

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

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

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Marketing Activities

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

Table 3. Marketing Activities elements

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

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Producer Enrollment

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

Table 4. Producer Enrollment elements

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

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Field Enrollment

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

Table 5. Field Enrollment elements

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

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Farm Summary

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

Table 6. Farm Summary elements

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

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Field Summary

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

Table 7. Field Summary elements

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

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GHG Benefits - Alternate Modeled

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

Table 8. GHG Benefits – Alternate Modeled elements

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

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
 - o Impacts of weather
- Plan for non-compliance

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

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

Field modeled GHG benefit reports

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

Field direct measurement results

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

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

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Data Descriptions

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

Unique IDs

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

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

State or territory of operation: State or territory name

County of operation: Physical county name

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

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

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Project Summary

Commodity type	
Data element name: Commodity type	Reporting question: What climate-smart commodity types are
	produced by this project?
	zed by the project. These commodities include those for whom
	or other types of marketing support. See full list of commodity options
in Appendix B. List one commodity per ro	
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
D	quarter of the commodity(ies) produced by this project?
	dity(ies) related to project activities. If sales are reported, complete the as part of the quarterly performance report.
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
	• Yes
	• No
Logic: None – all respond	Required: Yes
Data collection level: Project	Data collection frequency: Quarterly
Farms enrolled	
Data element name: Farms enrolled	Reporting question: Did the project enroll any producers or
	fields this quarter?
	rolled producers or fields. If enrollment activities occurred this quarter
	eld Enrollment worksheets (Tables 4 and 5) as part of the quarterly
performance report.	
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
	• Yes
Laste Name all managed	No 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
	Direct field measurementsBoth
Logic: None – all respond	Required: Yes
=	•
Data collection level: Project	Data collection frequency: Quarterly

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GHG cumulative calculation

Data element name: GHG cumulative **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 CO₂eq **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: DecimalSelect multiple values: NoMeasurement unit: Metric tons CO₂eqAllowed 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 CO₂ Allowed values: 0-10,000,000

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

Data collection level: Project Data collection frequency: Quarterly

Cumulative CH4 benefit

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

CH4 emission reductions to date?

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

of $CH_4 = 25$ tons of CO_2 eq.

Data type: DecimalSelect multiple values: NoMeasurement unit: Metric tons CH4 reduced inAllowed values: 0-10,000,000

CO₂eq

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

CO₂eq

Logic: None – all respond Required: Yes

Data collection level: Project Data collection frequency: Quarterly

Offsets produced

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

produced in the project?

Description: Total carbon offsets produced by enrolled project fields during the quarter. Offsets are defined as

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

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons CO₂eq Allowed values: 0-10,000,000

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

Data collection level: Project Data collection frequency: Quarterly

Offsets sale

Data element name: Offsets sale **Reporting question:** To what marketplace(s) were carbon offsets

sold?

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

List each marketplace name. Separate names with commas.

Data type: Text Select multiple values: NA

Measurement unit: Name Allowed values: Text

Logic: Respond if >0 to 'Offsets produced' **Required:** Yes

Offsets price

Data element name: Offsets price Reporting question: What was the average price of carbon

received for offsets?

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

Data type: Decimal Select multiple values: No

Measurement unit: Dollars per metric ton Allowed values: 0-500

Logic: Respond if >0 to 'Offsets produced' **Required:** Yes

Data collection level: Project Data collection frequency: Quarterly

Insets produced

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

produced in the project?

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

Data type: Decimal **Select multiple values**: No **Measurement unit:** Metric tons CO₂eq **Allowed values:** 0-10,000,000

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

Data collection level: Project Data collection frequency: Quarterly

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Cost of on-farm TA

Data element name: Cost of on-farm TA **Reporting question:** What is the total amount that has been

spent to provide on-farm TA?

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

previous quarter.

Data type: 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: 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

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
- Fmail
- 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

Logic: None - all respond

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)

Required: Yes

Data collection level: Project Data collection frequency: Quarterly

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Partner Activities

U	nic	ue	IDs

Partner ID Unique Project ID for each partner

Partner name

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

recipient or partner organization?

Description: Legal name of recipient or partner organization

Data type: Text Select multiple values: NA

Measurement unit: NA Allowed values: Text

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

Data collection level: Partner **Data collection frequency:** Partnership initiation

Partner type

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

Description: Legal/financial structure of recipient or partner organization

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Commodity groups (501c5)

For-profitIndividualNonprofit

State or local agency

Tribal agencyUniversity

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

Data collection level: Partner **Data collection frequency:** Partnership initiation

Partner POC

Data element name: Partner POC **Reporting question:** Who is the point of contact for

this project at the recipient or partner organization?

Description: Name of a point of contact for the recipient or partner organization

Data type: Text Select multiple values: NA

Measurement unit: NA Allowed values: Text

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

Data collection level: Partner **Data collection frequency:** Partnership initiation;

update as necessary

Partner POC email

Data element name: Partner POC email Reporting question: What is the point of contact's

email address?

Description: Email of the point of contact for the recipient or partner organization

Data type: Text Select multiple values: NA

Measurement unit: NA Allowed values: Text

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

Data collection level: Partner **Data collection frequency:** Partnership initiation;

update as necessary

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

Data collection level: Partner	Data collection frequency: Partnership initiation		
Partnership end date			
Data element name: Partnership end date	Reporting question: When did the partnership end?		

Description: Date that the partner organization and the recipient stopped formally partnering on the project

Data type: Date Select multiple values: NA

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

Logic: No response for recipient **Required:** Yes

Data collection level: Partner **Data collection frequency:** Partnership end quarter

New partnership

Data element name: New partnership **Reporting question:** Is this a new partnership?

