

Name of Practice:  
WHOLE FARM APPROACH – COVER CROP BUNDLE  
DCR Specification for No. WFA-CC

This document specifies terms and conditions for the Virginia Department of Conservation and Recreation’s Whole Farm Approach – Cover Crop practice for bundled agricultural best management practices which are applicable to all contracts entered into with respect to that practice. **Implementation of WFA-NM is required to be eligible for this practice.**

A. Description and Purpose

This practice will collect data and provide for the establishment of vegetative cover on agricultural land for protection from erosion and the reduction of nutrient losses to groundwater. The Chesapeake Bay Program Watershed Model separates cover crops into independent sets of practice elements, which stack onto a required core set of management elements known as Core Requirements; this practice is intended to enable reporting for each of these practice elements.

In addition, the practice is also intended to offer financial assistance to agricultural producers to provide an incentive to keep cover on agricultural land, increase biomass, and promote biological diversity while providing water quality benefits.

This practice bundles components of the following best management practices:

- SL-8 Protective Cover for Specialty Crops;
- SL-8B Small Grain and Mixed Cover Crop for Nutrient and Residue Management;
- SL-8H Harvestable Cover Crop;
- SL-8M Small Grain and Mixed Cover Crop for Nutrient Management and Residue Management with Fall Manure Application;
- WQ-4 Legume Based Cover Crop

B. General Policies and Specifications

***Review the following standards and specifications for the individual practice components of the Whole Farm Approach.*** Producers receiving cost-share funding for this practice must be implementing recommended nutrient application rates on all agricultural production acres in the Tract to be in compliance with this specification.

This is an annual practice with a cost-share payment issued annually. There is no guarantee that cost-share funds will be approved by the local District.

1. Eligibility

- i. This practice applies to crops and highly managed hay.
- ii. Cropland which receives applications of pelletized Class A biosolids that do not require a permit are eligible for the WFA-CC framework since these products are considered commercial fertilizer. However, participants should review each individual WFA-CC cover crop option for relevant nutrient application rules.

- iii. **Implementation of the WFA-NM is required to be eligible for this practice.** The Nutrient Management Plan shall also contain any specific production management criteria designated in the BMP components listed within this practice.

2. Ineligible

- i. Participants may **NOT** receive cost-share payments on the same crop and field for the WFA-CC and the following VACS practices simultaneously: SL-8, SL-8B, SL-8H, SL-8M, and WQ-4.

C. Rates

Cost-share rates for the following components may stack; see the WFA-CC Rate Worksheet for assistance with sign-up. The WFA-CC core and components are not eligible for tax credit.

- 1. **Implementation of the WFA-NM is required to be eligible for this practice. Core Nutrient Management Plan Requirement:** The state cost-share payment rate is **\$4.00 per acre** for all eligible acres on a Tract where cover crop is established and a Nutrient Management Plan is being fully implemented. Participants must provide the District a copy of the current Nutrient Management Plan, which includes amendments or revisions that match all management practices to be implemented in the cropping year to the District to receive the annual payment; and

2. **Cover Crop – Standard Cover Crop:**

- i. A state cost-share payment rate per acre is available for pure stands of rye as listed below:

	<b>Rate</b>
<b>Early Pure Rye</b>	<b>\$90.00/acre</b>
<b>Standard Pure Rye</b>	<b>\$60.00/acre</b>

- ii. A state cost-share payment rate per acre is available for listed small grains, brassicas, and/or mixtures as listed below:

	<b>Rate</b>
<b>Early</b>	<b>\$70.00/acre</b>
<b>Standard</b>	<b>\$40.00/acre</b>

- iii. An additional state cost-share payment rate of **\$5.00 per acre** is available for a mixed species cover crop that includes 50-75% small grain.

- iv. An additional state cost-share payment rate of **\$10.00 per acre** is available for a delayed cover crop kill down on May 1 or thereafter, but no later than June 1.

3. **Cover Crop – Fall Manure Application:**

- i. A state cost-share payment rate per acre is available for pure stands of Rye are listed below:

	<b>Rate</b>
<b>Early Rye</b>	<b>\$40.00/acre</b>
<b>Standard Rye</b>	<b>\$25.00/acre</b>

- ii. A state cost-share payment rate per acre is available for listed small grains, brassicas, and/or mixtures are below:

	<b>Rate</b>
<b>Early</b>	<b>\$32.00/acre</b>
<b>Standard</b>	<b>\$20.00/acre</b>

- iii. An additional state cost-share payment rate of **\$5.00 per acre** is available for a mixed species cover crop that includes 50-75% small grain.
- iv. An additional state cost-share payment rate of **\$10.00 per acre** is available for a delayed cover crop kill down on May 1 or thereafter, but no later than June 1.

