimated	
Data element name: Total N2O estimated	Reporting question: What is the alternate estimate of the field's total N2O emission reductions?
<b>Description:</b> Total nitrous oxide emission reductions based on using an alternate method. Conversion rate is one ton of $N_2O$ =	V
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

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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

Logic: None - all respond

Data element name: GHG measurement method

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

Description: Field-based measurement method used to calculate GHG benefits. If "other" is chosen, enter the

appropriate value as free text in the additional column.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

 Emissions measurement unit

Flux towers

Litterbags

Plant measurements

 Portable emissions analyzers

Soil flux chambers

Soil samplesSoil 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

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: TextSelect multiple values: NoMeasurement unit: NAAllowed values: Free textLogic: None – all respondRequired: If applicable

Data collection level: Field Data collection frequency: Annual

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٠,	V	Ver	25.5	35590	80396Z	12.00		

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

Data collection level: Field Data collection frequency: Annual

Total CO2 reduction calculated

Data element name: Total CO2 reduction calculated Reporting question: What are

the total measured CO2 emission reductions?

Description: Total annual CO2 emission reductions based on practice implementation in the field calculated

from in-field measurements.

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons CO<sub>2</sub> 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 Reporting question: What is the total amount of

measured carbon sequestered based on repeat measurements

in this field?

**Description:** Change in carbon stock based on practice implementation in the field calculated from repeat soil sampling in this field. (Results for initial field soil samples should be reported in the 'Soil sample result' and

'Measurement type" columns.) Conversion rate is one ton of carbon = 3.67 tons of CO<sub>2</sub>eq.

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons CO<sub>2</sub>eq 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	<b>Reporting question:</b> What are the total measured CH4 emission reductions?	
<b>Description:</b> Total annual methane emission reductions b		
from in-field measurements. Conversion rate is one ton o		
Data type: Decimal	Select multiple values: No	
Measurement unit: Metric tons CH4 reduced in CO <sub>2</sub> eq	Allowed values: 0-10,000,000	
Logic: None – all respond	Required: If a project conducts soil samples or takes carbon stock or greenhouse gas emission measurements in this field	
Data collection level: Field	Data collection frequency: Annual	
Total N20 reduction calculated		
Data element name: Total N2O reduction calculated	<b>Reporting question:</b> What are the total measured N2O emission reductions?	
Description: Total annual nitrous oxide emission reductio	ns based on practice implementation in the field	
calculated from in-field measurements. Conversion rate is	S S S	
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	<b>Reporting question:</b> What is the numeric result from this soil sample?	
<b>Description:</b> Results of measurement(s) taken to determine in a specified volume of soil).	ne the carbon stock of a soil (the tons of carbon found	
Data type: Decimal	Select multiple values: No	
Measurement unit: Amount	Allowed values: .00001-100,000	
Logic: None – all respond	<b>Required:</b> 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:

PercentPpmGrams

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 matterTotal organic carbonBulk 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

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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 Reporting question: Are environmental benefits other than

penefits 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 Reporting question: Are reductions in nitrogen losses being

ss 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 Reporting question: How much reduction in nitrogen losses

name: Reduction in nitrogen loss amount 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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February 2023	
Reduction in nitrogen loss amount unit	
	Reporting question: What is the unit for how much reduction in nitrogen losses have been measured in the field? uction in nitrogen losses that is measured and reported in the appropriate value as free text in the additional column.  Select multiple values: No
Measurement unit: Category	Allowed values:
	Kilograms
	Metric tons
	• Pounds
	Other (specify)
<b>Logic:</b> Respond if yes to 'Reduction in nitrogen loss'	Required: Yes
Data collection level: Field	Data collection frequency: Annual
Reduction in nitrogen loss purpose	
Data element name: Reduction in nitrogen loss purpose	<b>Reporting question:</b> What is the purpose of tracking reduction in nitrogen losses?
appropriate value as free text in the addition	
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
	Commodity marketing
	Producing insets
	<ul><li>Producing offsets</li><li>I don't know</li></ul>
	Other (specify)
<b>Logic:</b> Respond if yes to 'Reduction in nitrogen loss'	Required: Yes
Data collection level: Project	Data collection frequency: Annual
Reduction in phosphorus loss	
Data element name: Reduction in	Reporting question: Are reductions in phosphorus losses being
phosphorus loss	tracked in the field?
(A)	norus losses in the enrolled field. Tracking means at a minimum
using some form of monitoring and reporting Data type: List	Select multiple values: No
The same of the sa	SET WITH SET OF
Measurement unit: Category	Allowed values:  • Yes
	• No
	I don't know
<b>Logic:</b> Respond if yes to 'Environmental benefits'	Required: Yes
Data collection level: Field	Data collection frequency: Annual
Reduction in phosphorus loss amount	<u> </u>
Data element name: Reduction in	Reporting question: How much reduction in phosphorus losses
phosphorus loss amount	have been measured in the field?
Description: Total amount of reduction in ph	osphorus losses that is measured in the field.
Data type: Decimal	Select multiple values: No
Measurement unit: Amount Allowed values: 0-1,000,000	
<b>Logic:</b> Respond if yes to 'Reduction in phosphorus loss'	Required: Yes
Data collection level: Field	Data collection frequency: Annual

