

**DELAWARE RIVER WATERSHED RESTORATION AND PROTECTION STRATEGY (WRAPS)  
2019 Soil Health Financial Assistance Program  
January 2019**

The Delaware River WRAPS provides financial assistance to producers for implementing soil health best management practices (BMPs) to improve water quality in designated priority areas of the Delaware River watershed.

**Soil Health: Tier One (Cover Crop Establishment)**

**Purpose:** To support producers that are new or beginning cover croppers and provide flexibility to experiment with cover crop utilization. Producers who have already adopted cover crops as part of their normal cropping program are not eligible for this assistance.

**Definition:** A cover crop is a crop planted to provide seasonal cover and other conservation purposes such as improvement in soil health, erosion control, control of pests or to provide supplemental forage for livestock. A cover crop is planted on cropland between cash crops (i.e. corn, wheat, soybeans, or other income-generating crop) and is typically terminated prior to or shortly after the next cash crop is planted. Termination is accomplished by means of chemical sprays, mowing, tillage or seasonal frost/freezing. A crop planted for harvesting seed for sale is not considered a cover crop.

**Benefits:** The use of cover crops in agricultural systems can provide many benefits to soil and water resources, wildlife and the environment. These benefits may include reduction of soil erosion by wind and water; increased infiltration and reduced runoff from crop fields; reduced water pollution from sediment, nutrients, pesticides and bacteria; increased soil organic matter; capture, recycling and redistribution of nutrients in the soil profile; enhanced biological nitrogen fixation and other biological activity in the soil; increased biodiversity in the soil and the surrounding environment; weed suppression and disruption of disease cycles in cropping systems; provision of supplemental livestock forage; improved soil moisture management; reduction of soil compaction; reduction of fertilizer and pesticide inputs; and enhanced wildlife habitat.



**Eligibility and Requirements:**

- Eligibility criteria for implementing cover crop practices:
  1. Only producers (operators) that have not already adopted cover crops as part of their normal cropping program are eligible. Operators that have used cover crops in their agricultural operation within the past 3 years are not eligible.
  2. Operators that receive WRAPS financial assistance for cover crop establishment are not eligible for reenrollment.
  3. Cover crops must be planted on cropland located in a designated WRAPS priority area (see attached map) utilizing a no-till or reduced-till residue management system.
  4. Sod-busted fields are eligible if broken out prior to 2005 and are being farmed under a continuous no-till residue management system.
- Requirements for cover crop establishment include:
  1. Cover crops shall be planted at least 2 years within a 3-year timeframe (different fields may be utilized for cover crop establishment).
  2. The Midwest Cover Crop Council Decision Tool and guidance will be used for identifying resource objectives and determining applicable species, seeding rates, seeding dates, etc. (see: <http://mccc.msu.edu/>).
  3. Any seeding method may be utilized (e.g. drilled or broadcast, including aerial seeding).

4. Seed mix must include at least two species representing different cover crop types (e.g. grasses, brassicas, legumes) if planted prior to October 1<sup>st</sup>; aerial applications must include a multi-species mix with seeding rates 1.5 times the recommended drilling rate; planting must occur prior to November 15<sup>th</sup>.
5. Cover crop seed shall be free of noxious weeds.
6. Cover crops planted in field(s) next to perennial or intermittent streams which will be used for livestock grazing shall be planted and/or fenced to establish an un-grazed buffer zone between the stream and the grazed area. The buffer zone shall be of sufficient width to provide filtration of runoff containing livestock waste prior to entering the stream.
7. Cover crops used for livestock forage shall not be overgrazed and utilized so that adequate cover is maintained with a goal of maintaining at least 80% ground cover to provide for necessary re-growth and avoid soil erosion. Cover crops may not be hayed or chopped unless advance written approval is received by the Delaware WRAPS Stakeholder Leadership Team.
8. Producers shall follow the NRCS Cover Crop Termination Guidelines (producers should check with their local NRCS/FSA office for the latest guidance).
9. Applications will be prioritized as needed considering the following factors (Note: cover crops must be planted in a crop field located in one of the designated priority areas indicated in item a, b or c):
  - a) Cover crop planted in a crop field in a cropland priority area of the watershed.
  - b) Cover crop planted in a crop field in a livestock priority area of the watershed AND used for livestock grazing in a manner that reduces livestock waste loading of streams (for example, the cover crop eliminates or significantly reduces use of a concentrated winter-feeding site in the field).
  - c) Cover crop planted in a crop field in a gully erosion priority area of the watershed.
  - d) Cover crop planted in a crop field located adjacent to a perennial or intermittent stream.
  - e) If cover crop is grazed, perennial or intermittent streams in the field are fenced out so that livestock does not have access to the stream during the grazing period.
  - f) Cover crop is a mixture of two or more species.