4. **Protective Cover for Specialty Crops:** A state cost-share payment rate of **\$40.00 per acre** is available for protective cover for specialty crops.

5. **Cover Crop – Harvestable:** A state cost-share payment rate of **\$20.00 per acre** is available for harvestable cover crops.

6. **Cover Crop – Legume:** A state cost-share payment rate of **\$45.00 per acre** is available for legume cover crops.

D. Technical Responsibility

Technical and administrative responsibility for all Components of the WFA-CC is assigned to qualified technical DCR and District staff in consultation, where appropriate and based on the controlling standard, with DCR, Virginia Certified Nutrient Management Planner(s), NRCS, DOF, and VCE. Individuals certifying technical need and technical practice installation shall have appropriate certifications as identified above and/or Engineering Job Approval Authority (EJAA) for the designed and installed component(s). All practices are subject to spot check procedures and any other quality control measures.

## **WFA-CC Cover Crop – Standard Cover Crop**

This document specifies terms and conditions for the Virginia Department of Conservation and Recreation's WFA-CC Standard Cover Crop option which are applicable to all contracts entered into with respect to that practice.

### A. Description and Purpose

Cost-share is provided to establish vegetative cover on cropland for protection from erosion and the reduction of nutrient losses to groundwater.

This practice will provide an incentive to keep a cover on cropland, which will help prevent the loss of nutrients. The purpose is to reduce erosion and the leaching of nutrients to ground water. This BMP is designed to utilize the maximum amount of residual nitrogen from previous surface nutrient applications and in the first three feet of the soil profile.

### B. Policies and Specifications

1. Soil loss calculations using the presently approved NRCS calculation methodology shall be documented and included in the participant file for review during spot checks.
2. No nutrients from any sources are allowed between the harvesting of the previous crop and March 1 of the next calendar year. No nutrients are allowed at planting.
3. Cost-share is provided as a variable flat rate per acre incentive to encourage proper establishment and to offset a portion of the cost of seed and the seeding operation.
4. In order to be eligible for cost-share or tax credit, producers must be fully implementing a current Nutrient Management Plan (NMP) on all agricultural production acreage contained within the field that this practice will be implemented on. The NMP must comply with all requirements set forth in the Nutrient Management Training and Certification Regulations (4VAC50-85 et seq.) and the Virginia Nutrient Management Standards and Criteria (revised July 2014); must be prepared and certified by a Virginia certified Nutrient Management Planner; and must be on file with the local District before any cost-share payment is made to the participant. Plans shall also contain any specific production management criteria designated in the BMP practice (4VACV50-85-130G).
5. A good stand and good growth of vegetative winter cover must be obtained by December 15 to protect the area from nutrient leaching and runoff in the fall and winter. All cover crop plantings must maintain a minimum of 60% cover crop plant material on the enrolled acres through the lifespan of the practice.
6. Seeding rates shall be adjusted based on germination rates.
7. The practice is intended to provide an incentive to keep a vegetative cover on cropland,

which will help prevent the loss of nutrients by reducing surface erosion and absorbing any excess nutrients from the soil. Current research indicates that early planting of winter rye maximizes the environmental benefit in of cover crops Virginia. This WFA-CC option is not intended to subsidize crops produced for commodity purposes or for land already in permanent grass.

8. Harvesting for hay, haylage, silage, grain, straw or seed is not permitted. Pasturing consistent with sound agronomic management is permitted as long as a 60% cover is maintained through March 14. **In years of drought if producers anticipate a need for additional feed harvest, they should apply for the Harvestable Cover Crop option as harvesting is not allowed under this practice.**
9. Select one of following species and/or mixtures of species to plant in all soils:

Species	bu./acre
Rye (Tetraploid)	2 bu./acre
Winter Rye (not tetraploid)	2 bu./acre
Winter Barley	2 bu./acre
Winter Hardy Oats	2 bu./acre
Winter Wheat or Triticale	2 bu./acre
Winter Annual ryegrass	20 lbs./acre
Small grain mixtures with	1 bu./acre
a) legume† or	10 lbs./acre
b) Diakon (forage or tillage) radish or	6 lb./ acre
c) canola or rape	4 lbs./acre
Diakon (forage or tillage) Radish	6-8 lbs./acre°
mixture with annual rye grass	10 lbs./acre
Winter-hardy <i>Brassica</i> (canola/rape)	5 -7 lbs./acre°
mixture with annual rye grass	10 lbs./acre

† legume = Crimson Clover, Austrian Winter Pea or Hairy Vetch

°Use higher seeding rates for pure stands and lower seeding rates for mixed species plantings

**Higher seeding rates are recommended for aerial seeding and non-incorporation seeding methods.**

10. In order to promote soil health through biodiversity and increased biological activity; an additional incentive is provided for mixed species cover crop consisting of 50-75% small grain.

