NON COST-SHARED BEST MANAGEMENT PRACTICE

VERIFICATION PROCEDURES MANUAL

Maryland Department of Agriculture

Office of Resource Conservation

Quality Assurance and Accountability

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Introduction

As Chesapeake Bay states begin to implement local Watershed Implementation Plans to meet the new Total Maximum Daily Load requirements for the Chesapeake Bay Watershed, a more accurate accounting of all conservation measures on Maryland's agricultural land is critical to ensure that appropriate nutrient load reductions are being credited in the Bay Watershed Model. Traditionally, the Maryland Department of Agriculture (MDA) has relied upon both State and Federal Cost-share Programs as the source of conservation implementation data. This data is currently reported through MDA's Conservation Tracker System.

Recognizing that many conservation measures have been implemented without Federal or State financial assistance, the Chesapeake Bay Program has agreed to credit certain Best Management Practices that have been implemented without public cost-share provided they are functionally equivalent to the USDA-NRCS standard.

Objective

The objective is to develop a sustainable protocol for the collection of non cost-shared agricultural best management practices. The goal is to credit the agricultural sector for all verified conservation practice implementation that results in nutrient and sediment reductions. In order for practices to be counted in the Bay Model, data will have to be tracked, verified and reported using Maryland's Conservation Tracker Program and then transmitted to the Chesapeake Bay Program via the National Environmental Information Exchange Network.

District staff are encouraged to contact cooperators and landowners to fully document all conservation practices and to try to assist in correcting any potential environmental concerns that may arise during site visits. It is extremely important for the District to establish a dialogue with cooperators to encourage the proper use and maintenance of all BMPs. It is the intent of the program to ensure that all conservation practices are documented. The program relies heavily on the Districts to ensure that the intent of the program is carried out.

Procedure

1) An on-farm evaluation of **all** non cost-shared Best Management Practices should be performed under the following situations:
    a. Developing or updating a Conservation Plan
    b. MACS Spot Check / Quality Assurance Review
    c. Nutrient Trading Evaluation
    d. At the request of owner/operator
2) The Soil Conservation District will assign a technically proficient person(s) from their staff to perform the verification.

3) Do an on-site evaluation of the BMP.
4) If the BMP meets NRCS standard,
    a. Complete the *Best Management Practice Verification Report* form
    b. Document BMP in Conservation Plan, if owner agrees to complete and sign an NRCS Operation and Maintenance Plan
    c. Keep report form in Conservation Plan folder
    d. Report BMP in Conservation Tracker
5) If the BMP does not meet NRCS standard, review Functional Equivalent Practice Standards for BMP.
    a. Complete associated BMP worksheet for each practice identified
    b. Document necessary actions to bring BMP to NRCS standard
    c. Review recommendations with owner/operator, and if they agree, develop a schedule to implement improvements to bring practices up to NRCS standard
    d. Keep Worksheet in Conservation Plan folder
    e. Report BMP in Conservation Tracker
6) All verified practices must be reported in Conservation Tracker.
    a. Those that meet NRCS standard should be reported with appropriate NRCS BMP code (i.e. 391 – Riparian Forest Buffer)
    b. Those that do not meet NRCS standard but meet the functional equivalent standard should be reported under the functional equivalent code (i.e. 391FE – Riparian Forest Buffer (MDA))
    c. Report date implemented or installed by owner/operator, not date verified
    d. Indicate “Farmer Installed” as technician
    e. Federal and State cost-share programs should remain unchecked
7) At any point at which the BMP is brought up to NRCS standard, the change should be documented by completing a *Best Management Practice Verification Report* and appropriate change reported in Conservation Tracker.
8) BMPs identified and reported may be subject to review during MACS Spot Checks or Quality Assurance Reviews.

Best Management Practice Verification Report

(Meets NRCS Standard)

Cooperator Name, Address and Phone #	FSA Farm / Tract	District	Inspection Type
	Parcel ID#	MDA Plan ID #	☐ Initial Inspection ☐ Q.A.R ☐ Nutrient Trading ☐ Recheck ☐ Other _____

Best Management Practice	Date Installed	Extent Implemented	Unit	Comment
	__/__/____			
	__/__/____			
	__/__/____			
	__/__/____			
	__/__/____			
	__/__/____			
	__/__/____			
	__/__/____			
	__/__/____			
	__/__/____			
	__/__/____			

1. Does/do the BMP(s) meet the current NRCS standard as defined in the NRCS-FOTG? ☐ Yes ☐ No
2. Is the BMP being utilized to achieve an environmental benefit? ☐ Yes ☐ No
3. Is there any maintenance work needed to bring the project up to the standard? ☐ Yes ☐ No
4. Has the SCD discussed any improvements or corrective actions with the cooperator? ☐ Yes ☐ No
5. Will the owner agree to complete and sign an NRCS Operation and Maintenance Plan to allow the practice to be documented in the Conservation Plan? ☐ Yes ☐ No

Expected Completion Date: ___/___/___

SCD Description/Remarks:

_____ _____

SCD Reviewer: Name, Position, and Signature Date of Review

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Functional Equivalent Practice Standards

391FE – Riparian Forest Buffer

393FE – Grassed Buffer

561FE – Heavy Use Area Protection

313FE – Waste Storage Facility

382FE – Livestock Fencing

614FE – Watering Facility

558FE – Barnyard Runoff Control

316FE – Animal Mortality Facility

512FE – Pasture and Hayland Planting

528FE – Prescribed Grazing

657FE – Wetland Restoration

587FE – Structure for Water Control

380FE – Vegetative Environmental Buffer

327FE – Alternative Crop – Switchgrass

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391FE – RIPARIAN FOREST BUFFER (MDA)

(Reported by Acres)

DEFINITION
An area of predominately trees and/or shrubs located adjacent to and up-gradient from water bodies.