Description: A new partnership means that the recipient and the partner organization have not had a formal

working relationship (under contract or on a grant) prior to the start of the project.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

asurement unit: Category

Allowed values:

Yes

NoI don't know

Logic: No response for recipient Required: Yes

Data collection level: Partner **Data collection frequency:** Partnership initiation

Partner total requested

Data element name: Partner total requested **Reporting question:** What is the total amount of funding the partner has requested to date from this

project?

Description: Cumulative (total) amount of funds that the partner has requested reimbursement for from the recipient from the start of the partnership to the end of the reporting quarter. For each quarter's data entry, the value must be the sum of all previous entries plus the amount of funds requested in the reporting quarter. If there are no changes, report the value from the previous quarter.

Data type: Decimal Select multiple values: NA

Measurement unit: Dollars Allowed values: \$0-\$100,000,000

Logic: No response for recipient **Required:** Yes

Data collection level: Partner **Data collection frequency:** Quarterly

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Total match contribution

Data element name: Total match contribution

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

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

Data type: Decimal Select multiple values: NA

Measurement unit: Dollars Allowed values: \$0-\$100,000,000

Logic: None - all respond Required: Yes

Data collection level: Partner Data collection frequency: Quarterly

Total match incentives

Data element name: Total match incentives

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

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

Data type: Decimal Select multiple values: NA

Measurement unit: Dollars **Allowed values:** \$0-\$100,000,000

Logic: None - all respond Required: Yes

Data collection level: Partner Data collection frequency: Quarterly

Match type

Data element name: Match type 1-3

Logic: None - all respond

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)

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

Allowed values: \$0-\$100,000,000 Measurement unit: Dollars

Logic: None - all respond Required: Yes

Data collection level: Partner **Data collection frequency:** Quarterly

Training type provided

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

organization provided to project partners?

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

Data type: List Select multiple values: No

Measurement unit: Category

Allowed values:

- Data collection
- Grant reporting
- Marketing opportunities
- Providing financial assistance
- Providing technical assistance
- Writing producer contracts

Other (specify) Required: Yes

Logic: None - all respond Data collection level: Partner Data collection frequency: Quarterly

Activity by partner

Data element name: Activity 1-3 by partner **Reporting question:** What types of activities has the

organization provided to the project?

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

Select multiple values: No Data type: List

Measurement unit: Category Marketing support

MMRV support

Allowed values:

- 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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Δ	CTIV	/ITV	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: TextSelect multiple values: NAMeasurement unit: NameAllowed values: Text

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

Data collection level: Partner Data collection frequency: Quarterly

Product source

Data element name: Product source Reporting question: Which companies provided the

supplies?

Description: Name of firm or company from which supplies were obtained.

Data type: Text Select multiple values: NA

Measurement unit: Name Allowed values: Text

Logic: Respond if text entered for 'Products supplied' **Required:** Yes

Data collection level: Partner Data collection frequency: Quarterly

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Marketing Activities

Commodity type

Data element name: Commodity type **Reporting question:** What type of commodity is produced by

the farmers enrolled in this project?

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

the FSA commodity list in Appendix B and choose the commodity from the list. **Data type:** List **Select multiple values:** No

Measurement unit: Category Allowed values: FSA commodity list

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

Data collection level: Project Data collection frequency: Quarterly

Marketing channel type

Data element name: Marketing channel Reporting question: What type of marketing channel is used to

ype 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 restaurantDistributor (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: IntegerSelect multiple values: NoMeasurement unit: CountAllowed values: 1-500

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

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Data element name: Names of buyers **Reporting question:** What are the names of all of the buyers in

this marketing channel?

Description: Provide the names of all buyers in this marketing channel. Separate each name with a comma.

Data type: Text Select multiple values: NA

Measurement unit: Name Allowed values: Text

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

Data collection level: Project Data collection frequency: Quarterly

Marketing channel geography

Data element name: Marketing channel **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:

LocalRegionalNationalGlobal

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

Data collection level: Project Data collection frequency: Quarterly

Value sold

Data element name: Value sold **Reporting question:** What is the value of the commodity sold in

this marketing channel?

Description: The dollar value of the commodity sold in this marketing channel this quarter (non-cumulative).

Data type: Decimal Select multiple values: No

Measurement unit: Dollars Allowed values: \$1-\$100,000,000

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

Data collection level: Project Data collection frequency: Quarterly

Volume sold

Data element name: Volume sold **Reporting question:** What is the volume of the commodity sold

in this marketing channel?

Description: The volume of the commodity sold in this marketing channel this quarter (non-cumulative).

Data type: Decimal Select multiple values: No

Measurement unit: Number Allowed values: 1-100,000,000

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

Data collection level: Project **Data collection frequency:** Quarterly

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Volume sold unit

Data element name: Volume sold unit **Reporting question:** What is the unit of volume?

Description: The unit associated with the volume of the commodity sold in the marketing channel. If "other" is

chosen, use the additional column to enter the appropriate unit as free text.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Bales (500 pounds)

Bushels

Carcass pounds

Gallons

Kilograms

Linear board feet

Liveweight pounds

Metric tons

Pounds

Short tons

Other (specify)

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

Data collection level: Project Data collection frequency: Quarterly

Price premium

Data element name: Price premium Reporting question: What price premium is received for the

commodity sold in this marketing channel?

Description: The price premium received for the commodity sold in this marketing channel this quarter. Price

premium is the amount received above a 'business as usual' price.

Data type: DecimalSelect multiple values: NoMeasurement unit: DollarsAllowed 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 Measurement unit: Percent Allowed values: 0-100

Logic: None - all respond Required: Yes

Data collection level: Project Data collection frequency: Quarterly

Product differentiation method

Data element name: Product differentiation method 1-3 Reporting question: What methods are used

to differentiate climate-smart commodities in

this marketing channel?