11. Seeding of all seed types must be planted by the dates listed below:

<b>Area</b>	<b>Early Planting Date</b>	<b>Standard Planting Date</b>
Cities of Chesapeake & VA Beach	November 10	November 30
Coastal Plain (including the Eastern Shore)	November 10	November 30
Piedmont	October 25	November 15
Mountain and Valley	October 20	November 10

12. In all cases, this practice is subject to NRCS standard 340.

13. The cover crop must be killed using mechanical or chemical means or by grazing no earlier than March 15 and no later than June 1. The cover crop residue may be left on the field for conservation purposes or the cover crop or its residue may be tilled under. The practice will be considered complete once the cover crop has served its purpose and been killed.

14. In order to provide additional nutrient uptake and promote soil health through the increase of biomass above and below the soil surface, an additional incentive is provided for cover crops that are killed using mechanical, chemical or grazing means, on May 1 or thereafter, but no later than June 1.

C. Rate(s)

1. For participants who are not receiving payment for cover crops from another source on the same acreage, a state cost-share payment rate per acre for pure stands of Rye are below. Participants may also be eligible for the late kill down incentive.

	<b>Rate</b>
<b>Early Rye</b>	<b>\$90.00/acre</b>
<b>Standard Rye</b>	<b>\$60.00/acre</b>

i. The following list of rye cultivars are approved for the rye payments OR any other indeterminate growth tetraploid rye cultivar:

6250 Abruzzi	Paster
Abruzzi	Ryman
Dura	Virginia Abruzzi
Early Grazer	Wheeler
Elbon	Wintergrazer 70
Grazer	Winterking
Graze Master	

2. For participants who are not receiving payment for cover crops from another source on the same acreage, a state cost-share payment rate per acre for listed small grains,

brassicas, and/or mixtures are below. Participants may also be eligible for the mixed species and late kill down incentives.

	<b>Rate</b>
<b>Early</b>	<b>\$70.00/acre</b>
<b>Standard</b>	<b>\$40.00/acre</b>

3. Mixed Species Cover Crop that consist of 50%-75% small grain are eligible for a **\$5.00 per acre** bonus (i.e. pure stands of rye are not eligible).
4. Cover crops that are killed using mechanical, chemical or grazing means, on May 1 or thereafter, but no later than June 1, are eligible for a **\$10.00 per acre** bonus.

D. Technical Responsibility

Technical and administrative responsibility is assigned to qualified technical DCR and District staff in consultation, where appropriate and based on the controlling standard, with DCR, Virginia Certified Nutrient Management Planner(s), NRCS, DOF, and VCE. Individuals certifying technical need and technical practice installation shall have appropriate certifications as identified above and/or Engineering Job Approval Authority (EJAA) for the designed and installed component(s). All practices are subject to spot check procedures and any other quality control measures.

## **WFA-CC Cover Crop – Cover Crop with Fall Manure Application**

This document specifies terms and conditions for the Virginia Department of Conservation and Recreation's WFA-CC Cover Crop with Fall Manure Application option which are applicable to all contracts entered into with respect to that practice.

### A. Description and Purpose

Cost-share or tax credit are provided to establish vegetative cover on cropland for protection from erosion and the reduction of nutrient losses to groundwater. This type of cover crop is planted upon cropland where manure is applied following the harvest of a summer crop and prior to cover crop planting. The crop may not be harvested in the spring.

This practice will provide an incentive to keep a cover on cropland, which will help prevent the loss of nutrients, reduce erosion and the leaching of nutrients to ground water. The purpose is to increase above- and below-ground biomass returned to the soil by increasing the amount of manure amendments while minimizing nutrient loss risk, thereby providing adequate fertility to grow the extra biomass. This BMP is designed to utilize the maximum amount of residual nitrogen from previous surface nutrient applications and in the first three feet of the soil profile.

### B. Policies and Specifications

1. Soil loss calculations using the presently approved NRCS calculation methodology shall be documented and included in the participant file for review during spot checks.
2. Application of manure (organic) amendments are allowed between the harvesting of the previous crop and prior to planting.
3. In order to be eligible for cost-share or tax credit, producers must be fully implementing a current Nutrient Management Plan (NMP) on all agricultural production acreage contained within the field on which this practice will be implemented. The NMP must comply with all requirements set forth in the Nutrient Management Training and Certification Regulations (4VAC50-85 et seq.) and the Virginia Nutrient Management Standards and Criteria (revised July 2014); must be prepared and certified by a Virginia certified Nutrient Management Planner; and must be on file with the local District before any cost-share payment is made to the participant. Plans shall also contain any specific production management criteria designated in the BMP practice (4VACV50-85-130G).
4. A current Nutrient Management Plan must be on file with the District Prior to issuing cost-share. Cost-share is available for all acres with application rates in compliance with the NMP Spreading Schedule. Acres that receive application rates above NMP are not eligible for cost-share.
5. No nutrients from any source are allowed between the harvesting of the previous crop and March 1 of the next calendar year, except that use of manure (with less than 40