PURPOSES
This practice is to reduce excess amounts of sediment, organic material, nutrients, pesticides and other pollutants in surface runoff and reduce excess nutrients and other chemicals in shallow ground water flow and to increase carbon storage in plant biomass and soils.

CONDITIONS WHERE PRACTICE APPLIES
This practice qualify if applied on stable areas adjacent to permanent or intermittent streams, lakes, ponds, wetlands and areas with ground water recharge.

CRITERIA
To reduce excess amounts of sediment, organic material, nutrients, pesticides and other pollutants in surface runoff and reduce excess nutrients and other chemicals in shallow ground water flow.

The minimum width shall be at least 15 feet measured horizontally on a line perpendicular to the water body, beginning at the top of bank or wetland edge. In order to adequately address water quality, the buffer width may need to be expanded to include important resource features such as wetlands, steep slopes, areas that are occasionally or seasonally flooded, or critical habitats.

Livestock shall be controlled or excluded as necessary to achieve and maintain the intended purpose.

OPERATION AND MAINTENANCE
Inspections of the forest buffer are required at least every 3 years.

Control concentrated flow or mass soil movement up-gradient of the forest buffer to maintain buffer function.

Manage the dominant canopy to maintain maximum vigor of overstory and understory species.

SUPPORTING DATA AND DOCUMENTATION
Complete accompanying worksheet and document on conservation plan map.

391FE – RIPARIAN FOREST BUFFER (MDA) Worksheet

Cooperator Name, Address and Phone #	**FSA Farm / Tract**	**District**	**Inspection Type**
			☐ Initial Inspection ☐ Q.A.R ☐ Nutrient Trading ☐ Recheck ☐ Other _____
	Parcel ID#	**MDA Plan ID #**	

1. When was the practice installed? _____/_____ Month Year	
2. How is the buffer managed? Is it mowed? Is it ever burned down? Is it fertilized? How are weeds controlled? Describe:	
3. Why no cost-share? ☐ Not aware that cost-share was available ☐ Not eligible ☐ Practice doesn't fit standard ☐ Programs too complicated ☐ Programs take too long ☐ Not selected for program ☐ Other:	
4. Does the buffer border a ☐ river, ☐ stream, ☐ forest or ☐ ditch?	Y / N
5. Are livestock excluded from the buffer?	Y / N / NA
6. How wide is the non-cost-shared buffer? If it buffers water, measure from the top of the bank. If buffer width varies significantly, record average width	
7. How long is the buffer?	
8. Is the buffer thick/ have high density? Do the trees appear healthy? Describe:	Y / N
9. What is the land use upslope of the buffer? ☐ Cropland ☐ Pasture ☐ Hay ☐ Other	
10. Is maintenance or other work needed that can make the buffer achieve the standard? Describe:	Y / N
11. Does the practice provide an environmental benefit?	Y / N

_____ _____

SCD Reviewer: Name, Position, and Signature Date of Review

393FE – GRASSED BUFFER (MDA)

(Reported by Acres)

DEFINITION

Grasses, grass-like plants and forbs that are established or managed to provide a herbaceous buffer located adjacent to and up-gradient from water bodies or a strip or area of herbaceous vegetation that removes contaminants from overland flow located adjacent to cropland. This includes areas that function as riparian herbaceous buffers, filter strips and/or grassed waterways.

PURPOSES

This practice is to reduce excess amounts of sediment, organic material, nutrients, pesticides and other pollutants in surface runoff and reduce excess nutrients and other chemicals in shallow ground water flow and to increase carbon storage in plant biomass and soils.

CONDITIONS WHERE PRACTICE APPLIES

This practice qualify if applied on stable areas adjacent to permanent or intermittent streams, lakes, ponds, wetlands and areas with ground water recharge.

CRITERIA

To reduce excess amounts of sediment, organic material, nutrients, pesticides and other pollutants in surface runoff and reduce excess nutrients and other chemicals in shallow ground water flow.

For areas adjacent to surface water, the minimum width shall be at least 10 feet measured horizontally on a line perpendicular to the water body, beginning at the top of bank or wetland edge. In order to adequately address water quality, the buffer width may need to be expanded to include important resource features such as wetlands, steep slopes, areas that are occasionally or seasonally flooded, or critical habitats.

Livestock shall be controlled or excluded as necessary to achieve and maintain the intended purpose.

Plant and animal pest species shall be controlled to the extent feasible to achieve and maintain the intended purpose of the vegetative cover. Noxious weeds shall be controlled as required by state law.

OPERATION AND MAINTENANCE

Inspections of the natural grassed buffer are required at least every 3 years.

Control concentrated flow or mass soil movement up-gradient of the buffer to maintain buffer function.

Species shall have stiff stems and high stem density near the ground surface.

SUPPORTING DATA AND DOCUMENTATION

Complete accompanying worksheet and document on conservation plan map.