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

Select multiple values: No Data type: List

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)

Required: Yes

Data collection level: Project Data collection frequency: Quarterly

Marketing method

Logic: None - all respond

Logic: None - all respond

Data element name: Marketing method 1-3 Reporting question: What methods are used to market

climate-smart commodities in this marketing channel?

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Label or badge used on packaging or marketing materials

Marketing partnership (e.g., promotion by buyer)

Print marketing campaign

Social media and digital marketing campaign

Verbal marketing campaign (e.g., radio, word of mouth)

Other (specify) 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

Select multiple values: No Data type: List

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

Data collection level: Project Data collection frequency: Quarterly

Traceability method

Logic: None - all respond

Data element name: Traceability method

Reporting question: What traceability methods are used for climatesmart commodities in this channel?

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

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

Logic: None - all respond Required: Yes

Data collection level: Project Data collection frequency: Quarterly

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<u>Producer Enrollment</u>

Unique IDs	U	nic	ıue	IDs
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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

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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, underserved

- Yes, small producer
- Yes, underserved and small producer
- I don't know

Required: No

Data collection level: Producer Data collection frequency: Initial enrollment

Total area

Logic: None - all respond

Reporting question: What is the total area of the farm? Data element name: Total area

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

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

Logic: None - all respond Required: Yes

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

enrollment(s), if applicable

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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

rea 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

(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: IntegerSelect multiple values: NoMeasurement unit: AcresAllowed values: 0-100,000

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

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

enrollment(s), if applicable

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Livestock type

Data element name: Livestock type 1-3

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

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

Data type: List Select multiple values: No

Measurement unit: Category

Allowed values:

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

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

Logic: Respond if 'Total livestock area' >0

Data collection level: Producer

Allowed values: 1-10,000,000

Required: Yes

Data collection frequency: Initial enrollment and

subsequent enrollment(s), if applicable

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	farm

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

Measurement unit: Category Allowed values:

Yes

No

I don't know

Logic: Respond if yes to 'Organic operation'

Required: No

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

subsequent enrollment(s), if applicable

Producer motivation

Data element name: Producer motivation Reporting question: Which of the following was the primary

reason the producer enrolled in this project?

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

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 Required: Yes

Data collection level: Producer Data collection frequency: Initial enrollment

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Producer outreach

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 **Required:** Yes

Data collection level: Producer Data collection frequency: Initial enrollment

CSAF experience

Data element name: CSAF experience **Reporting question:** Has the primary operator implemented CSAF practices in the last ten years anywhere on the farm?

CSAF practices in the last ten years anywhere on the farm? e-smart agriculture or forestry (CSAF) practices anywhere on t

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

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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

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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:

• Yes

• No
Logic: None – all respond Required: Yes

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

Contract start date

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

contract with the producer that includes this field?

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

Data type: Date Select multiple values: NA

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

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

Data collection level: Field Data collection frequency: Initial enrollment

Total field area

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

enrolled field?

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

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

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

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Commodity category	
Data element name: Commodity category	Reporting question: What category of commodity(ies) is (are) produced from this field?
Description: Category of commodity(ies) produce	* * * * * * * * * * * * * * * * * * * *
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
,	• Crops
	 Livestock
	 Trees
	 Crops and livestock
	 Crops and trees
	 Livestock and trees
	 Crops, livestock and trees
Logic: None – all respond	Required: Yes
Data collection level: Field	Data collection frequency: Initial enrollment
Commodity type	
Data element name: Commodity type	Reporting question: What type of commodity is produced from this field?
	l enrolled in the project. See full list in Appendix B. The ed values. Choose the appropriate value. Enter additional
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values: FSA commodity list
Logic: None – all respond	Required: Yes
	Data collection frequency: Initial enrollment
Data collection level: Field	
Data collection level: Field Baseline yield	

field if possible. If not at field level, provide average annual yield for the specific commodity for the operation.

Data type: Decimal

Select multiple values: No

Measurement unit: Production per acre or animal

Logic: None – all respond

Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

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Baseline yield unit

Data element name: Baseline yield unit Reporting question: Baseline yield unit

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Animal units per acre

- Bushels per acre
- busileis pei acie
- 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)

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

Baseline yield location

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

baseline yield being reported?

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

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Enrolled fieldWhole 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 landNon-agriculture
- Other agricultural land
- PastureRange

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

Data collection level: Field **Data collection frequency:** Initial enrollment

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

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

No irrigation

• 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	past	extent	- farm
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Data element name: Practice past extent -

farm

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

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

Data type: List Select multiple values: No

Measurement unit: Category

Allowed values:

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

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

Data collection level: Field Data collection frequency: Initial enrollment

Field any CSAF practice

Data element name: Field any CSAF practice

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

CSAF practices?

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

CSAF practices are included in a list in Appendix A.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

• Yes

- No
- I don't know

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

Data collection level: Field Data collection frequency: Initial enrollment

Practice past use - this field

Data element name: Practice past use - this

field

Reporting question: Have this CSAF practice (combination)

been implemented previously in this field?

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

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

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

Data collection level: Field **Data collection frequency:** Initial enrollment

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Practice type

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

in this field through the project?

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

Data type: List Select multiple values: No

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

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

Data collection level: Field Data collection frequency: Initial enrollment

Practice standard

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

follow:

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

NRCS

Other (specify)

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

Data collection level: Field Data collection frequency: Initial enrollment

Planned practice implementation year

Data element name: Practice 1-7 **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

Unique IDs

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

Producer TA received

Data element name: Producer TA received Reporting question: What types of technical assistance were 1-3 provided to this producer?

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Demonstration plots

Equipment demonstrations

Group field days or in-person field workshops

Hotline

One-on-one enrollment assistance

One-on-one field visits

One-on-one producer mentorship

Producer networks and peer-to-peer groups

Retailer consultation

Social media/digital tools

Train-the-trainer opportunities

Virtual meetings or field days

Webinars and videos

Written materials

None

Other (specify)

Logic: None - all respond Required: Yes

Data collection level: Producer Data collection frequency: Quarterly

Producer incentive amount

Reporting question: What is the total value of financial Data element name: Producer incentive

incentives provided to this producer? amount

Description: Total incentive payment received by the producer from USDA project funds for the year (non-

cumulative). Do not include incentive payments made with partner match funds.