- lbs. N per acre tested) is permitted if all of the following conditions are met:
- i. Inadequate manure storage is available for the winter at the source;
  - ii. On fields that have organic sources of nitrogen applied during the crop year or in previous years, or if high residual nitrogen levels are suspected from a previous crop, fall nitrogen rates shall be determined by a soil nitrate test. The results of these samples may be used by the participant to support this practice.
  - iii. Manure is applied in accordance with a Nutrient Management Plan prepared by a Virginia certified Nutrient Management Planner.
  - iv. New plans shall be written for a period of one to three years. Before cost-share payment can be made the following items must be submitted:
    - a. A complete copy of the NMP containing the planner's Virginia Nutrient Management Certificate number;
    - b. An invoice for planning services of the private certified planner;
    - c. A completed Imported Manure Supplier Verification form (if applicable).
6. No nutrients may be applied at planting
  7. If available as set forth in Section C.1. of this specification, cost-share is provided as a flat rate per acre incentive to encourage proper establishment of vegetative cover and to offset a portion of the cost of seed and the seeding operation.
  8. **A good stand and good growth of vegetative winter cover must be obtained by December 15 to protect the area from nutrient leaching and runoff in the fall and winter.** All cover crop plantings must maintain a minimum of 60% cover crop plant material on the enrolled acres through the lifespan of the practice.
  9. Aerial seeding is not applicable for this practice.
  10. Seeding rates shall be adjusted based on germination rates.
  11. The practice is intended to provide an incentive to keep a vegetative cover on cropland, which will help prevent the loss of nutrients by reducing surface erosion and absorbing any excess nutrients from the soil. Current research indicates that early planting of winter rye maximizes the environmental benefit of cover crops in Virginia. The Cover Crop with Fall Manure Application option is not intended to subsidize winter crop produced for commodity purposes.
  12. Harvesting for hay, haylage, silage, grain, straw or seed is not permitted. Pasturing consistent with sound agronomic management is permitted as long as a 60% cover is maintained through March 14. **In years of drought, if producers anticipate a need for additional feed harvest, they should apply for the Harvestable Cover Crop option, as harvest is not allowed under this practice.**
  13. Land enrolled in this practice may not be enrolled in another state cover crop practice.

14. Select one of following species and/or mixtures of species to plant in all soils:

Species	bu./acre
Rye (Tetraploid)	2 bu./acre
Winter Rye (not tetraploid)	2 bu./acre
Winter Barley	2 bu./acre
Winter Hardy Oats	2 bu./acre
Winter Wheat or Triticale	2 bu./acre
Winter Annual ryegrass	20 lbs./acre
Small grain mixtures with	1 bu./acre
a) legume† or	10 lbs./acre
b) Diakon (forage or tillage) radish or	6 lb./ acre
c) canola or rape	4 lbs./acre
Diakon (forage or tillage) Radish	6-8 lbs./acre°
mixture with annual rye grass	10 lbs./acre
Winter-hardy <i>Brassica</i> (canola/rape)	5 -7 lbs./acre°
mixture with annual rye grass	10 lbs./acre

† - legume = Crimson Clover, Austrian Winter Pea or Hairy Vetch

°Use higher seeding rates for pure stands and lower seeding rates for mixed species plantings

**Higher seeding rates are recommended for non-incorporation seeding methods. Aerial seeding is not eligible with this practice.**

15. In order to promote soil health through biodiversity and increased biological activity; an additional incentive is provided for mixed species cover crop consisting of 50%-75% small grain.
16. Seeding of all seed types must be planted by the dates listed below:

Area	Early Planting Date	Standard Planting Date
Cities of Chesapeake & VA Beach	November 10	November 30
Coastal Plain (including the Eastern Shore)	November 10	November 30
Piedmont	October 25	November 15
Mountain and Valley	October 20	November 10

17. In all cases, this practice is subject to NRCS standard 340.

18. The cover crop must be killed using mechanical or chemical means or by grazing no earlier than March 15 and no later than June 1. The cover crop residue may be left on the field for conservation purposes or the cover crop or its residue may be tilled under. The practice will be considered complete once the cover crop has served its purpose and been killed.
19. In order to provide additional nutrient uptake and promote soil health through the increase of biomass above and below the soil surface, an additional incentive is provided for cover crops that are killed using mechanical, chemical or grazing means, on May 1 or thereafter, but no later than June 1.