393FE – GRASSED BUFFER (MDA) Worksheet

Cooperator Name, Address and Phone #	FSA Farm / Tract	District	Inspection Type
			☐ Initial Inspection ☐ Q.A.R ☐ Nutrient Trading ☐ Recheck ☐ Other _____
	Parcel ID#	MDA Plan ID #	

1. When was the practice installed? _____/_____ Month Year	
2. How is the buffer managed? Is it mowed? Is it ever burned down? Is it fertilized? How are weeds controlled? Describe:	
3. Why no cost-share? ☐ Not aware that cost-share was available ☐ Not eligible ☐ Practice doesn't fit standard ☐ Programs too complicated ☐ Programs take too long ☐ Not selected for program ☐ Other:	
4. Does the buffer border a ☐ river, ☐ stream, ☐ forest or ☐ ditch?	Y / N
5. Are livestock excluded from the buffer?	Y / N / NA
6. How wide is the non-cost-shared buffer? If it buffers water, measure from the top of the bank. If buffer width varies significantly, record average width	
7. How long is the buffer?	
8. Is the buffer thick? Is there high stem density near the ground surface? Does the grass appear healthy? Are bare spots few or none? Describe:	Y / N
9. What is the land use upslope of the buffer? ☐ Cropland ☐ Pasture ☐ Hay ☐ Other	
10. Is maintenance or other work needed that can make the buffer achieve the standard? Describe:	Y / N
11. Does the practice provide an environmental benefit?	Y / N

_____ _____
SCD Reviewer: Name, Position, and Signature Date of Review

561FE – HEAVY USE AREA PROTECTION (MDA)

(Reported by Acres)

DEFINITION
The stabilization of areas frequently and intensively used by animals or vehicles by establishing vegetative cover, surfacing with suitable materials, and/or installing needed structures.

PURPOSES
The purpose of this practice is to provide a stable non-eroding surface for areas frequently used by animals or vehicles to improve water quality.

CONDITIONS WHERE PRACTICE APPLIES
This practice applies to agricultural areas requiring treatment to address one or more resource concerns.

CRITERIA
Surface treatment should be appropriate to the purpose and use of the heavy use area.

Any structure associated with the heavy use area should have appropriate roof runoff controls to divert clean water.

Surface and subsurface drainage should be managed sufficient to control the disposal of runoff without causing erosion or water quality impairment and to exclude runoff from entering the heavy use area. Treatment areas should prevent ponding of water.

Treated areas should extend an appropriate distance from facilities such as hay rings, water troughs, feeding troughs, mineral boxes and other facilities where livestock concentrations cause resource concerns.

Manure accumulations and contaminated runoff should be collected, stored and utilized in an environmentally sound manner.

OPERATION AND MAINTENANCE
Inspections of the heavy use area are required at least every 3 years.

SUPPORTING DATA AND DOCUMENTATION
Complete accompanying worksheet and document on conservation plan map.

561FE – HEAVY USE AREA PROTECTION (MDA) Worksheet

Cooperator Name, Address and Phone #	**FSA Farm / Tract**	**District**	**Inspection Type**
			☐ Initial Inspection ☐ Q.A.R ☐ Nutrient Trading ☐ Recheck ☐ Other _____
	Parcel ID#	**MDA Plan ID #**	

1. What is the total area of the HUAP(s)? In ☐ Square Feet or ☐ Acres			
2. When was the practice installed? _____/_____ Month Year			
3. Animal Information	Type:	Units:	
4. For poultry: are there HUAPs on all areas where crustouts/cleanouts occur?			Y / N / NA
5. Does the producer clean litter off of the pads after each crustout or cleanout?			Y / N / NA
6. Why no cost-share? ☐ Not aware that cost-share was available ☐ Not eligible ☐ Practice doesn't fit standard ☐ Programs too complicated ☐ Programs take too long ☐ Not selected for program ☐ Other:			
7. The material used is: ☐ Concrete ☐ Gravel /Stone ☐ Mulch			
8. The practice is ☐ Permanent ☐ Semi-permanent			
9. Is the material holding up to the load?			Y / N
10. Is the material permeable?			Y / N
11. Is the drainage from the protected area managed?			Y / N
12. Any erosion problems? If so, please describe.			Y / N
13. Does the practice include a vegetated component? If so, please describe.			Y / N
14. Does the practice provide an environmental benefit?			Y / N

_____ _____

SCD Reviewer: Name, Position, and Signature Date of Review

313FE – WASTE STORAGE FACILITY (MDA)

(Reported by Number)

DEFINITION

A waste storage impoundment made by constructing an embankment and/or excavating a pit or dugout, or by fabricating a structure.

PURPOSES

To temporarily store wastes such as manure, wastewater, and contaminated runoff as a storage function component of an agricultural waste management system.

CONDITIONS WHERE PRACTICE APPLIES

This practice is applicable when temporary storage is needed for organic wastes generated by agricultural production or processing to reduce potential pollution to air or water resources.

CRITERIA

Size of the facility should be large enough to store all accumulated animal wastes, including bedding, wash water, and needed dilution water, if applicable, for the maximum period during which such wastes cannot be processed or applied to the land for reasons such as operational restrictions, weather, or crops.

Exclude clean runoff to the fullest extent practical except where its storage is advantageous to the operation of the agricultural waste management system.

Waste handling equipment shall be available to remove waste materials from agricultural waste storage facilities and processing it or applying it to the land at the locations, times, and rates shown in the overall Nutrient Management Plan or the Waste Management Plan.

OPERATION AND MAINTENANCE

Inspections of the drainage management systems are required at least every 5 years.

SUPPORTING DATA AND DOCUMENTATION

Complete accompanying worksheet and document on conservation plan map.