Data type: Decimal Select multiple values: NA Measurement unit: Dollars Allowed values: \$0-\$5,000,000

Logic: None - all respond Required: Yes

Data collection level: Producer Data collection frequency: Quarterly

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Incentive reason

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

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

Data type: List Select multiple values: No

Measurement unit: Category Allo

Allowed values:

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

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

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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 transportationTuition or fees for training
- Other (specify)

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

Payment on enrollment

Data element name: Payment on

enrollment

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

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

Data type: List Select multiple values: No

Measurement unit: Category

Allowed values:Full paymentPartial payment

No payment

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

Payment on implementation

Data element name: Payment on implementation

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

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Full paymentPartial paymentNo paymentRequired: Yes

Logic: None - all respond

Data collection level: Producer Data collection frequency: Quarterly

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Payment on ha	rvest
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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 paymentNo 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 paymentRequired: Yes

Data collection level: Producer Data collection frequency: Quarterly

Payment on sale

Logic: None - all respond

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

U	ni	a	ue	ı	Ds

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

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

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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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

Nο

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

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

Allowed values: Measurement unit: Category

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

Logic: None – all respond

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

Allowed values: Measurement unit: Category

Yes

No

I don't know Required: Yes

Data collection level: Field Data collection frequency: Quarterly

Version 1.0 Page 50 of 87 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

Per linear foot

Per pound

Per ton

Other (specify)

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

Data collection level: Field Data collection frequency: Quarterly

Cost coverage

Data element name: Cost coverage **Reporting question:** What percent of the practice cost is

covered by the incentive?

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

incentives.

Data type: IntegerSelect multiple values: NoMeasurement unit: PercentAllowed 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

fie

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 Rep

Reporting question: How were GHG benefits reported for this

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 CO₂eq Allowed values: 0-10,000,000

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

Data collection level: Field Data collection frequency: Quarterly

Field official carbon stock

Data element name: Field official carbon **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: DecimalSelect multiple values: NoMeasurement unit: Metric tons CO2eqAllowed 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 CO₂ Allowed values: 0-10,000,000

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

Data collection level: Field Data collection frequency: Quarterly

Field official CH4 ER

Data element name: Field official CH4 emission 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 CH₄ = 25 tons of CO₂eq.

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons CH4 reduced in

CO₂eq

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 CO₂eq Allowed values: 0-10,000,000

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

Data collection level: Field **Data collection frequency:** Quarterly

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Field insets produced

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

produced in this field?

Description: Total carbon insets produced in the field during the quarter (not cumulative). Insets are defined as having been verified and certified using an accepted standard and accounted for within Scope 3 emissions for a

firm.

Data type: DecimalSelect multiple values: NoMeasurement unit: Metric tons CO2eqAllowed 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

Select martiple values. N

- Allowed values:

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

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

Data collection frequency: Annual

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February 2023	
Model start date	
Data element name: Model start date	Reporting question: For what time period are the GHG benefits modeled (model start date)?
Description: Date that the model parameters be	
Data type: Date	Select multiple values: NA
Measurement unit: MM/DD/YYYY	Allowed values: 01/01/1950 - 12/31/2030
Logic: None – all respond	Required: If project calculates GHG benefits using multiple methods
Data collection level: Field	Data collection frequency: Annual
Model end date	
Data element name: Model end date	Reporting question: For what time period are the GHG benefits modeled (model end date)?
Description: Date that the model parameters of	end.
Data type: Date	Select multiple values: NA
Measurement unit: MM/DD/YYYY	Allowed values: 01/01/2023– 12/31/2030
Logic: None – all respond	Required: If project calculates GHG benefits using multiple methods
Data collection level: Field	Data collection frequency: Annual
Total GHG benefits estimated	
Data element name: Total GHG benefits estimated	Reporting question: What is the alternate estimate of the field's total GHG emission reductions?
using an alternate model.	ductions from practice implementation in the field estimated
Data type: Decimal	Select multiple values: No
Measurement unit: Metric tons CO ₂ eq	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	Reporting question: What is the alternate estimate of how much
estimated Description: Total change in carbon stock hase	carbon has the field has sequestered? d on practice implementation in the field estimated using an
alternate model. Conversion rate is one ton of	
Data type: Decimal	Select multiple values: No
Measurement unit: Metric tons CO₂eq	Allowed values: 0-10,000,000
Logic: None – all respond	Required: If project calculates GHG benefits using multiple methods
Data collection level: Field	Data collection frequency: Annual
Total CO2 estimated	
Data element name: Total CO2 estimated	Reporting question: What is the alternate estimate of the field's total CO2 emission reductions?
using an alternate model.	luctions based on practice implementation in the field estimated
Data type: Decimal	Select multiple values: No
Measurement unit: Metric tons CO ₂	Allowed values: 0-10,000,000

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Data collection frequency: Annual

methods

Logic: None – all respond

Data collection level: Field

Required: If project calculates GHG benefits using multiple

Total CH4 estimated	
Data element name: Total CH4 estimated	Reporting question: What is the alternate estimate of the field's total CH4 emission reductions?
Description: Total methane emission reductions based on praction an alternate model. Conversion rate is one ton of $CH_4 = 25$ tor	
Data type: Decimal	Select multiple values: No
Measurement unit: Metric tons CH4 reduced in CO₂eq	Allowed values: 0-10,000,000
Logic: None – all respond	Required: If project calculates GHG benefits using multiple methods
Data collection level: Field	Data collection frequency: Annual
Total field N20 estimated	
Data element name: Total N2O estimated	Reporting question: What is the alternate estimate of the field's total N2O emission reductions?
Description: Total nitrous oxide emission reductions based on using an alternate method. Conversion rate is one ton of N_2O	practice implementation in the field estimated
Data type: Decimal	Select multiple values: No
Measurement unit: Metric tons N2O reduced in CO ₂ eq	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 collection level: Field

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 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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Measurement start date

Data element name: Measurement start date Reporting question: On what date did the

measurement start?