C. Rate(s)

1. For participants who are not receiving payment for cover crops from another source on the same acreage, a state cost-share payment rate per acre for pure stands of Rye are below. Participants may also be eligible for the late kill down incentive.

	<b>Rate</b>
<b>Early Rye</b>	<b>\$40.00/acre</b>
<b>Standard Rye</b>	<b>\$25.00/acre</b>

- i. The following list of rye cultivars are approved for the rye payments OR any other indeterminate growth tetraploid rye cultivar:

6250 Abruzzi	Paster
Abruzzi	Ryman
Dura	Virginia Abruzzi
Early Grazer	Wheeler
Elbon	Wintergrazer 70
Grazer	Winterking
Graze Master	

2. For participants who are not receiving payment for cover crops from another source (funding) on the same acreage, a state cost-share payment rate per acre for listed small grains, brassicas, and/or mixtures are below. Participants may also be eligible for the mixed species and late kill down incentives.

	<b>Rate</b>
<b>Early</b>	<b>\$32.00/acre</b>
<b>Standard</b>	<b>\$20.00/acre</b>

3. Mixed Species Cover Crop that consist of 50%-75% small grain are eligible for a **\$5.00 per acre** bonus (i.e. pure stands of rye are not eligible).
4. Cover crops that are killed using mechanical, chemical or grazing means, on May 1 or thereafter, but no later than June 1, are eligible for a **\$10.00 per acre** bonus.

D. Technical Responsibility

Technical and administrative responsibility is assigned to qualified technical DCR and District staff in consultation, where appropriate and based on the controlling standard, with DCR, Virginia Certified Nutrient Management Planner(s), NRCS, DOF, and VCE. Individuals certifying technical need and technical practice installation shall have appropriate certifications as identified above and/or Engineering Job Approval Authority (EJAA) for the designed and installed component(s). All practices are subject to spot check procedures and any other quality control measures.

## WFA-CC Cover Crop – Protective Cover for Specialty Crops

This document specifies terms and conditions for the Virginia Department of Conservation and Recreation's Protective Cover for Specialty Crops option which are applicable to all contracts entered into with respect to that practice.

### A. Description and Purpose

This practice will provide an incentive to keep a cover on specialty crop land when it is not being used after harvest of a specialty crop. The purpose is to reduce wind and water erosion, thus improving water quality.

### B. Policies and Specifications

1. Specialty crops for this practice (for the purpose of the Virginia Agricultural Cost-Share Program only) are defined as: Vegetables, tree crops, perennial vine crops, ornamentals, horticultural crops, tobacco, hemp, turf and other similar crops.
2. Specialty crops are given consideration due to bare sites and highly erodible soil conditions.
3. Soil loss rates must be computed for all applications for use in establishing priority considerations.
4. Payment is provided as a flat rate per acre incentive payment to encourage proper establishment and to offset a portion of the cost of seed and the seeding operation.
5. The seeding must be planted and certified no later than November 30. A good stand and growth of vegetated cover must be obtained in sufficient time to protect the area no later than December 15. All cover crop plantings must maintain a minimum of 60% cover crop plant material on the enrolled acres through the lifespan of the practice. After the growth has been maintained for at least 90 days after seeding certification or until the conservation purpose has been served in accordance with NRCS 340, whichever is greater, it may be left on the land or incorporated.
6. Pasturing consistent with good management may be permitted. No vegetative growth may be harvested for hay or seed.
7. Seed type and rates shall be those listed:

<b>Seed Type</b>	<b>Rate</b>
Tetraploid Rye (pure strain only)	2.0 bu./acre
Winter Rye	1.5 bu./acre
Winter Barley	2.5 bu. /acre
Winter Annual Ryegrass	20 lbs./acre

Winter Wheat	1.5 bu./acre
Winter Hardy Oats	2.0 bu./acre
Small Grain Mixtures	1 bu./ac.with
a) legume†	10 lbs./acre or,
b) forage radish	6 lb./ acre or,
c) canola or rape	4 lbs./acre
Triticale	1.5 bu. /acre
Forage Radish	6-8 lbs. /acre
1) mixture with grass or legume†	4 lbs./acre
Winter-Hardy <i>Brassica</i> (canola/rape)	5 lbs./acre
1) mixture with grass or legume†	2-4 lbs./acre

† - legume = Crimson Clover, Austrian Winter Pea or Hairy Vetch

°Use higher seeding rates for pure stands and lower seeding rates for mixed species plantings.

**Higher seeding rates are recommended for aerial seeding.**

8. This practice is subject to NRCS standard 340 Cover Crop.

C. Rate(s)

1. For participants who are not receiving payment for cover crops from another source on the same acreage, a state cost-share payment rate of **\$40.00 per acre** is available.