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Reduction in phosphorus loss amount unit	
Data element name: Reduction in	Reporting question: What is the unit for the reduction in
phosphorus loss amount unit	phosphorus losses measured in the field?
	duction in phosphorus losses that is measured in the enrolled field. If
"other" is chosen, enter the appropriate val	ue as free text in the additional column.
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
	<ul> <li>Kilograms</li> </ul>
	Metric tons
	<ul> <li>Pounds</li> </ul>
	Other (specify)
<b>Logic:</b> Respond if yes to 'Reduction in phosphorus loss'	Required: Yes
Data collection level: Field	Data collection frequency: Annual
Reduction in phosphorus loss purpose	
Data element name: Reduction in	Reporting question: What is the purpose of tracking reductions
phosphorus loss purpose	in phosphorus losses?
Description: Purpose of tracking reduction i	n phosphorus losses in the enrolled field. If "other" is chosen, enter
the appropriate value as free text in the add	ditional column.
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
	Commodity marketing
	<ul> <li>Producing insets</li> </ul>
	<ul> <li>Producing offsets</li> </ul>
	I don't know
	Other (specify)
Logic: Respond if yes to 'Reduction in	Required: Yes
phosphorus loss'	·
Data collection level: Field	Data collection frequency: Annual
Other water quality	
Data element name: Other water quality	Reporting question: Are other water quality metrics being
	tracked in the field?
Description: Project tracking of other water	quality metrics in the enrolled field. Tracking means at a minimum
using some form of monitoring and reportir	
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
and the second the second of t	• Yes
	• No
	I don't know
Logic: Respond if yes to 'Environmental	Required: Yes
E 526 E	

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Data collection frequency: Annual

benefits'

Data collection level: Field



Other water quality type	
Data element name: Other water quality	Reporting question: What type of other water quality metric
type	have been measured in the field?
measured in the field. If "other" is chosen, e	tric (besides nitrogen loss and phosphorus loss reductions) that is nter the appropriate value as free text in the additional column.
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
	<ul> <li>Sediment load reduction</li> </ul>
	Temperature
2 8 821 3 8	Other (specify)
<b>Logic:</b> Respond if yes to 'Other water quality'	Required: Yes
Data collection level: Field	Data collection frequency: Annual
Other water quality amount	
Data element name: Other water quality amount	<b>Reporting question:</b> How much reduction in other water quality metrics have been measured in the field?
CTALL TO CONTROL OF THE CONTROL	ther water quality metrics that is measured in the enrolled field.
Data type: Decimal	Select multiple values: No
Measurement unit: Amount	Allowed values: 0-1,000,000
<b>Logic:</b> Respond if yes to 'Other water quality'	Required: Yes
Data collection level: Field	Data collection frequency: Annual
Other water quality amount unit	
Data element name: Other water quality amount unit	<b>Reporting question:</b> What is the unit for the reduction in other water quality metrics measured in the field?
	duction in other water quality metrics that is measured in the appropriate value as free text in the additional column.  Select multiple values: No
Measurement unit: Category	Allowed values:
,	Degrees F
	Kilograms
	Kilograms per liter
	Metric tons
	• Pounds
	Other (specify)
<b>Logic:</b> Respond if yes to 'Other water quality'	Required: Yes
Data collection level: Field	Data collection frequency: Annual