313FE – WASTE STORAGE FACILITY (MDA) Worksheet

Cooperator Name, Address and Phone #	**FSA Farm / Tract**	**District**	**Inspection Type**
			☐ Initial Inspection ☐ Q.A.R ☐ Nutrient Trading ☐ Recheck ☐ Other _____
	Parcel ID#	**MDA Plan ID #**	

1. What type of livestock does the facility provide storage for? ☐ Poultry ☐ Dairy ☐ Beef ☐ Swine ☐ Horses ☐ Other:	2. Animal Units
3. When was the practice installed? _____/_____ Month Year	
4. What type of facility is it? ☐ Manure Shed ☐ Lagoon ☐ Other (Describe):	
5. Does this facility have adequate storage capacity?	Y / N
6. Why no cost-share? ☐ Not aware that cost-share was available ☐ Not eligible ☐ Practice doesn't fit standard ☐ Programs too complicated ☐ Programs take too long ☐ Not selected for program ☐ Other:	
7. Does the facility appear to be well-located given the layout of the property? ☐ 100' or more away from water bodies and roads ☐ Easy access for loading and unloading ☐ Reasonable proximity to waste source	Y / N
8. What type of manure is being stored? ☐ Solid ☐ Liquid	
9. Dimensions: Length & Width _____&_____ or Diameter_____ Height _____ Constructed Material: Walls: Floor/Liner (or soil type if not lined): Is the loading/unloading area ☐ lined? ☐ Concrete? ☐ None Is there a foundation? Y / N / NA Is the structure covered? Y / N Is the covering ☐ permanent or ☐ temporary? Is rainfall directed away from the structure? Y / N Is there an auxilary spillway? Y / N Are there any potential problems? (If so, please describe.) Y / N	
10. Does the practice provide an environmental benefit?	Y / N

_____ _____
SCD Reviewer: Name, Position, and Signature Date of Review

382FE – LIVESTOCK FENCING (MDA)

(Reported by Feet)

DEFINITION
A constructed barrier to livestock.

PURPOSES
This practice is to prevent, restrict, or control access of livestock into surface water or environmentally sensitive areas.

CONDITIONS WHERE PRACTICE APPLIES
This practice may be applied on any area adjacent to surface water or environmentally sensitive areas where the control of livestock is needed. Fences are not needed where natural barriers will serve this purpose.

CRITERIA
Fencing shall be appropriately installed and maintained sufficient to control or restrict the access of livestock.

The minimum buffered width between fence and surface water and or environmentally sensitive area shall be no less than at least 10 feet measured horizontally on a line perpendicular to the water body, beginning at the top of bank or wetland edge. In order to adequately address water quality, the buffer width may need to be expanded to include important resource features such as wetlands, steep slopes, areas that are occasionally or seasonally flooded, or critical habitats.

OPERATION AND MAINTENANCE
Fencing materials shall be new, of high quality and durability, and constructed to meet the intended purpose of the practice.

Inspections of the fencing are required at least every 3 years.

SUPPORTING DATA AND DOCUMENTATION
Complete accompanying worksheet and document on conservation plan map.

382FE – LIVESTOCK FENCING (MDA) Worksheet

Cooperator Name, Address and Phone #	FSA Farm / Tract	District	Inspection Type
			☐ Initial Inspection ☐ Q.A.R ☐ Nutrient Trading ☐ Recheck ☐ Other _____

1. When was the practice installed? _____/_____
   Month Year
2. What type of animal does the fence control?
3. What is the main purpose of the fence?
   ☐ Stream/Ditch Buffer ☐ Prescribed Grazing
   ☐ Protect other environmentally sensitive area
   ☐ Other (describe):
4. What is the fence made of?
   ☐ Non-Electric Smooth Wire ☐ Electric Smooth Wire
   ☐ Woven Wire ☐ Barbed Wire
   ☐ Wood Boards

5. How tall is the fence?	6. How many strands?
7. Post spacing?	8. Post material?

9. If used to exclude livestock from a stream, how far is the fence from the top of the bank?

10. Does the fence appear to be well-maintained? Is it operational?	Y / N
11. Are there any erosion problems around the fence?	Y / N

12. Describe the vegetation around the fence. Is it sufficient? Under control? Are there trees?

13. Are there properly maintained stream crossings?	Y / N
14. Are all gates in working order? Are they closed except when moving livestock?	Y / N

_____ _____
SCD Reviewer: Name, Position, and Signature Date of Review

614FE – WATERING FACILITY (MDA)

(Reported by Number)

DEFINITION

A permanent or portable device to provide an adequate amount and quality of drinking water for livestock.

PURPOSES

To provide watering facilities which will bring about the desired protection of vegetative cover to prevent erosion and pollutants from nutrients, sediment, and animal wastes from reaching the waters of the State. The primary purpose is not to provide livestock water, but to protect water quality.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to all land uses where there is a need for alternative watering facilities for livestock. The source of water supplied to the facilities can be from any source including pipelines, spring developments, water wells, and ponds.

CRITERIA

Locate facilities to promote even grazing distribution and reduce grazing pressure on sensitive areas.

Provide fencing as necessary to exclude livestock from protected areas, and encourage use of facility and should be located as far away from streams and drainage ways as practical.

Design the watering facility to provide adequate access to the animals planned to use the facility.

Install troughs on sites that are well drained, or provide drainage.

OPERATION AND MAINTENANCE

Inspect collection and storage devices, valves, outlets and pipelines at least biannually. Make repairs as needed.

Check valves, automatic water level devices, and overflow pipes for proper operation.

Inspections of the watering facilities are required at least every 3 years.

SUPPORTING DATA AND DOCUMENTATION

Complete accompanying worksheet and document on conservation plan map.