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

began.

Data type: Date Select multiple values: No

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

Logic: None – all respond Required: If a project conducts soil samples or takes

carbon stock or greenhouse gas emission

measurements in this field

Data collection level: Field Data collection frequency: Annual

Measurement end date

Data element name: Measurement end date Reporting question: On what date did the

measurement end?

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

were completed.

Data type: Date Select multiple values: No

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

Logic: None – all respond **Required:** If a project conducts soil samples or takes

carbon stock or greenhouse gas emission

measurements in this field

Data collection level: Field

Data collection frequency: Annual

Total CO2 reduction calculated

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

the total measured CO2 emission reductions?

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

from in-field measurements.

Data type: DecimalSelect multiple values: NoMeasurement unit: Metric tons CO2Allowed 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 CO₂eq.

Data type: DecimalSelect multiple values: NoMeasurement unit: Metric tons CO2eqAllowed values: 0-10,000,000

Logic: None – all respond **Required:** If a project conducts soil samples or takes

carbon stock measurements in this field

Data collection level: Field Data collection frequency: Annual

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Total CH4 reduction calculated			
Data element name: Total CH4 reduction calculated	Reporting question: What are the total measured CH4 emission reductions?		
Description: Total annual methane emission reductions be 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 ₂ 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	Reporting question: What are the total measured N2O emission reductions?		
Description: Total annual nitrous oxide emission reductions based on practice implementation in the field			
calculated from in-field measurements. Conversion rate i	•		
Data type: Decimal	Select multiple values: No		
Measurement unit: Metric tons N2O reduced in CO₂eq	Allowed values: 0-10,000,000		
Logic: None – all respond	Required: If a project conducts soil samples or takes		
	carbon stock or greenhouse gas emission		
	measurements in this field		
Data collection level: Field	Data collection frequency: Annual		
Soil sample result			
Data element name: Soil sample result	Reporting question: What is the numeric result from this soil sample?		
Description: Results of measurement(s) taken to determi	ne the carbon stock of a soil (the tons of carbon found		
in a specified volume of soil).			
Data type: Decimal	Select multiple values: No		
Measurement unit: Amount	Allowed values: .00001-100,000		
Logic: None – all respond	Required: If a project conducts soil samples in this field		
Data collection level: Field	Data collection frequency: Annual		

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Soil sample result unit

Data element name: Soil sample result unit **Reporting question:** What is unit for the soil sample result?

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

text.

Data type: List

Select multiple values: No

Measurement unit: Category Allowed values:

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 carbon

Bulk densityOther (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

	IDs

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

Environmental benefits

Data element name: Environmental **Reporting question:** Are environmental benefits other than

benefits 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 knowRequired: Yes

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

Reduction in nitrogen loss

Logic: None - all respond

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:

YesNo

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 elementReporting 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: DecimalSelect multiple values: NoMeasurement unit: AmountAllowed values: 0-1,000,000

Logic: Respond if yes to 'Reduction in

nitrogen loss'

Required: Yes

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

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Reduction	in	nitrogen	loss	amount unit
Neudchon		IIILIOGEII	1033	aiiiouiit uiiit

Data element name: Reduction in nitrogen **Reporting question:** What is the unit for how much reduction in

loss amount unit nitrogen losses have been measured in the field?

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

KilogramsMetric tonsPounds

Other (specify)Required: Yes

Logic: Respond if yes to 'Reduction in

nitrogen loss'

Data collection level: Field Data collection frequency: Annual

Reduction in nitrogen loss purpose

Data element name: Reduction in nitrogen **Reporting question:** What is the purpose of tracking reduction in

loss purpose nitrogen losses?

Description: Purpose of tracking reduction in nitrogen losses in the enrolled field. If "other" is chosen, enter the

appropriate value as free text in the additional column.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

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

Logic: Respond if yes to 'Reduction in

nitrogen loss'

Reduction in phosphorus loss

Data element name: Reduction in **Reporting question:** Are reductions in phosphorus losses being

Required: Yes

phosphorus loss tracked in the field?

Description: Tracking of reductions in phosphorus losses in the enrolled field. Tracking means at a minimum

using some form of monitoring and reporting that can quantify benefits.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

YesNo

I don't know

Logic: Respond if yes to 'Environmental

benefits'

Required: Yes

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

Reduction in phosphorus loss amount

Data element name: Reduction in **Reporting question:** How much reduction in phosphorus losses

phosphorus loss amount have been measured in the field?

Description: Total amount of reduction in phosphorus losses that is measured in the field.

Data type: DecimalSelect multiple values: NoMeasurement unit: AmountAllowed values: 0-1,000,000

Logic: 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?

Description: Unit for the total amount of reduction in phosphorus losses that is measured in the enrolled field. If

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Kilograms

Metric tonsPounds

Other (specify)Required: Yes

Logic: Respond if yes to 'Reduction in

phosphorus loss'

Data collection level: Field Data collection frequency: Annual

Reduction in phosphorus loss purpose

Data element name: Reduction in **Reporting question:** What is the purpose of tracking reductions

phosphorus loss purpose in phosphorus losses?

Description: Purpose of tracking reduction in phosphorus losses in the enrolled field. If "other" is chosen, enter

the appropriate value as free text in the additional column.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Commodity marketing

Producing insets

Producing offsetsI don't know

Other (specify)

Logic: Respond if yes to 'Reduction in

phosphorus loss'

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

Other water quality

Data element name: Other water quality **Reporting question:** Are other water quality metrics being

Required: Yes

tracked in the field?