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Other water quality purpose	
Data element name: Other water quality	Reporting question: What is the purpose of tracking other water
purpose	quality benefits?
	r quality benefits in the enrolled field. If "other" is chosen, enter the
appropriate value as free text in the addition	
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
	Commodity marketing
	Producing insets     Producing offsets
	<ul> <li>Producing offsets</li> <li>I don't know</li> </ul>
	Other (specify)
<b>Logic:</b> Respond if yes to 'Other water quality'	Required: Yes
Data collection level: Field	Data collection frequency: Annual
Water quantity	
Data element name: Water quantity	<b>Reporting question:</b> Is water conservation being tracked in the field?
<b>Description:</b> Tracking of water conservation	or reduction in use in the enrolled field. Tracking means at a
minimum using some form of monitoring an	d reporting that can quantify benefits.
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
	• Yes
	• No
	I don't know
<b>Logic:</b> Respond if yes to 'Environmental benefits'	Required: Yes
Data collection level: Field	Data collection frequency: Annual
Water quantity amount	
Data element name: Water quantity	Reporting question: How much water conservation has been
amount	measured in the field?
(F)	ation or reduction that is measured in the field.
Data type: Decimal	Select multiple values: No
Measurement unit: Amount	Allowed values: 0-1,000,000
Logic: Respond if yes to 'Water quantity'	Required: Yes
Data collection level: Field	Data collection frequency: Annual
Water quantity amount unit	
Data element name: Water quantity amount unit	Reporting question: What is the unit for the amount of water conservation measured in the field?
- 지지하고요(4) 2012년대로 이번을 하지만, 2014년 원래문지는 비를 하게 되었는 그런지 있었네요. 말을 10 하고하게 11억 보고 보다 (1)하다	ter conservation or reduced use that is measured and reported in
The state of the s	the appropriate value as free text in the additional column.
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
	Acre-feet
	Cubic feet
Leefa December 116 and 160	Other (specify)  Province A Vicentification
Logic: Respond if yes to 'Water quantity'	Required: Yes
Data collection level: Field	Data collection frequency: Annual

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Water quantity purpose		
Data element name: Water quantity	Reporting question: What is the purpose of tracking water	
purpose	conservation?	
and an analysis and the first and the second of the second	ervation or reductions in water use in the enrolled field. If "other" is	
chosen, enter the appropriate value as free		
Data type: List	Select multiple values: No	
Measurement unit: Category	Allowed values:	
	Commodity marketing	
	Producing insets	
	Producing offsets	
	<ul><li>I don't know</li><li>Other (specify)</li></ul>	
Logic: Respond if yes to 'Water quantity'	Required: Yes	
Data collection level: Field	Data collection frequency: Annual	
Reduced erosion	Data concetton requestey. Almaai	
Data element name: Reduced erosion	Reporting question: Is reduced soil erosion being tracked in the	
	field?	
	n in the enrolled field. Tracking means at a minimum using some	
form of monitoring and reporting that can q	Washing to the conference of t	
Data type: List	Select multiple values: No	
Measurement unit: Category	Allowed values:	
	• Yes	
	• No	
Logic: Respond if yes to 'Environmental	I don't know  Required: Yes	
benefits'	nequired. 1es	
Data collection level: Field	Data collection frequency: Annual	
Reduced erosion amount	27 59	
Data element name: Reduced erosion	Reporting question: How much erosion reduction has been	
amount	measured in the field?	
Description: Total amount of erosion reduct	ion 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	<b>Reporting question:</b> What is the unit for the amount of erosion reduction measured?	
Description: Unit for the total amount of ero	osion reduction from enrolled fields that is measured and reported	
	e appropriate value as free text in the additional column.	
Data type: List	Select multiple values: No	
Measurement unit: Category	Allowed values:	
	• Tons	
	<ul> <li>Other (specify)</li> </ul>	
Logic: Respond if yes to 'Reduced erosion'	Required: Yes	

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Data collection frequency: Annual

Data collection level: Field

Reduced erosion purpose			
Data element name: Reduced erosion	Reporting question: What is the purpose of tracking reduced		
purpose	erosion in the field?		
and the many and the control of the	osion 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:		
	<ul> <li>Commodity marketing</li> </ul>		
	<ul> <li>Producing insets</li> </ul>		
	<ul> <li>Producing offsets</li> </ul>		
	<ul> <li>I don't know</li> </ul>		
De 10 worth 1022-Mars at chapter Line 21 0000 bit	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	<b>Reporting question:</b> Is reduced energy use being tracked in the field?		
	in the enrolled field. Tracking means at a minimum using some		
form of monitoring and reporting that can q	Water and the control of the control		
Data type: List	Select multiple values: No		
Measurement unit: Category	Allowed values:		
	• Yes		
	• No		
	<ul> <li>I don't know</li> </ul>		
<b>Logic:</b> 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	Reporting question: How much energy use reduction has been		
amount	measured in the field?		
Description: Total amount of energy use rec	duction 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	2 2		
Data element name: Reduced energy use	Reporting question: What is the unit for the energy use		
unit	reduction measured in the field?		
Description: Unit for the total amount of en	ergy use reduction that is measured in the enrolled field. If "other"		
is chosen, enter the appropriate value as fre			
Data type: List	Select multiple values: No		
Measurement unit: Category	Allowed values:		
	Kilowatt hours		
	<ul> <li>Other (specify)</li> </ul>		
<b>Logic:</b> 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 Reporting question: What is the purpose of tracking reduced

urpose energy use in the field?