614FE – WATERING FACILITY (MDA) Worksheet

Cooperator Name, Address and Phone #	FSA Farm / Tract	District	Inspection Type
			☐ Initial Inspection ☐ Q.A.R ☐ Nutrient Trading ☐ Recheck ☐ Other _____

1. When was the practice installed? _____/_____ Month Year	
2. What type of livestock is using the watering facility? ☐ Dairy ☐ Beef ☐ Horses ☐ Other:	
3. Why no cost-share? ☐ Not aware that cost-share was available ☐ Not eligible ☐ Practice doesn't fit standard ☐ Programs too complicated ☐ Programs take too long ☐ Not selected for program ☐ Other:	
4. What type of watering facility is it? ☐ Trough ☐ Waterers	
5. Is it ☐ Permanent or ☐ Portable ?	
6. Is the facility pulling animals from a sensitive area?	Y / N
7. Is it causing good animal distribution?	Y / N
8. Is the area protected from erosion? If so, by what material? ☐ Concrete ☐ Sufficient vegetation ☐ Other:	Y / N
9. Is overflow managed? If so, how? ☐ Overflow mechanism ☐ Roof ☐ Drainage Outlet	Y / N
10. What is the trough material? ☐ Concrete ☐ Plastic ☐ Fiberglass ☐ Steel	
11. Is there a mechanism to prevent freezing?	Y / N
12. Does the practice provide an environmental benefit?	Y / N

_____ _____

SCD Reviewer: Name, Position, and Signature Date of Review

558FE – BARNYARD RUNOFF CONTROL (MDA)

(Reported by Number)

DEFINITION

This practice includes the installation of practices to control runoff from barnyard areas, such as roof runoff control, diversion of clean water from entering the barnyard and control of runoff from barnyard areas.

PURPOSES

To prevent roof runoff water and or divert clean water away from the barnyard or areas of heavy animal concentration to prevent erosion and pollutants from nutrients, sediment, and animal wastes from reaching the waters of the State.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to where roof runoff or clean water needs to be diverted away from structures or contaminated areas, such as barnyards or other concentrated animal areas. Such structures include but are not limited to erosion-resistant channels or subsurface drains with rock-filled trenches along building foundations below eaves, roof gutters, downspouts, and appurtenances.

CRITERIA

Roof gutters should have a minimum top width of 5 inches and supports no greater than 24 inch spacing.

All downspouts, gutters and outlets should be protected from damage by livestock and equipment.

The water from roof runoff structures may empty into surface drains or underground outlets, or onto the ground surface and should be directed away from foundations, structures or contaminated areas.

Stone filled trenches with an underground outlet, under the roof dripline, may be used in lieu of roof gutter. Locate the trench so the trench centerline follows the roof dripline.

OPERATION AND MAINTENANCE

Inspect collection and storage devices, valves, outlets and pipelines at least biannually. Make repairs as needed.

Check valves, automatic water level devices, and overflow pipes for proper operation.

Inspections of the watering facilities are required at least every 3 years.

SUPPORTING DATA AND DOCUMENTATION

Complete accompanying worksheet and document on conservation plan map.

558FE – BARNYARD RUNOFF CONTROL (MDA) Worksheet

Cooperator Name, Address and Phone #	FSA Farm / Tract	District	Inspection Type ☐ Initial Inspection ☐ Q.A.R ☐ Nutrient Trading ☐ Recheck ☐ Other _____

1. When was the practice installed? _____/_____ Month Year	
1. Is the top width of the gutter at least 5”?	Y / N
2. Are downspout outlets avoiding contamination with animal waste?	Y / N
3. Do the gutter and downspouts appear to have sufficient strength for snow and ice? Are there a sufficient number of supports? (24” on centers)	Y / N Y / N
4. Are downspouts protected from potential animal/equipment damage?	Y / N
5. Is the system in good condition? Does it need repair?	Y / N
6. Where does the outflow exit? ☐ Field ☐ Stream ☐ Storage Area	
7. Does it cause any erosion or pollution problem? (If so, please describe.)	Y / N
Outlets:	
8. How large is the outlet?	
9. For surface outlets, is the outflow directed/protected from erosion (ex. by a splash block)? How far from the structure is the outlet?	Y / N
10. For subsurface outlets, is there a proper slope for steady flow? 11. Is there any sign of ☐ clogging, ☐ cracks or ☐ erosion?	Y / N Y / N
Collection Trenches:	
12. Are collection trenches aligned with the roof drip line?	Y / N
13. Are trenches at least 24” wide and deep?	Y / N
14. Do they have a concrete or stone bottom?	Y / N
15. Are they protected/fenced from animals and animal waste?	Y / N

_____ _____
SCD Reviewer: Name, Position, and Signature Date of Review

316FE – ANIMAL MORTALITY FACILITY (MDA)

(Reported by Number)

DEFINITION

An on-farm facility for the treatment or disposal of livestock and poultry carcasses.

PURPOSES

Provide proper disposal of carcasses to reduce the pollution potential of organic agricultural wastes to surface and ground water.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies where animal carcass treatment or disposal must be considered as a component of a waste management system for livestock or poultry operations. This practice includes disposal of both normal and catastrophic animal mortality; however, it does not apply to catastrophic mortality resulting from disease.

CRITERIA

The facility shall be designed to handle normal mortality and/or catastrophic mortality.

Contaminated runoff from any mortality facility without a roof must be controlled.

Leachate should not occur from any composting facility.

Operators should received proper training on the use of the facility.

OPERATION AND MAINTENANCE

Inspections of the facilities are required at least every 5 years.

SUPPORTING DATA AND DOCUMENTATION

Complete accompanying worksheet and document on conservation plan map.