#### **Incentive payment rates and Limitations:**

- Producers will receive a payment of \$30/acre (100 acres maximum) upon receipt of documentation for seed, planting and other establishment costs.
- The maximum payment per producer is \$3,000 per year for 2 years (\$6,000 total)
- Plantings may be verified by field checks prior to payment.

#### **Application Process:**

- A Delaware River WRAPS Soil Health Application must be completed and submitted to the Delaware River WRAPS Office – **Application Deadline: October 1, 2019**
- Applications will be evaluated and funding decisions made by the Delaware River WRAPS Stakeholder Leadership Team (SLT). All SLT decisions are final.

### **Soil Health: Tier Two**

**Purpose:** The purpose of Tier Two is to promote a more holistic and long-term management approach to soil health on crop land by improving organic matter content and restoring beneficial soil biology. Incentive payments for planning and implementation are provided to assist a producer in transitioning his/her current cropping program to more fully integrate soil health principles.

**Definition:** Long-term improvements to soil health are best achieved and sustained using a comprehensive management approach that keeps the soil covered, maintains living roots, improves diversity of crops and cover crops, and minimizes soil disturbance.

**Benefits:** Multiple benefits can be achieved through improvements in soil health including increased soil organic matter; increased infiltration rates and reduced runoff from crop fields; enhanced biological nitrogen fixation and other biological activity in the soil; increased productivity; reduced inputs (fertilizers & pesticides); reduction of soil erosion by wind and water; reduction of water pollution from sediment, nutrients, pesticides and bacteria; capture, recycle and redistribution of nutrients in the soil profile; increased biodiversity in the soil and the surrounding environment; weed suppression and disruption of disease cycles in cropping systems; provision of supplemental livestock forage; cover for wildlife; improved soil moisture management; and reduction of soil compaction.



**Eligibility and Requirements:**

- Eligibility criteria for participating in the Delaware River WRAPS Soil Health Tier Two program are as follows:
  1. Crop field must be in a designated WRAPS priority area for cropland, livestock or gully erosion practices.
  2. Only producers (operators) that are not already using cover crops in a 4-crop rotation as described below are eligible.
  3. Producers may participate in the Tier Two program only once and are not eligible for reenrollment.
  4. Sod-busted fields are not eligible for enrollment in Tier Two.
  
- Requirements for Tier Two:
  1. A minimum of 20 acres must be enrolled in the program with a maximum of 100 acres eligible for enrollment.
  2. A 3-4 year commitment is required depending on the crop rotation sequence utilized (a summer harvested small grain crop must be included at least twice in the rotation during the contract period).
  3. NRCS requirements for “organic matter depletion” resource concern will be utilized as guidelines for program implementation unless otherwise specified, including:
    - a) A minimum of four crop/cover types in a diverse crop rotation that includes cash crops and multi-species cover crops including at least one legume (The Delaware River WRAPS requires that a summer harvested small grain crop followed by a multi-species cover crop be included in the crop rotation - see Table 1 for example crop rotations).
    - b) A continuous no-till residue management system with soil disturbance restrictions.
    - c) Multi-species (minimum of 5 species) cover crop mixes that comply with NRCS 340A Cover Crop Soil Health Specifications.
    - d) Growing (live) cover 10 months a year, on average, throughout the planned crop rotation.
  4. A soil health plan will be prepared outlining the soil health practices to be followed. Factors such as soil health testing/monitoring and consideration of integrated pest management practices will be considered in the planning process. This plan will be developed by a qualified technical service provider and the producer in collaboration with the Delaware River WRAPS.
  5. Documentation of activities, observations, costs, etc. by the producer will be required and provided to the Delaware River WRAPS on an annual basis.
  6. Producer will allow use of the affected field for demonstration and outreach activities to promote soil health practices (e.g. field days, project profiles).