Description: Purpose of tracking reduced energy use in the enrolled field. If "other" is chosen, enter the

appropriate value as free text in the additional column.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Commodity marketingProducing insetsProducing offsets

I don't knowOther (specify)

Logic: Respond if yes to 'Reduced energy

use'

Required: Yes

Data collection level: Field Data collection frequency: Annual

Avoided land conversion

Data element name: Avoided land Reporting question: Is avoided land conversion being tracked in

conversion the field?

**Description:** Tracking of avoided land conversion in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits. Land conservation means land use changing from agricultural uses to non-agricultural uses.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Yes
 No

I don't know

Logic: Respond if yes to 'Environmental

benefits'

Required: Yes

Data collection level: Field Data collection frequency: Annual

Avoided land conversion amount

Data element name: Avoided land Reporting question: How much avoided land conversion has

conversion amount been measured in the field?

Description: Total amount of avoided land conversion that is measured in the enrolled field.

Data type: Decimal Select multiple values: No
Measurement unit: Amount Allowed values: 0-1,000,000

Logic: Respond if yes to 'Avoided land

conversion'

Required: Yes

Data collection level: Field Data collection frequency: Annual

Avoided land conversion amount unit

Data element name: Avoided land Reporting question: What is the unit for the amount of avoided

conversion unit land conversion measured in the field?

Description: Unit for the total amount of avoided land conversion that is measured in the enrolled field. If

"other" is chosen, enter the appropriate value as free text in the additional column.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Acres

Other (specify)

Logic: Respond if yes to 'Avoided land

conversion'

Required: Yes

Data collection level: Field Data collection frequency: Annual

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February 2023	same semblem verminde verminde verminde der die der der der der der verminde vermind
Avoided land conversion purpose	
Data element name: Avoided land conversion purpose  Description: Purpose of tracking avoided la appropriate value as free text in the additional control of the control of	Reporting question: What is the purpose of tracking avoided land conversion in the field? nd conversion in the enrolled field. If "other" is chosen, enter the enal column.
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
	Commodity marketing
	Producing insets
	Producing offsets
	I don't know     Other (apprile)
Logic: Respond if yes to 'Avoided land	Other (specify)  Required: Yes
conversion'	Required. Tes
Data collection level: Field	Data collection frequency: Annual
Improved wildlife habitat	
Data element name: Improved wildlife	Reporting question: Are improvements to wildlife habitat being
habitat	tracked in the field?
- 112	wildlife in and around the enrolled field. Tracking means at a
minimum using some form of monitoring a Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
weastrement unit. Category	• Yes
	• No
	I don't know
Logic: Respond if yes to 'Environmental	Required: Yes
benefits'	
Data collection level: Field	Data collection frequency: Annual
Improved wildlife habitat amount	Account of the representative transfer and the determinant of the Personal Control of the Personal Con
Data element name: Improved wildlife habitat amount	Reporting question: How much improved wildlife habitat has been measured in the field?
	dlife habitat that is measured in and around the enrolled fields.
Data type: Decimal	Select multiple values: No
Measurement unit: Amount	Allowed values: 0-1,000,000
Logic: Respond if yes to 'Improved wildlife	Required: Yes
habitat'	
Data collection level: Field	Data collection frequency: Annual
Improved wildlife habitat amount unit	
Data element name: Improved wildlife habitat unit	<b>Reporting question:</b> What is the unit for the amount of improved wildlife habitat measured in the field?
	nproved wildlife habitat that is measured in and around enrolled priate value as free text in the additional column.  Select multiple values: No
Alberta Maria	-omu a -2
Measurement unit: Category	Allowed values:  • Acres
	Linear feet
	Other (specify)
Legis, Dossand if yes to (Improved wildlife	Dominal Voc

Logic: Respond if yes to 'Improved wildlife

habitat'

Required: Yes

Data collection level: Field Data collection frequency: Annual

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Data collection level: Field

mproved wildlife habitat purpose	
Data element name: Improved wildlife habitat purpose	Reporting question: What is the purpose of tracking improved wildlife habitat in the field?
	wildlife habitat in the enrolled field. If "other" is chosen, enter the nal column.
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
	Commodity marketing
	<ul> <li>Producing insets</li> </ul>
	Producing offsets
	I don't know
	Other (specify)
<b>Logic:</b> Respond if yes to 'Improved wildlife habitat'	Required: Yes

Data collection frequency: Annual

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### **CSAF Practice Sub-questions**