316FE – ANIMAL MORTALITY FACILITY (MDA) Worksheet

Cooperator Name, Address and Phone #	FSA Farm / Tract	District	Inspection Type
			☐ Initial Inspection ☐ Q.A.R ☐ Nutrient Trading ☐ Recheck ☐ Other _____

1. When was the practice installed? _____/_____ Month Year	
2. The facility's main purpose is to compost: ☐ Livestock ☐ Poultry ☐ Other organic material	Y / N
3. What ingredients are used in the compost mix?	
4. For the purposes of managing the compost material, do you factor in: Temperature? Moisture Content?	 Y / N Y / N
5. Is the compost aerated? If so, how?	Y / N
6. Is the compost turned? If so, how often?	Y / N
7. Where does the finished material go?	
8. Is the facility located adjacent to a Waste Storage Facility?	Y / N
9. Is the facility more than 100 feet from streams, wetlands and waterways? Is the facility more than 100 feet from other dwellings?	Y / N Y / N
10. What are the materials used? Walls: Floor: Roof:	Y / N
11. What are the dimensions of the structure? Length:_____ Width: _____ Height (to the top of the wall): _____	
12. Is the composting facility configured using ☐ Bins or ☐ Channel Design?	

_____ _____

SCD Reviewer: Name, Position, and Signature Date of Review

512FE – PASTURE AND HAYLAND PLANTING (MDA)

(Reported by Acres)

DEFINITION

Conversion of cropland to pasture or hayland through the establishment of native or introduced forage species.

PURPOSES

This practice may be applied to establish forage species for the purposes of forage production which may balance forage supply, reduce soil erosion and improve water quality.

CONDITIONS WHERE PRACTICE APPLIES

This practice may be applied on cropland or other agricultural lands where forage production is feasible or desired. It does not apply to planting primarily intended for wildlife or where grazing and/or harvesting is a secondary consideration.

CRITERIA

Select forage species for planting based on the intended use, realistic yield goals, maturity stages, compatibility with other species, and level of management that the client is willing and able to provide.

Select plants that will provide adequate ground cover, canopy cover, root mass, and resistance to water flow when site conditions require erosion protection.

Removal of herbage should be consistent with site production limitations, rate of plant growth, and the physiological needs of specific forage plants to maintain plant reserves for regrowth, winter survival, and drought survival.

OPERATION AND MAINTENANCE

Inspections of the plantings are required at least every 3 years.

SUPPORTING DATA AND DOCUMENTATION

Complete accompanying worksheet and document on conservation plan map.

512FE – PASTURE AND HAYLAND PLANTING (MDA) Worksheet

Cooperator Name, Address and Phone #	FSA Farm / Tract	District	Inspection Type
			☐ Initial Inspection ☐ Q.A.R ☐ Nutrient Trading ☐ Recheck ☐ Other _____
1. When did you begin using this practice? _____/_____ Month Year			
2. Total acre planted.			
3. What is the primary purpose of this planting? ☐ Pasture/Grazing ☐ Hayland/Harvest			
4. What species of animals are grazing? (Check all that apply) ☐ Dairy Cows ☐ Beef Cows ☐ Sheep ☐ Goats ☐ Horses ☐ Other:			Y / N
5. Do you have a rotational grazing plan?			Y / N
6. What grass species have been planted?			
7. Do livestock have access to clean water within a reasonable distance?			Y / N / NA
8. Does the pasture/hayland appear to be properly maintained?			Y / N
9. Are there any erosion or other environmental concerns? Describe			Y / N

_____ _____

SCD Reviewer: Name, Position, and Signature Date of Review

528FE – PRESCRIBED GRAZING (MDA)

(Reported by Acres)

DEFINITION
Managing the controlled harvest of vegetation with grazing animals.

PURPOSES
This practice utilizes a range of pasture management and grazing techniques to improve the quality and quantity of the forages grown on pastures and reduce the impact of animal travel lanes, animal concentration areas or other degraded areas.

CONDITIONS WHERE PRACTICE APPLIES
This practice may be applied on all lands where grazing animals are managed.

CRITERIA
Frequency and intensity of grazing shall be managed to promote ecologically and economically stable plant communities that meet the producer's objectives. Use stubble height target levels in conjunction with monitoring to help ensure that resource conservation and producer objectives are met.

Minimize concentrated livestock areas, trailing, and trampling to reduce soil compaction, excess runoff and erosion. Pasture fencing layouts shall provide laneways that are least prone to livestock trail erosion and provide protection to sensitive areas, such as wetlands.

Provide all livestock on pasture with free access to clean water.

OPERATION AND MAINTENANCE
Apply prescribed grazing on a continuing basis throughout the occupation period of all grazing units. Make adjustments as needed to ensure that the goals and objectives of the prescribed grazing strategy are met.

Inspections of the grazing system are required at least every 3 years.

SUPPORTING DATA AND DOCUMENTATION
Complete accompanying worksheet and document on conservation plan map.