**Incentive Payments:**

- Incentive payment amounts will be as follows:
  - \$75/acre/year (100-acre maximum enrollment); \$7,500 maximum annual payment for 3 years

- \$1,500 sign-up bonus (paid after completion of an approved soil health plan)
- Incentive payments will be made over a 3-4 year period depending on the crop rotation utilized.

**Application Process:**

- A Delaware River WRAPS Soil Health Application must be completed and submitted to the Delaware River WRAPS Office - **Application Deadline for Tier Two: September 2, 2019**
- A maximum of \$30,000 in financial incentive payments will be allocated for Tier Two projects in calendar year 2019. Applications will be evaluated and funding decisions made by the Delaware River WRAPS SLT. The following criteria will be considered for application ranking:
  - Number of acres to be enrolled
  - Previous experience of producer with no-till farming and cover crop usage
  - WRAPS priority area location (cropland-1<sup>st</sup> priority; livestock-2<sup>nd</sup> priority; gully erosion-3<sup>rd</sup> priority)
  - Proximity of crop field to a receiving stream and anticipated water quality benefits
  - Funding assistance to be received from other programs

**Decision-Making:** All Delaware River WRAPS financial assistance applications are reviewed and funding decisions made by the Delaware River WRAPS Stakeholder Leadership Team (SLT). Applications are evaluated based on the criteria described previously and cost efficiency of the practice in achieving pollutant load reductions. The decisions of the SLT are final.

**Additional Information:** For additional information and to request an application form, contact: Kerry Wedel, Delaware River WRAPS Coordinator, 785.284.3422, [kwedel@delawarewraps.com](mailto:kwedel@delawarewraps.com). Financial assistance is also available through the Delaware WRAPS for other cropland, livestock and gully erosion BMPs in designated priority areas – visit: [http://delawarewraps.com/Cost\\_Share.html](http://delawarewraps.com/Cost_Share.html) for additional information.

**Table 1. Delaware WRAPS Soil Health Tier Two – Example Crop Rotations**  
(Actual rotation schedule will be determined during soil health plan development)