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

Table 11. Follow-on questions for select CSAF practices

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

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		Coal
		Diesel
		Electricity
		Gasoline
	Fuel type before installation	Kerosene
	r der type before installation	Liquified petroleum gas (LPG)
		Natural gas
		Propane
		Wood
	-	Other (specify)
	Fuel amount before installation	0-1,000,000
		Cubic feet (natural gas)
	First successful buffers	Gallons (diesel, gasoline, propane, LPG, kerosene
	Fuel amount unit before	Kilowatt-hours (electricity)
	installation	Pounds (wood, coal)
Combustion System Improvement (CPS 372)		Other (specify)
	Fuel type after installation	Coal
		Diesel
		Electricity
		Gasoline
		Kerosene
		Liquified petroleum gas (LPG)
		Natural gas
		Propane
		Wood
		Other (specify)
	Fuel amount after installation	0-1,000,000
		Cubic feet (natural gas)
	Fuel amount unit after	Gallons (diesel, gasoline, propane, LPG, kerosene
		Kilowatt-hours (electricity)
	installation	Pounds (wood, coal)
		Other (specify)
	Species category (select most	Brassicas
Conservation Cover (CPS 327)		Grasses
	common/extensive type if	Legumes
	using more than one)	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
	Strip width (feet)	1-100
Contour Buffer Strips (CPS 332)	Species category	Grasses Forbs Mix
	Species category (select most common/extensive type if using more than one)	Brassicas Forbs Grasses Legume Non-legume broadleaves
Cover Crop (CPS 340)	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
	Crude protein (percent)	0-100
	Fat (percent)	0-100
Feed Management (CPS 592)	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	Species category (select most common/extensive type if using more than one)	Grasses Shrubs Trees
422)	Species density (number of trees planted per acre)	1-10,000
Herbaceous Wind Barriers (CPS 603)	Species category (select most common/extensive type if using more than one)	Forbs Grasses Mix Shrubs
	Barrier width (feet)	1-1,000
	Number of rows	1-100
Mulching (CPS 484)	Mulch type	Gravel Natural Synthetic Wood
	Mulch cover (percent of field)	0-100

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Nutrient management (CPS 590)	Nutrient type with CPS 590	Biosolids Commercial fertilizers Compost EEF (nitrification inhibitor) EEF (slow or controlled release) EEF (urease inhibitor) Green manure Liquid animal manure Organic by-products Organic residues or materials Solid/semi-solid animal manure Wastewater
	Nutrient application method with CPS 590	Banded Broadcast Injection Irrigation Surface application Surface application with tillage Variable rate
	Nutrient application method in the previous year	Banded Broadcast Injection Irrigation Surface application Surface application with tillage Variable rate
	Nutrient application timing with CPS 590	Single pre-planting Single post-planting Split pre- and post-planting Split post-planting
	Nutrient application timing in the previous year	Single pre-planting Single post-planting Split pre- and post-planting Split post-planting
	Nutrient application rate with CPS 590	0-20,000
	Nutrient application rate unit with CPS 590	Gallons per acre Pounds per acre
	Nutrient application rate change	Decrease compared to previous year Increase compared to previous year No change
Pasture and Hay Planting	Species category (select most common/extensive type if using more than one)	Cool-season broadleaf Cool-season grass Warm-season broadleaf Warm-season grass
(CPS 512)	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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		Forbs
	Species category (select most	Grasses
Range Planting (CPS 550)	common/extensive type if using more than	Legumes
	one)	Shrubs
	8420	Trees
Residue and Tillage	5 Z 9 9	None
Management – No-till (CPS 329)	Surface disturbance	Seed row only
M M		None
Residue and Tillage		Seed row/ridge tillage for
Management – Reduced	Surface disturbance	planting
Till (CPS 345)	Surface distarbance	Shallow across most of the soil
1111 (cr 3 343)		surface
		Vertical/mulch
	Species category (select most	Coniferous trees
Riparian Forest Buffer	common/extensive type if using more than	Deciduous trees
(CPS 391)	one)	Shrubs
(0.3331)	Species density (number of trees planted per acre)	1-10,000
		Ferns
	Consider anti-construction for first and and	Forbs
Riparian Herbaceous	Species category (select most	Grasses
Cover (CPS 390)	common/extensive type if using more than	Legumes
N 262	one)	Rushes
		Sedges
		Concrete
D - f 1 C 1 CDC		Flexible geomembrane
Roofs and Covers (CPS	Roof/cover type	Metal
367)		Timber
		Other (specify)
	Species category (select most	Coniferous trees
	common/extensive type if using more than	Deciduous trees
Cilvonacturo (CDC 201)	one)	Forage
Silvopasture (CPS 381)	S	Shrubs
	Species density (number of trees planted per acre)	1-10,000
	Strip width (feet)	1-1,000
		Erosion resistant crops
Stripcropping (CPS 585)	Crop category (select most common/extensive	Fallow
CARLOTTERS AND MARKS TO CARDON LOSS. SE ESSECTE SE	type if using more than one)	Sediment trapping crops
	Number of strips	2-100
	Species category (select most	Coniferous trees
Tues (Charles Carelly)	common/extensive type if using more than	Deciduous trees
Tree/Shrub Establishment	one)	Shrubs
(CPS 612)	Species density (number of trees planted per acre)	1-10,000
	Species category (select most	Grasses
Vegetative Barrier (CPS	common/extensive type if using more than	Grass forb mix
_		
601)	one)	Grass legume mix