528FE – PRESCRIBED GRAZING (MDA) Worksheet

Cooperator Name, Address and Phone #	FSA Farm / Tract	District	Inspection Type
			☐ Initial Inspection ☐ Q.A.R ☐ Nutrient Trading ☐ Recheck ☐ Other _____

1. When did you begin using this practice? _____/_____ Month Year	
2. What species of animals are grazing? (Check all that apply) ☐ Dairy Cows ☐ Beef Cows ☐ Sheep ☐ Goats ☐ Horses ☐ Other:	Y / N
3. Do you have a rotational grazing plan?	Y / N
4. How many paddocks are there?	
5. How many total acres?	
6. How many animals are in each paddock?	
7. How many days do the animals spend in each paddock?	
8. What dictates livestock rotation? ☐ Set schedule ☐ Forage height	
9. How many months out of the year do you graze the animals?	
10. Is livestock given additional feed?	Y / N
11. What grass species are there?	
12. Do the animals graze crop residues?	Y / N
13. Are there any unprotected heavy use areas?	Y / N
14. Are there any erosion issues? If yes, please describe.	Y / N
15. Have you ever used C-GRAZ or G SAT (Computer Grazing Programs)	Y / N
16. Do livestock have access to streams, wetlands or waterways?	Y / N
17. Is there a sacrifice area?	Y / N
18. Do livestock have access to clean water within a reasonable distance?	Y / N

_____ _____
SCD Reviewer: Name, Position, and Signature Date of Review

657FE – WETLAND RESTORATION (MDA)

(Reported by Acres)

DEFINITION

The creation, rehabilitation or reestablishment of a wetland so that soils, hydrology, vegetative community, and habitat are a close approximation of the original natural condition that existed prior to modification, to the extent practicable.

PURPOSES

The purpose of this practice is the restoration of wetland areas and their functions and values which will result in removing sediment, organic matter, pollutants and utilizing nutrients, from surface and ground water associated with agricultural operations.

CONDITIONS WHERE PRACTICE APPLIES

This standard applies to creating wetlands on sites where, historically, no natural wetlands occurred or where restoration applies to rehabilitating natural wetlands which were hydrologically and/or vegetatively manipulated, and/or to sites where hydric soils have been removed or covered by fill.

These sites may have been completely converted to non-wetland conditions by filling, draining, or other hydrologic changes, or they may still meet wetland criteria but have impaired functions due to hydrologic or vegetative modifications.

CRITERIA

The wetland hydrology, soils, vegetation, and habitat shall approximate as closely as possible the natural condition, or a precursor to the natural condition, of the wetland prior to modification.

A variety of structural measures, including but not limited to embankments, surface drain plugs, subsurface drain plugs, removal of fill material, and shallow excavation, may be used as needed to restore hydrology. These measures may not be needed on restoration sites where the natural hydrology has not been significantly modified.

After the site is restored, the soil shall generally remain undisturbed so that the wetland will perform its natural functions, including (but not limited to) accumulation of organic matter, nutrient and contaminant sequestration, and retention of surface and subsurface water.

OPERATION AND MAINTENANCE

Inspections of the restored wetland are required at least every 5 years.

SUPPORTING DATA AND DOCUMENTATION

Complete accompanying worksheet and document on conservation plan map.

657FE – WETLAND RESTORATION (MDA) Worksheet

Cooperator Name, Address and Phone #	FSA Farm / Tract	District	Inspection Type
			☐ Initial Inspection ☐ Q.A.R ☐ Nutrient Trading ☐ Recheck ☐ Other _____

1. When was the practice installed? _____/_____ Month Year	
2. Was this area a wetland historically?	Y / N
3. How was the wetland restored? ☐ Plugging/pipe riser ☐ Drain removal ☐ Drain replacement (perforated with non-perforated) ☐ Other (please describe):	
4. Why no cost-share? ☐ Not aware that cost-share was available ☐ Not eligible ☐ Practice doesn't fit standard ☐ Programs too complicated ☐ Programs take too long ☐ Not selected for program ☐ Other:	
5. Is the wetland wooded?	Y / N
6. Is there a buffer surrounding the restoration? If so, how wide is the buffer?	Y / N
7. Are there any spillways or pipe conduits added for surface inflow?	Y / N
8. Does the wetland affect any other upstream drainage? If so, how?	Y / N
9. Is there a water control structure to control inflow or outflow?	Y / N
10. Is the wetland adjacent to a water body?	Y / N
11. How large is the wetland?	
12. How much area drains into the wetland?	
13. Does the practice provide an environmental benefit?	Y / N

_____ _____

SCD Reviewer: Name, Position, and Signature Date of Review

587FE – STRUCTURE FOR WATER CONTROL (MDA)

(Reported by Number)

DEFINITION

A structure in a water management system that conveys water, controls the direction or rate of flow, maintains a desired water surface elevation in drainage ditches.

PURPOSES

The purpose of this practice is to reduce nutrient loading from agricultural drainage systems into downstream receiving waters.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies wherever a permanent structure is needed as an integral part of a water control system to serve one or more of the following functions:

1. To control the elevation of water in drainage or irrigation ditches. Typical structures: checks, flashboard risers, check dams.

2. To control the water table level, remove surface or subsurface water from adjoining land, flood land for frost protection or manage water levels for wildlife or recreation. Typical structures: water level control structures flashboard risers, pipe drop inlets, and box inlets

3. To provide silt management in ditches or canals. Typical structure: sluice.

CRITERIA

Structures should be designed and installed consistent with all federal and state rules and regulations.

The structure capacity shall be appropriate for the intended practice or purpose.

The structure shall be fenced, if necessary, to protect the vegetation.

Protect outlets to the extent that design flows will not result in erosion downstream of the structure.

OPERATION AND MAINTENANCE

Structures will be checked and necessary maintenance, including removal of debris, shall be performed after major storms and at least semiannually. Water level management and timing shall be adequately described wherever applicable.

Inspections of the restored wetland are required at least every 5 years.

SUPPORTING DATA AND DOCUMENTATION

Complete accompanying worksheet and document on conservation plan map.