Description: Project tracking of other water quality metrics in the enrolled field. Tracking means at a minimum

using some form of monitoring and reporting that can quantify benefits.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Yes

No

I don't know

Logic: Respond if yes to 'Environmental

benefits'

Required: Yes

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

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February 2023	
Other water quality type	
measured in the field. If "other" is chosen, e	Reporting question: What type of other water quality metric have been measured in the field? etric (besides nitrogen loss and phosphorus loss reductions) that is enter the appropriate value as free text in the additional column.
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values: Sediment load reduction Temperature Other (specify)
Logic: Respond if yes to 'Other water quality'	Required: Yes
Data collection level: Field	Data collection frequency: Annual
Other water quality amount	
Data element name: Other water quality amount Description: Total amount of reduction in o	Reporting question: How much reduction in other water quality metrics have been measured in the field? 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
Logic: Respond if yes to 'Other water quality'	Required: Yes
Data collection level: Field	Data collection frequency: Annual
Other water quality amount unit	
	Reporting question: 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

Logic: Respond if yes to 'Other water

quality'

Data collection level: Field

- Metric tons
- Pounds
- Other (specify)

Required: Yes

Data collection frequency: Annual

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February 2023	, .
Other water quality purpose	
Data element name: Other water quality purpose Description: Purpose of tracking other water of appropriate value as free text in the additional	Reporting question: What is the purpose of tracking other water quality benefits? quality benefits in the enrolled field. If "other" is chosen, enter the Il column. Select multiple values: No
Data type: List	
Measurement unit: Category Logic: Respond if yes to 'Other water	 Allowed values: Commodity marketing Producing insets Producing offsets I don't know Other (specify) Required: Yes
quality'	
Data collection level: Field	Data collection frequency: Annual
Water quantity	
Data element name: Water quantity	Reporting question: Is water conservation being tracked in the field?
minimum using some form of monitoring and	
Data type: List	Select multiple values: No Allowed values:
Measurement unit: Category Logic: Respond if yes to 'Environmental benefits'	 Yes No I don't know Required: Yes
Data collection level: Field	Data collection frequency: Annual
Water quantity amount	
Data element name: Water quantity amount Description: Total amount of water conservat	Reporting question: How much water conservation has been 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 concetton requency. Annual
Data element name: Water quantity	Reporting question: What is the unit for the amount of water
amount unit Description: Unit for the total amount of water	conservation measured in the field? er conservation or reduced use that is measured and reported in he appropriate value as free text in the additional column. Select multiple values: No
Measurement unit: Category	Allowed values: • Acre-feet

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Cubic feet Other (specify)

Data collection frequency: Annual

Required: Yes

Logic: Respond if yes to 'Water quantity'

Data collection level: Field

Water quantity purpose

Data element name: Water quantity Reporting question: What is the purpose of tracking water

purpose conservation?

Description: Purpose of tracking water conservation or reductions in water use in the enrolled field. If "other" is

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

Select multiple values: No Data type: List

Allowed values: Measurement unit: Category

> Commodity marketing **Producing insets Producing offsets**

I don't know Other (specify)

Logic: Respond if yes to 'Water quantity' Required: Yes

Data collection level: Field Data collection frequency: Annual

Reduced erosion

Data element name: Reduced erosion Reporting question: Is reduced soil erosion being tracked in the

Description: Tracking of reduced soil erosion in the enrolled field. Tracking means at a minimum using some

form of monitoring and reporting that can quantify benefits.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

> Yes No

> > I don't know

Logic: Respond if yes to 'Environmental

benefits'

Required: Yes

Data collection level: Field Data collection frequency: Annual

Reduced erosion amount

Data element name: Reduced erosion Reporting question: How much erosion reduction has been

amount measured in the field?

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

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

Logic: Respond if yes to 'Reduced erosion' Required: Yes

Data collection level: Field Data collection frequency: Annual

Reduced erosion amount unit

Data element name: Reduced erosion unit Reporting question: What is the unit for the amount of erosion

reduction measured?

Description: Unit for the total amount of erosion reduction from enrolled fields that is measured and reported

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

Data type: List Select multiple values: No

Allowed values: Measurement unit: Category

Tons

Other (specify)

Logic: Respond if yes to 'Reduced erosion'

Required: Yes

Data collection level: Field Data collection frequency: Annual

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Reduced erosion purpose	Rec	luced	erosion	purpose
-------------------------	-----	-------	---------	---------

Data element name: Reduced erosion **Reporting question:** What is the purpose of tracking reduced

purpose erosion in the field?

Description: Purpose of tracking reduced erosion the enrolled field. If "other" is chosen, enter the appropriate

value as free text in the additional column.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Commodity marketingProducing insetsProducing offsets

I don't knowOther (specify)

Logic: Respond if yes to 'Reduced erosion' **Required:** Yes

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

Reduced energy use

Data element name: Reduced energy use Reporting question: Is reduced energy use being tracked in the

field?

Description: Tracking of reduced energy use in the enrolled field. Tracking means at a minimum using some

form of monitoring and reporting that can quantify benefits.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

YesNo

I don't know

Logic: Respond if yes to 'Environmental

benefits'

Required: Yes

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

Reduced energy use amount

Data element name: Reduced energy use **Reporting question:** How much energy use reduction has been

amount measured in the field?

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

Data type: DecimalSelect multiple values: NoMeasurement unit: AmountAllowed values: 0-1,000,000

Logic: Respond if yes to 'Reduced energy

use'

Required: Yes

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

Reduced energy use amount unit

Data element name: Reduced energy use **Reporting question:** What is the unit for the energy use

unit reduction measured in the field?