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	Separation type	Chemical (e.g., salts, polymers) Mechanical (e.g., screens, presses)
Waste Separation Facility (CPS 632)		Settling basin
	Most common use of solids	Bedding
		Field applied
		Other (specify)
		Aerobic lagoon
		Anaerobic digester (complex mix) with
		N N N N N N N N N N N N N N N N N N N
		energy generation
		Anaerobic digester (plug flow) with
		energy generation
		Anaerobic lagoon
		Composting
		Covered lagoon (no energy generation or flaring)
Waste Storage Facility (CPS	Waste storage system prior to	Covered lagoon with energy generation
313)	installing your waste storage facility	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
		Biological
Waste Treatment (CPS 629)	Treatment type	Chemical
(i) and the second of the seco	readment type	Mechanical
		Aerobic lagoon
		Anaerobic digester (complex mix) with
		energy generation
		Anaerobic digester (plug flow) with
	Waste storage system prior to installing waste treatment lagoon	energy generation
		Anaerobic lagoon
		Composting
		Covered lagoon (no energy generation
		or flaring)
		Covered lagoon with energy generation
		Covered lagoon with flaring
Waste Treatment Lagoon		Daily spread
400 1400 14 HOUSE - 11 공연에 시청 중심하는 11 11 11 11 11 11 11 11 11 11 11 11 11		Deep bedding pack
(CPS 359)		Section of the contract of the
		Deep pit
		Dry lot
		Dry stacking/solid storage
		Pasture/Range/Paddock
		Poultry with bedding
		Poultry without bedding (e.g., high rise
	9:	Slurry tank/basin
	Is there a lagoon cover/crust?	Yes
	is there a lagoon cover/crustr	No
	Is there lagoon aeration?	Yes
	is there lagoun delation:	No

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

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#### Appendix A: Climate-smart Agriculture and Forestry Practices

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

309, Agrichemical Handling Facility 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

420, Wildlife Habitat Planting 327, Conservation Cover 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,

332, Contour Buffer Strips Plain Concrete

333, Amending Soil Properties with Gypsum Products 428B, Irrigation Water Conveyance, Ditch and Canal Lining,

334, Controlled Traffic Farming Flexible Membrane 336, Soil Carbon Amendment 428C, Irrigation Water Conveyance, Ditch and Canal Lining, 338, Prescribed Burning Galvanized Steel 340, Cover Crop 430, Irrigation Pipeline

342, Critical Area Planting 432, Dry Hydrant 345, Residue and Tillage Management, Reduced Till 436, Irrigation Reservoir

348, Dam, Diversion 441, Irrigation System, Microirrigation

350, Sediment Basin 442, Sprinkler System

443, Irrigation System, Surface and Subsurface 351, Well Decommissioning 447, Irrigation and Drainage Tailwater Recovery 353, Monitoring Well 355, Groundwater Testing 449, Irrigation Water Management

450, Anionic Polyacrylamide (PAM) Application 356, Dike and Levee

359, Waste Treatment Lagoon 453, Land Reclamation, Landslide Treatment 360, Waste Facility Closure 455, Land Reclamation, Toxic Discharge Control

362, Diversion 457, Mine Shaft and Adit Closing

366, Anaerobic Digester 460, Land Clearing

367, Roofs and Covers 462, Precision Land Forming and Smoothing

368, Emergency Animal Mortality Management 464, Irrigation Land Leveling 371, Air Filtration and Scrubbing 466, Land Smoothing

372, Combustion System Improvement 468, Lined Waterway or Outlet

373, Dust Control on Unpaved Roads and Surfaces 472, Access Control 374, Energy Efficient Agricultural Operation 484, Mulching

375, Dust Management for Pen Surfaces 490, Tree/Shrub Site Preparation 376, Field Operations Emissions Reduction 500, Obstruction Removal