587FE – STRUCTURE FOR WATER CONTROL (MDA) Worksheet

Cooperator Name, Address and Phone #	FSA Farm / Tract	District	Inspection Type
			☐ Initial Inspection ☐ Q.A.R ☐ Nutrient Trading ☐ Recheck ☐ Other _____

1. When was the practice installed? _____/_____
   Month Year

2. What is the main purpose of the drainage system?
   ☐ Wildlife benefits ☐ Environmental quality ☐ Drainage of agricultural land
   Describe:

3. Does it fulfill its intended purpose?	Y / N
4. Do you ever leave the water control structure in free drainage mode? When?	Y / N

5. How often do you drain your water body? _____
   Why? ☐ Clean out sediment ☐ Plant Crops for Wildlife ☐ Other:

6. Why no cost-share?
   ☐ Not aware that cost-share was available ☐ Not eligible
   ☐ Practice doesn't fit standard ☐ Programs too complicated
   ☐ Programs take too long ☐ Not selected for program
   ☐ Other:

7. Does the system collect surface water from ag land?	Y / N

8. How many acres drain into the system?

9. Where does the outlet drain?

10. Where in the field is the structure?

11. Does the drainage/collection provide wildlife habitat?	Y / N
12. Does the system provide an environmental benefit?	Y / N

_____ _____
SCD Reviewer: Name, Position, and Signature Date of Review

380FE – VEGETATIVE ENVIRONMENTAL BUFFER (MDA)

(Reported by Number)

DEFINITION

Windbreaks or shelterbelts are single or multiple rows of trees or shrubs in linear configurations adjacent to poultry houses.

PURPOSES

This practice applies to buffers around poultry operations that are designed to improve air and water quality by reducing and intercepting airborne particulate matter.

CONDITIONS WHERE PRACTICE APPLIES

This practice may be applied on any areas where linear plantings of woody plants are desired and are suitable for the intended purpose.

Windbreaks/shelterbelts are generally not used solely for purposes of enhancing aesthetics or providing wildlife habitat. These are usually secondary purposes that may complement a primary purpose.

This practice does not apply to plantings that are intended to function primarily as field borders, hedgerows, or riparian forest buffers, for which other standards are applicable.

CRITERIA

Plant species shall be selected based on the planned purpose(s) of the windbreak, preferences of the client, and conditions of the site. Do not use weak-wooded species close to buildings where broken limbs can cause damage.

Use staggered spacing in multiple row plantings. Plant taller-growing trees or shrubs in center rows, and medium or lower growing species in outer rows.

OPERATION AND MAINTENANCE

Inspections of the restored wetland are required at least every 3 years.

SUPPORTING DATA AND DOCUMENTATION

Complete accompanying worksheet and document on conservation plan map.

380FE – VEGETATIVE ENVIRONMENTAL BUFFER (MDA) Worksheet

Cooperator Name, Address and Phone #	FSA Farm / Tract	District	Inspection Type
			☐ Initial Inspection ☐ Q.A.R ☐ Nutrient Trading ☐ Recheck ☐ Other _____

1. When was the practice installed? _____/_____ 2. Month Year	
3. How is the area managed? Weeds? Pests? Accumulated particulates?	
4. How long is the buffer?	
5. How wide is the buffer?	
6. Is the buffer on both sides of the animal production area?	Y / N
7. How many rows of trees are there?	
8. What is the spacing of the trees?	
9. What species are the trees?	

10. 1st row:	11. 2nd row:	12. 3rd row:

13. Do the trees appear to be healthy?	
14. What percentage of trees are missing or dead?	
15. Is the buffer irrigated?	Y / N
16. Are the trees in front of ventilation fans? 17. If so, how far are the trees from the fans?	Y / N
18. Does the practice provide an environmental benefit?	Y / N

_____ _____

SCD Reviewer: Name, Position, and Signature Date of Review

327FE – ALTERNATIVE CROP - SWITCHGRASS (MDA)

(Reported by Acres)

DEFINITION

A designated area devoted to herbaceous vegetation of a desired variety of alternative crop, primarily switchgrass.

PURPOSES

Improve water quality and sequester atmospheric carbon dioxide; Promote desired plant growth; Control insects, disease and weeds; Improve or provide wildlife habitat.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to alternative crops plantings on land that was previously used for crop production.

This practice does not apply to plantings that are intended to function primarily as field borders, hedgerows, or riparian buffers, for which other standards are applicable.

OPERATION AND MAINTENANCE

Inspections of the alternative crop are required at least every 2 years.

SUPPORTING DATA AND DOCUMENTATION

Complete accompanying worksheet and document on conservation plan map.

327FE – ALTERNATIVE CROP - SWITCHGRASS (MDA) Worksheet

Cooperator Name, Address and Phone #	FSA Farm / Tract	District	Inspection Type
			☐ Initial Inspection ☐ Q.A.R ☐ Nutrient Trading ☐ Recheck ☐ Other _____

1. When was the practice installed? _____/_____ Month Year	
2. How many acres are planted in alternative crops?	
3. What was the prior land use? ☐ Cropland ☐ Pasture ☐ Fallow Land ☐ Other (Describe)	
4. How is the stand managed? (Mowing, burning, fertilization, weed control, etc.)	
5. Is the crop harvested for any use? If so, please describe.	Y / N
6. Is the area grazed?	Y / N
7. Does the stand appear to be healthy and maintained?	Y / N
8. Are there excessive weeds?	Y / N
9. Does the practice provide an environmental benefit?	Y / N

Other notes and observations:

_____ _____

SCD Reviewer: Name, Position, and Signature Date of Review