D. Technical Responsibility

Technical and administrative responsibility is assigned to qualified technical DCR and District staff in consultation, where appropriate and based on the controlling standard, with DCR, Virginia Certified Nutrient Management Planner(s), NRCS, DOF, and VCE. Individuals certifying technical need and technical practice installation shall have appropriate certifications as identified above and/or Engineering Job Approval Authority (EJAA) for the designed and installed component(s). All practices are subject to spot check procedures and any other quality control measures.

## **WFA-CC Cover Crop – Harvestable Cover Crop**

This document specifies terms and conditions for the Virginia Department of Conservation and Recreation's Harvestable Cover Crop option which are applicable to all contracts entered into with respect to that practice.

### A. Description and Purpose

This practice will provide an incentive to keep a cover on cropland, which will help prevent the loss of nutrients. The primary purpose is to reduce winter rain and wind generated erosion; a secondary purpose is to reduce the leaching of nutrients to ground water. This practice is not intended to subsidize winter crop production. This cover crop may be harvested after the requirements of this specification have been met.

### B. Policies and Specifications

1. Soil loss calculations using the presently approved NRCS calculation methodology shall be documented and included in the participant file for review during spot checks.
2. In order to be eligible for cost-share or tax credit, producers must be fully implementing a current Nutrient Management Plan (NMP) on all agricultural production acreage contained within the field that this practice will be implemented on. The NMP must comply with all requirements set forth in the Nutrient Management Training and Certification Regulations (4VAC50-85 et seq.) and the Virginia Nutrient Management Standards and Criteria (revised July 2014); must be prepared and certified by a Virginia certified Nutrient Management Planner; and must be on file with the local District before any cost-share payment is made to the participant. Plans shall also contain any specific production management criteria designated in the BMP practice (4VACV50-85-130G).
3. No nutrients from any sources are allowed between the harvesting of the previous crop and March 1 of the next calendar year, except that use of manure (with less than 40 lbs N. per acre tested value) is permitted if all of the following conditions are met:
  - i. Animals are raised as part of the applicant's operation;
  - ii. Inadequate manure storage is available for the winter;
  - iii. There are no other vegetated acres available to safely utilize the manure;
  - iv. Manure is applied in accordance with a Nutrient Management Plan prepared by a Virginia certified Nutrient Management Planner.
4. No nutrients may be applied at planting.
5. If available as set forth in Section C.1. of this specification, cost-share is provided as a flat rate per acre incentive to encourage proper establishment of vegetative cover and to offset a portion of the cost of seed and the seeding operation.

6. A good stand and good growth of vegetative winter cover must be obtained by December 15 to protect the area from nutrient leaching and runoff in the fall and winter. All cover crop plantings must maintain a minimum of 60% cover crop plant material on the enrolled acres through the lifespan of the practice.
7. The practice is intended to provide an incentive to keep a vegetative cover on cropland, which will help prevent the loss of nutrients, by reducing surface erosion and absorbing any excess nutrients from the soil. Current research indicates that early planting of winter rye maximizes the environmental benefit of cover crops in Virginia. The Harvestable Cover Crop option is designed to provide an incentive to farmers to provide year round vegetative cover on as much acreage as possible; it is not intended to subsidize winter crops produced for commodity purposes or land already in permanent grass.
8. Harvesting for hay, haylage, silage, grain, or seed is permitted after March 14. Pasturing consistent with sound agronomic management is permitted as long as 60% cover is maintained through March 14.
9. Land enrolled in this practice may not be enrolled in another state cover crop practice, and may not be converted to or from another cover crop practice. Acres enrolled for this component are ineligible to receive payment for the WFA-NM Second Topdress Application of Anitrogen on Small Grain component.
10. Select one of following species and/or mixtures of species to plant in all soils:

Species	bu./acre
Rye (Tetraploid)	2 bu./acre
Winter Rye (not tetraploid)	2 bu./acre
Winter Barley	2 bu./acre
Winter Hardy Oats	2 bu./acre
Winter Wheat or Triticale	2 bu./acre
Winter Annual ryegrass	20 lbs./acre
Small grain mixtures with	1 bu./acre
a) legume† or	10 lbs./acre
b) Diakon (forage or tillage) radish or	6 lb./ acre
c) canola or rape	4 lbs./acre
Diakon (forage or tillage) Radish	6-8 lbs./acre°
mixture with annual rye grass	10 lbs./acre
Winter-hardy <i>Brassica</i> (canola/rape)	5 -7 lbs./acre°
mixture with annual rye grass	10 lbs./acre

† legume = Crimson Clover, Austrian Winter Pea or Hairy Vetch

°Use higher seeding rates for pure stands and lower seeding rates for mixed species plantings.