378, Pond 511, Forage Harvest Management

379, Forest Farming 512, Pasture and Hay Planting 380, Windbreak/Shelterbelt Establishment and Renovation 516, Livestock Pipeline

520, Pond Sealing or Lining, Compacted Soil Treatment 381, Silvopasture

382, Fence 521, Pond Sealing or Lining, Geomembrane or 383, Fuel Break Geosynthetic Clay Liner

384, Woody Residue Treatment

521A, Pond Sealing or Lining, Flexible Membrane 386, Field Border 521B, Pond Sealing or Lining, Soil Dispersant 388, Irrigation Field Ditch 521C, Pond Sealing or Lining, Bentonite Sealant

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521D, Pond Sealing or Lining, Compacted Clay Treatment

522, Pond Sealing or Lining - Concrete

527, Sinkhole Treatment 528, Prescribed Grazing 533, Pumping Plant

543, Land Reclamation, Abandoned Mined Land 544, Land Reclamation, Currently Mined Land 548, Grazing Land Mechanical Treatment

550, Range Planting

554, Drainage Water Management

555, Rock Wall Terrace 557, Row Arrangement 558, Roof Runoff Structure

560, Access Road

561, Heavy Use Area Protection 562, Recreation Area Improvement

566, Recreation Land Improvement and Protection

570, Stormwater Runoff Control

572, Spoil Disposal 574, Spring Development 575, Trails and Walkways 576, Livestock Shelter Structure

578, Stream Crossing

580, Streambank and Shoreline Protection

582, Open Channel

584, Channel Bed Stabilization

585, Stripcropping

587, Structure for Water Control

588, Crosswind Ridges 589, Cross Wind Trap Strips 590, Nutrient Management

591, Amendments for Treatment of Agricultural Waste

592, Feed Management

595, Pest Management Conservation System

600, Terrace

601, Vegetative Barrier 602, Equitable Relief

603, Herbaceous Wind Barriers

604, Saturated Buffer 605, Denitrifying Bioreactor 606, Subsurface Drain 607, Surface Drain, Field Ditc

607, Surface Drain, Field Ditch 608, Surface Drain, Main or Lateral

609, Surface Roughening

610, Salinity and Sodic Soil Management

612, Tree/Shrub Establishment

614, Watering Facility 620, Underground Outlet 629, Waste Treatment 630, Vertical Drain 632, Waste Separation Facility

633, Waste Recycling 634, Waste Transfer

635, Vegetated Treatment Area636, Water Harvesting Catchment638, Water and Sediment Control Basin

640, Waterspreading 642, Water Well

643, Restoration of Rare or Declining Natural Communities

644, Wetland Wildlife Habitat Management 645, Upland Wildlife Habitat Management

646, Shallow Water Development and Management 647, Early Successional Habitat Development-Mgt

649, Structures for Wildlife

650, Windbreak/Shelterbelt Renovation

654, Road/Trail/Landing Closure and Treatment

655, Forest Trails and Landings 656, Constructed Wetland 657, Wetland Restoration 658, Wetland Creation 659, Wetland Enhancement 660, Tree-Shrub Pruning 666, Forest Stand Improvement

670, Energy Efficient Lighting System 672, Energy Efficient Building Envelope 736, Crop By-Product Transfer, interim 724, Water Treatment Facility, interim 735, Waste Gasification Facility, interim

737, Reduced Water and Energy Coffee Conveyance

System, interim

740, Pond Sealing and Lining, Soil Cement, interim

751, Individual Terrace, interim 753, Infiltration Ditch, interim 755, Well Plugging, interim

770, Livestock Confinement Facility, interim 775, Drainage Ditch Covering, interim 782, Phosphorus Removal System, interim 800, Controlling Existing Flowing Wells, interim

803, Water Well Disinfection, interim

805, Amending Soil Properties with Lime, interim

808, Soil Carbon Amendment, interim

809, Conservation Harvest Management, interim 810, Annual Forages for Grazing Systems, interim

812, Raised Beds, interim

815, Groundwater Recharge Basin or Trench, interim

817, On-Farm Recharge, interim

818, Water Conservation System, interim

821, Low Tunnel Systems, interim 823, Organic Management, interim

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

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Appendix B: Commodity List

CROPS CINNAMON HYBRID POPLAR TREES

ALFALFA CLOVER IDLE ALMONDS COCONUTS INDIGO

AMARANTH GRAIN COFFEE ISRAEL MELONS
APPLES CORN JACK FRUIT

APRICOTS COTTON ELS JERUSALEM ARTICHOKES

ARONIA (CHOKEBERRY) **COTTON UPLAND** JICAMA **ARTICHOKES CRANBERRIES JOJOBA ASPARAGUS** CRENSHAW MELON JUJUBE **ATEMOYA** CRUSTACEAN **JUNEBERRIES AVOCADOS CUCUMBERS** KENAF **BAMBOO SHOOTS** KHORASAN **CURRANTS BANANAS** DASHEEN **KIWIBERRY** BARLEY DATES **KIWIFRUIT** 