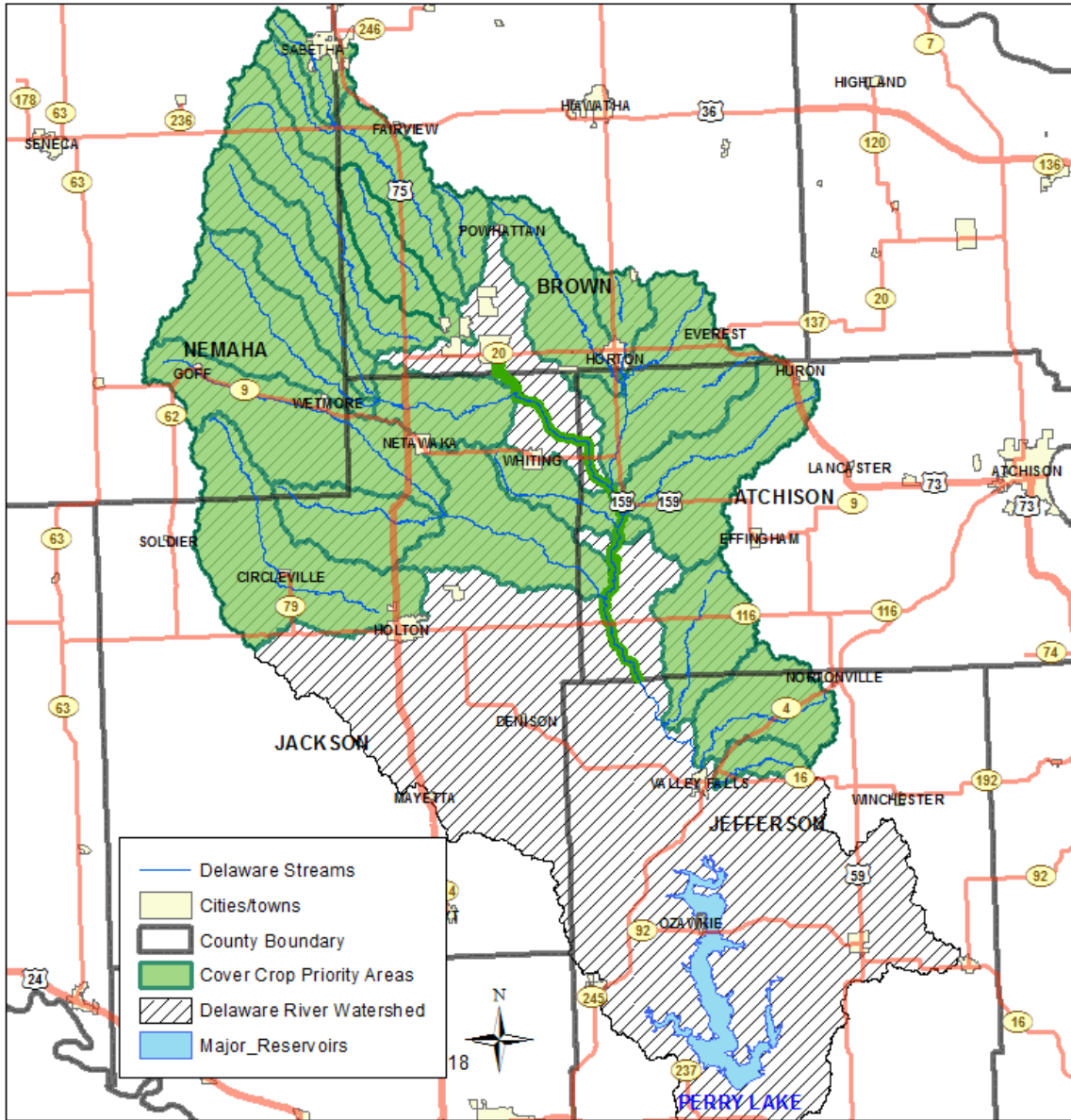
**Example 1: Fall Program Start - Soybeans**

Program Year	Soybeans	Corn	Wheat	Multi-species Cover Crop
1	Oct (harvest)		Oct (plant)	
			June/July (harvest)	July (plant) w/grazing
2		Apr (plant) Sep/Oct (harvest)		Sep/Oct (plant)
3	May (plant) Oct (harvest)		Oct (plant)	

**Example 2: Fall Program Start – Corn (4<sup>th</sup> year wheat planting required)**

Program Year	Soybeans	Corn	Wheat	Multi-species Cover Crop
1		Sep/Oct (harvest)		Sep/Oct (plant)
	May (plant) Oct (harvest)		Oct (plant)	
2			June/July (harvest)	July (plant) w/grazing
3		Apr (plant) Sep/Oct (harvest)		Sep/Oct (plant)
4	May (plant) Oct (harvest)		Oct (plant)	

# Delaware WRAPS Cover Crop Priority Areas



The purpose of this publication is to illustrate general watershed conditions in the state of Kansas. This map is provided without representation or implied or expressed warranty of accuracy and is intended for watershed planning purposes only. The originating agency is not responsible for publication or use of this product for any other purpose. This product may be corrected or updated as necessary without prior notification.