**Higher seeding rates are recommended for aerial seeding and non-incorporation seeding methods.**

11. Seeding of all seed types must be planted by the dates listed below:

Area	Planting Date
Cities of Chesapeake & VA Beach	November 10
Coastal Plain (including the Eastern Shore)	November 10
Piedmont	October 25
Mountain and Valley	October 20

12. Seeding rates shall be adjusted based on germination rates.
13. In all cases, this practice is subject to NRCS Standard 340.
14. The cover crop residue may be left on the field for conservation purposes, or the cover crop or its residue may be tilled under, or the cover crop may be harvested after March 14.

C. Rate(s)

1. For participants who are not receiving payment for cover crops from another source on the same acreage, a state cost-share payment rate of **\$20 per acre** is available. Districts should not issue cost-share funds if a good stand and good growth of winter cover is not obtained before December 1 and maintained through March 14.

D. Technical Responsibility

Technical and administrative responsibility is assigned to qualified technical DCR and District staff in consultation, where appropriate and based on the controlling standard, with DCR, Virginia Certified Nutrient Management Planner(s), NRCS, DOF, and VCE. Individuals certifying technical need and technical practice installation shall have appropriate certifications as identified above and/or Engineering Job Approval Authority (EJAA) for the designed and installed component(s). All practices are subject to spot check procedures and any other quality control measures.

## **WFA-CC Cover Crop – Legume Based Cover Crop**

This document specifies terms and conditions for the Virginia Department of Conservation and Recreation's Legume Based Cover Crop option which are applicable to all contracts entered into with respect to that practice.

### A. Description and Purpose

This practice will improve water quality by providing an adequate residue cover to prevent erosion and serve as desirable mulch for no-till cultivation. Water quality will also be enhanced by the nitrogen fixation of the legume in order to reduce applied amendments.

Cost-share is provided for utilizing an adequate legume mulch residue as a natural source of nitrogen to reduce applied soil amendment nitrogen.

### B. Policies and Specifications

1. In order to be eligible for cost-share, producers must be fully implementing a current Nutrient Management Plan (NMP) on all agricultural production acreage contained within the field that this practice will be implemented on. The NMP must comply with all requirements set forth in the Nutrient Management Training and Certification Regulations (4VAC50-85 et seq.) and the Virginia Nutrient Management Standards and Criteria (revised July 2014); must be prepared and certified by a Virginia certified Nutrient Management Planner; and must be on file with the local District before any cost-share payment is made to the participant. Plans shall also contain any specific production management criteria designated in the BMP practice (4VACV50-85-130G).
2. Cost-share is authorized as an incentive on a per acre basis to add this practice within an established rotation.
3. The amount of nitrogen application must be reduced following a pure legume cover crop according to Table 7-1, Estimating Nitrogen Available to Succeeding Crops from Legumes on page 108 of DCR Nutrient Management Standards and Criteria (Revised 2014).
4. The amount of nitrogen application must be reduced following a mixed species legume cover crop according to the recommendations of a Nutrient Management Plan. A split application of nitrogen based upon the results of a PSNT may be applied as well.
5. Removal of the legume residue by baling or by any other means is not allowed. Grazing is not permitted for this practice.

6. Soil loss rates must be computed for all applications for use in ranking practice applications; applications that are the most cost-effective at preventing the most soil loss should receive cost-share approval first.
7. Mulch Cover
- i. Existing stands: An adequate (minimum 60% legume cover and stand composition) cover that has been planted for at least one year prior to grain planting. Stand can be composed of clover, lespedeza, vetch or alfalfa. Seed must have been inoculated at time of planting.
  - ii. New stands: A legume cover crop can be planted during the fall prior to grain planting using the following recommendations. However, planting a cover crop in the fall is at the applicant's own risk, knowing cost-share assistance is not guaranteed.

Type	Rate	Seeding Date
<b>Crimson Clover</b>	20 lbs/acre	by September 28
<b>OR</b>		October 12 for the Coastal Plain
Crimson Clover (with any single grain or single grass below)	10.0 lbs/acre	
1) Annual ryegrass	10.0 lbs/acre	
2) Rye	1.0 bu./acre	
3) Barley	1.0 bu./acre	
4) Oats	1.0 bu./acre	
<b>OR</b>		
Ladino Clover (with either)	2 lbs/acre	
1) Tall Fescue	15.0 lb./acre	
2) Orchard grass	10.0 lb./acre	
<b>OR</b>		
<b>Austrian Winter Pea</b>	30-40 lbs/acre	by October 26
<b>OR</b>		
Austrian Winter Pea (with any single grain or single grass below)	15-20 lbs/acre	
1) Annual ryegrass	10.0 lbs/acre	
2) Rye	1.0 bu./acre	
3) Barley	1.0 bu./acre	
4) Oats	1.0 bu./acre	
<b>OR</b>		
Austrian Winter Pea (with either)	15-20 lbs/acre	
1) Tall Fescue	15.0 lb./acre	
2) Orchard grass	10.0 lb./acre	
<b>OR</b>		
<b>Hairy Vetch</b>	20 lbs/acre	by October 26
<b>OR</b>		
Hairy Vetch (with any single grain or single grass below)	10.0 lbs/acre	
1) Annual ryegrass	10.0 lbs/acre	
2) Rye	1.0 bu./acre	
3) Barley	1.0 bu./acre	
4) Oats	1.0 bu./acre	
<b>OR</b>		
Hairy Vetch (with either)	10 lbs/acre	
1) Tall Fescue	15.0 lb./acre	
2) Orchard grass	10.0 lb./acre	