BEANS DURIAN KOCHIA (PROSTRATA)

BEETS EGGPLANT KOHLRABI

BIRDSFOOT/TREFOIL EINKORN KOREAN GOLDEN MELON

**BLUEBERRIES ELDERBERRIES KUMQUATS BREADFRUIT** LAMBS EAR **EMMER** BROCCOFLOWER FIGS LEEKS BROCCOLI **FINFISH LEMONS** BROCCOLINI FLAX **LENTILS BRUSSEL SPROUTS FLOWERS LESPEDEZA** FORAGE SOYBEAN/SORGHUM **BUCKWHEAT** LETTUCE CABBAGE GAILON LIMES GARLIC CACAO LONGAN **CACTUS GENIP** LOQUATS CAIMITO **GINGER** LYCHEE CALABAZA MELON GINSENG MANGOS **CALALOO** GOOSEBERRIES **MANGOSTEEN** 

CAMELINA GOURDS MAPLE SAP
CANARY MELON GRAPEFRUIT MAYHAW BERRIES
CANARY SEED GRAPES MEADOWFOAM
CANEBERRIES GRASS MILKWEED
CANISTEL GREENS MILLET

CANOLA GROUND CHERRY MIXED FORAGE
CANTALOUPES GUAMABANA/SOURSOP MOHAIR

CARAMBOLA (STAR FRUIT) **GUAR** MOLLUSK **CARROTS GUAVA** MORINGA **CASHEW GUAVABERRY MULBERRIES GUAYULE CASSAVA MUSHROOMS** CAULIFLOWER HAZEL NUTS MUSTARD CELERIAC **HEMP NECTARINES CELERY HERBS** NIGER SEED NON CHERIMOYA **HESPERALOE CHERRIES** HONEY OATS CHESTNUTS **HONEYBERRIES** OKRA CHICORY/RADICCHIO HONEYDEW **OLIVES ONIONS** CHINESE BITTER MELON HOPS

CHRISTMAS TREES HORSERADISH ORANGES
CHUFAS HUCKLEBERRIES PAPAYA

**TURKEYS** 

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

**PARSNIP STRAWBERRIES PASSION FRUITS** SUGAR BEETS **PAWPAW** SUGARCANE LIVESTOCK **PEACHES SUNFLOWERS ALPACAS PEANUTS** SUNN HEMP **BEEF COWS PEARS TANGELOS BEEFALO** 

PEARS TANGELOS BEEFALO
PEAS TANGERINES BUFFALO OR BISON
PECANS TANGORS CHICKENS (BROILERS)
PENNYCRESS TANGOS CHICKENS (LAYERS)
PEPPERS TANNIER DAIRY COWS

PERENNIAL PEANUTS TARO DEER TEA **DUCKS** PERIQUE TOBACCO TEFF **PERSIMMONS ELK** PINE NUTS TI **EMUS PINEAPPLE** TOBACCO CIGAR WRAPPER **EQUINE PISTACHIOS TOBACCO BURLEY GEESE TOBACCO BURLEY 31V GOATS** 

PITAYA/DRAGONFRUIT **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** 

**TOBACCO FLUE CURED** 

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 WAMPEE RHUBARB RICE WASABI RICE SWEET WATERMELON WAX JAMBOO FRUIT RICE WILD

RUTABAGA WHEAT

RYE WILLOW SHRUB
SAFFLOWER WINTER MELON
SAPODILLA WOLFBERRY/GOJI

SAPOTE YAM

SCALLIONS SESAME SHALLOTS SORGHUM

SORGHUM DUAL PURPOSE

SORGHUM FORAGE

**POTATOES SWEET** 

SOYBEANS SPELT SQUASH

STAR GOOSEBERRY

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# 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 <a href="https://www.usda.gov/climate-smart-commodities">www.usda.gov/climate-smart-commodities</a>. 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:

- 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 <a href="https://www.usda.gov/climate-smart-commodities">www.usda.gov/climate-smart-commodities</a> or an alternative location provided to the recipient by the National Program Officer. USDA may provide updates to the PCSC Project Reporting Workbook or submission methods to streamline the data collection process and/or reduce the burden on the recipient throughout the grant period. Generally, these updates will be provided at least 3 months in advance of any required changes. The recipient must not transfer any data to foreign governments or foreign entities without prior approval from USDA.

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

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

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

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

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

- 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.