Description: Unit for the total amount of energy use reduction that is measured in the enrolled field. If "other"

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

Data type: List

Select multiple values: No

All and a land

Measurement unit: Category Allowed values:

Kilowatt hoursOther (specify)

Logic: Respond if yes to 'Reduced energy

use'

Required: Yes

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

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Reduced energy use purpose

Data element name: Reduced energy use Reporting question: What is the purpose of tracking reduced

purpose 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:

YesNo

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: DecimalSelect multiple values: NoMeasurement unit: AmountAllowed 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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Avoid	led l	land	convers	ion i	purpose
~~~			COLLACIO		Pui Puic

**Data element name:** Avoided land **Reporting question:** What is the purpose of tracking avoided

conversion purpose land conversion in the field?

**Description:** Purpose of tracking avoided land conversion in the enrolled field. If "other" is chosen, enter the

appropriate value as free text in the additional column.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

Commodity marketingProducing insets

Producing offsets

I don't knowOther (specify)

Logic: Respond if yes to 'Avoided land

conversion'

Required: Yes

Data collection level: Field

Data collection frequency: Annual

Improved wildlife habitat

**Data element name:** Improved wildlife **Reporting question:** Are improvements to wildlife habitat being

habitat tracked in the field?

Description: Tracking of improvements to wildlife in and around the enrolled field. Tracking means at a

minimum using some form of monitoring and reporting that can quantify benefits.

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

YesNo

I don't know

Logic: Respond if yes to 'Environmental

benefits'

Required: Yes

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

Improved wildlife habitat amount

**Data element name:** Improved wildlife **Reporting question:** How much improved wildlife habitat has

habitat amount been measured in the field?

Description: Total amount of improved wildlife habitat that is measured in and around the enrolled fields.

Data type: DecimalSelect multiple values: NoMeasurement unit: AmountAllowed values: 0-1,000,000

Logic: Respond if yes to 'Improved wildlife

habitat'

Required: Yes

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

Improved wildlife habitat amount unit

**Data element name:** Improved wildlife **Reporting question:** What is the unit for the amount of improved

habitat unit wildlife habitat measured in the field?

Description: Unit for the total amount of improved wildlife habitat that is measured in and around enrolled

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

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

AcresLinear feet

Other (specify)

**Logic:** Respond if yes to 'Improved wildlife

habitat'

Required: Yes

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

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Improved wildlife habitat purpose	
Data element name: Improved wildlife	

Reporting question: What is the purpose of tracking improved

wildlife habitat in the field? habitat purpose

**Description:** Purpose of tracking improved wildlife habitat in the enrolled field. If "other" is chosen, enter the

appropriate value as free text in the additional column.

Select multiple values: No Data type: List

Measurement unit: Category Allowed values:

Commodity marketing

**Producing insets** 

**Producing offsets** I don't know

Other (specify)

Logic: Respond if yes to 'Improved wildlife

Data collection level: Field

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
	First town a land on a track that are	Kerosene
	Fuel 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 and south on the face	Gallons (diesel, gasoline, propane, LPG, kerosene) Kilowatt-
	Fuel amount unit before	hours (electricity)
	installation	Pounds (wood, coal)
Combustion System		Other (specify)
Improvement (CPS 372)		Coal
		Diesel
		Electricity
		Gasoline
	F 1. 6	Kerosene
	Fuel type after installation	Liquified petroleum gas (LPG)
		Natural gas
		Propane
		Wood
		Other (specify)
	Fuel amount after installation	0-1,000,000
		Cubic feet (natural gas)
	Fire lane arration it often	Gallons (diesel, gasoline, propane, LPG, kerosene) Kilowatt-
	Fuel amount unit after installation	hours (electricity)
		Pounds (wood, coal)
		Other (specify)
		Brassicas
	Species category (select most	Grasses
Conservation Cover	common/extensive type if using more than one)	Legumes
(CPS 327)		Non-legume broadleaves
	·	Shrubs

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Conservation Crop Rotation	Conservation crop type	Brassica Broadleaf Cool season Grass Legume Warm season
	Change implemented	Added perennial crop Reduced fallow period Both
(CPS 328)	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
Feed Management (CPS 592)	Fat (percent)	0-100
	Feed additives/supplements	Chemical Edible oils/fats Seaweed/kelp Other (specify)
Field Border (CPS 386)	Species category (select most common/extensive type if using more than one)	Forbs Grasses Mix Shrubs

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

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

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		Forbs
	Species category (select most	Grasses
Range Planting (CPS 550)	common/extensive type if using more than	Legumes
Range Flanting (et 3 330)	one)	Shrubs
	one,	Trees
Residue and Tillage		11003
Management – No-till	Surface disturbance	None
(CPS 329)	Surface disturbance	Seed row only
(0.0023)		None
5		Seed row/ridge tillage for
Residue and Tillage		planting
Management – Reduced	Surface disturbance	Shallow across most of the soil
Till (CPS 345)		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
(CF3 391)	Species density (number of trees planted per acre)	1-10,000
	·	Ferns
	Superior antonomy (aplant mage)	Forbs
Riparian Herbaceous	Species category (select most	Grasses
Cover (CPS 390)	common/extensive type if using more than	Legumes