- iii. Vetch is not recommended in rotations containing small grains. It is very important that seeding dates be met to insure adequate fall growth.
- iv. All seed is required to be inoculated.
- v. Method:
  - a) No till drill

- OR**
    - b) Aerial Seeding
    - OR**
    - c) Conventionally drilled as long as 30% of previous crop residue remain
    - OR**
    - d) Broadcast as long as 30% of previously crop residue remains.
- 8. Legume cover crop must be left on surface intact to serve as mulch for the no-till planting of grain crops.
- 9. Applicant must submit documentation (fertilizer recommendation and bills, or signed statement) indicating that the applied nitrogen fertilizer used that crop year (grain) was reduced, or will be reduced only in cases where nitrogen will be applied after June 1, according to Table 7-1 on page 108 “Estimated Nitrogen Availability to Succeeding Crops from Legumes” of DCR Nutrient Management Standards and Criteria (07/2014) per acre from his normal application or rate that was recommended. Consult local extension agent for exact recommendations. Districts shall utilize the signed statement example found on page **WQ-4 - 5** of the Virginia Agricultural Cost-Share BMP Manual and place in the participant’s case file.
- 10. This practice must be implemented on the fields consistent with NRCS Standards 340 Cover Crops. This practice is for use only on land being planted to a grain crop. No till planting must be established into an existing legume stand or newly established legume stand according to the standards of NRCS 329 Residue and Tillage Management, No Till/Strip-Till/Direct Seed, and 340 Cover Crops.
- 11. The practice may be certified complete once the grain crop has been planted using no-till methods into the legume mulch cover and all applicable specifications listed above have been met.

C. Rate(s)

- 1. For participants who are not receiving payment for cover crops from another source on the same acreage, a state cost-share payment rate of **\$45.00 per acre** is available.

D. Technical Responsibility

Technical and administrative responsibility is assigned to qualified technical DCR and District staff in consultation, where appropriate and based on the controlling standard, with DCR, Virginia Certified Nutrient Management Planner(s), NRCS, DOF, and VCE. Individuals certifying technical need and technical practice installation shall have appropriate certifications as identified above and/or Engineering Job Approval Authority (EJAA) for the designed and installed component(s). All practices are subject to spot check procedures and any other quality control measures.

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**WFA-CC Rate Worksheet**

<b>Component</b>	<b>Rate per Acre</b>	<b>Participating Acres</b>
Core WFA-CC Base Payment*	\$4.00/acre	
<b>Standard Cover Crop</b>		
Early Pure Rye	\$90.00/acre	
Standard Pure Rye	\$60.00/acre	
Early - Listed Small Grains, Brassicas, and/or Mixtures	\$70.00/acre	
Standard - Listed Small Grains, Brassicas, and/or Mixtures	\$40.00/acre	
Mixed Species Cover Crop including 50-75% Small Grain	\$5.00/acre	
Cover Crop Kill Down on May 1 or Thereafter, but No Later than June 1.	\$10.00/acre	
<b>Cover Crop with Fall Application of Manure</b>		
Early Pure Rye	\$40.00/acre	
Standard Pure Rye	\$25.00/acre	
Early - Listed Small Grains, Brassicas, and/or Mixtures	\$32.00/acre	
Standard - Listed Small Grains, Brassicas, and/or Mixtures	\$20.00/acre	
Mixed Species Cover Crop including 50-75% Small Grain	\$5.00/acre	
Cover Crop Kill Down on May 1 or Thereafter, but No Later than June 1.	\$10.00/acre	
<b>Protective Cover for Specialty Crops</b>	\$40.00/acre	
<b>Harvestable Cover Crop</b>	\$20.00/acre	
<b>Legume Cover Crop</b>	\$45.00/acre	

\*The Core WFA-CC Base Payment applies only to eligible acres on a Tract where cover crop is established and a Nutrient Management Plan is being fully implemented. Acres where cover crop is not established and maintained does not qualify for this payment.