	one)	Rushes
		Sedges
	Roof/cover type	Concrete
Roofs and Covers (CPS		Flexible geomembrane
367)		Metal
307,		Timber
		Other (specify)
	Species category (select most	Coniferous trees
	common/extensive type if using more than	Deciduous trees
Silvopasture (CPS 381)	one)	Forage Shrubs
	Species density (number of trees planted per	Siliubs
	acre)	1-10,000
	Strip width (feet)	1-1,000
	Strip width (leet)	
Stripcropping (CPS 585)	Crop category (select most common/extensive	Erosion resistant crops Fallow
Striperopping (CF3 383)	type if using more than one)	Sediment trapping crops
	Number of strips	2-100
	-	
Tree/Shrub Establishment (CPS 612)	Species category (select most	Coniferous trees Deciduous trees
	common/extensive type if using more than one)	Shrubs
	Species density (number of trees planted per	Siliubs
	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
	Barrier width (feet)	3-1,000
-	v 7	<u> </u>

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

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

## Appendix A: Climate-smart Agriculture and Forestry 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
320, Irrigation Canal or Lateral
399, Fishpond Management
400, Bivalve Aquaculture Gear and Biofouling Control

320, Irrigation Canal or Lateral 400, Bivals 324, Deep Tillage 402, Dam

325, High Tunnel System

326, Clearing and Snagging

327, Conservation Cover

328, Conservation Crop Rotation

402, Billion

410, Grade Stabilization Structure

420, Wildlife Habitat Planting

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

338, Prescribed Burning
 340, Cover Crop
 342, Critical Area Planting
 345, Residue and Tillage Management, Reduced Till
 346, Irrigation Pipeline
 437, Dry Hydrant
 438, Irrigation Reservoir

349. Dam Diversion 430, Illigation Reservoir

348, Dam, Diversion 441, Irrigation System, Microirrigation 350, Sediment Basin 442, Sprinkler System

351, Well Decommissioning

443, Irrigation System, Surface and Subsurface
353, Monitoring Well

447, Irrigation and Drainage Tailwater Recovery

355, Groundwater Testing 449, Irrigation Water Management

356, Dike and Levee450, Anionic Polyacrylamide (PAM) Application359, Waste Treatment Lagoon453, Land Reclamation, Landslide Treatment360, Waste Facility Closure455, Land Reclamation, Toxic Discharge Control

362, Diversion 457, Mine Shaft and Adit Closing

366, Anaerobic Digester
 367, Roofs and Covers
 460, Land Clearing
 462, Precision Land Forming and Smoothing

402, Frecision Land Torring and Smoothing

368, Emergency Animal Mortality Management
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
374, Energy Efficient Agricultural Operation
375, Dust Management for Pen Surfaces
472, Access Control
484, Mulching
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
 381, Silvopasture
 516, Livestock Pipeline
 520, Pond Sealing or Lining, Compacted Soil Treatment

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 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 Ditch 608, Surface Drain, Main or Lateral

609, Surface Roughening

610, Salinity and Sodic Soil Management

612, Tree/Shrub Establishment

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

633, Waste Recycling 634, Waste Transfer

635, Vegetated Treatment Area 636, Water Harvesting Catchment 638, Water and Sediment Control Basin

640, Waterspreading

642, Water Well

643, Restoration of Rare or Declining Natural Communities

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

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

649, Structures for Wildlife

650, Windbreak/Shelterbelt Renovation

654, Road/Trail/Landing Closure and Treatment

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

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

737, Reduced Water and Energy Coffee Conveyance

System, interim

740, Pond Sealing and Lining, Soil Cement, interim

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

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

803, Water Well Disinfection, interim

805, Amending Soil Properties with Lime, interim

808, Soil Carbon Amendment, interim

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

812, Raised Beds, interim

815, Groundwater Recharge Basin or Trench, interim

817, On-Farm Recharge, interim

818, Water Conservation System, interim

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

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## 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

<u>CROPS</u> CINNAMON HYBRID POPLAR TREES

ALFALFA CLOVER IDLE ALMONDS COCONUTS INDIGO

AMARANTH GRAIN COFFEE ISRAEL MELONS APPLES CORN JACK FRUIT

APRICOTS COTTON ELS JERUSALEM ARTICHOKES

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

BEANS DURIAN KOCHIA (PROSTRATA)

BEETS EGGPLANT KOHLRABI

BIRDSFOOT/TREFOIL EINKORN KOREAN GOLDEN MELON

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

CANARY MELON GRAPERUIT 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 CASSAVA GUAYULE MUSHROOMS CAULIFLOWER HAZEL NUTS MUSTARD CELERIAC HEMP NECTARINES CELERY HERBS NIGER SEED CHERIMOYA HESPERALOE** NONI **OATS CHERRIES HONEY OKRA CHESTNUTS HONEYBERRIES** 

CHICORY/RADICCHIO HONEYDEW OLIVES
CHINESE BITTER MELON HOPS ONIONS
CHRISTMAS TREES HORSERADISH ORANGES
CHUFAS HUCKLEBERRIES PAPAYA

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PARSNIP STRAWBERRIES
PASSION FRUITS SUGAR BEETS
PAWPAW SUGARCANE
PEACHES SUNFLOWERS
PEANUTS SUNN HEMP
PEARS TANGELOS

PEARSTANGELOSBEEFALOPEASTANGERINESBUFFALO OR BISONPECANSTANGORSCHICKENS (BROILERS)PENNYCRESSTANGOSCHICKENS (LAYERS)PEPPERSTANNIERDAIRY COWS

**LIVESTOCK** 

**BEEF COWS** 

**ALPACAS** 

**TURKEYS** 

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

PISTACHIOS

PISTACHIOS

PITAYA/DRAGONFRUIT

TOBACCO BURLEY 31V

GOATS

PLANTAIN

TOBACCO CIGAR BINDER

HONEYBEE

PLUMCOTS

TOBACCO CIGAR FILLER

LLAMAS

PLUMS

TOBACCO CIGAR FILLER BINDER

REINDEER

POMEGRANATES

TOBACCO DARK AIR CURED

SWINE

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

RUTABAGA WHEAT

RYE WILLOW SHRUB
SAFFLOWER WINTER MELON
SAPODILLA WOLFBERRY/GOJI

SAPOTE YAM

SCALLIONS SESAME SHALLOTS SORGHUM

SORGHUM DUAL PURPOSE

SORGHUM FORAGE

SOYBEANS SPELT SQUASH

STAR GOOSEBERRY

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