Warm season grass planting (CP2) of native switchgrass with riparian forest buffer (CP22) in background. Photo courtesy of the Lancaster County Conservation District.


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Executive Summary

The Pennsylvania Conservation Reserve Enhancement Program (CREP) continues to lead the nation in the number of acres enrolled in the national Conservation Reserve Program (CRP). A voluntary initiative, CREP assists agricultural producers in land preservation by minimizing erosion, restoring wildlife habitat and protecting both ground and surface water. The original CREP agreement was signed in 1999 with the first practices implemented in 2000.

Riparian buffer planting (CP22). Photo courtesy of PACD.

Program Highlights

Currently, 8,936 contracts are in place for a total of 151,908 acres under contract.

Since the program's inception, in Pennsylvania:
- 13,798 landowners have received cost-share payments from the U.S. Department of Agriculture’s Farm Service Agency (FSA) and the Commonwealth of Pennsylvania
- FSA has provided $46,312,559 in cost-share payments

In the 2015-16 CREP program year, in Pennsylvania:
- 485 contracts were approved on 7,335 acres.
- 778 acres of forested riparian buffers were installed.
- 1,391 acres of native grasses were planted.
- $1,189,370 in direct cost-share payments were obligated by the FSA:
  - $1,088,183 in the Chesapeake Bay
  - $99,573 in the Ohio Basin
- $255,226 in direct cost-share payments were obligated by the PA Department of Environmental Protection (DEP):
  - $254,726 in the Chesapeake Bay
  - $500 in the Ohio Basin
CREP Program Overview

The CREP program is an offshoot of the Conservation Reserve Program (CRP), the country's largest private-lands environmental improvement program. Administered by the U.S. Department of Agriculture’s Farm Service Agency (FSA), the program is a partnership between farmers, state and federal government, and private groups. By combining CRP resources with state and private programs, CREP provides farmers and other landowners with a sound financial package for conserving and enhancing natural resources.

The CREP project began in Pennsylvania when the state government and several local nongovernmental groups identified an agriculture-related environmental issue of state and national significance. These parties worked with the state’s FSA office to develop a project proposal to address specific environmental issues and goals, such as the reduction of nonpoint source pollution in the state’s water bodies, and enhancement of wildlife habitat.

Pennsylvania’s CREP program supports increased conservation practices that help protect streams, lakes, and rivers from sedimentation and agricultural runoff. By helping to restore the state’s water systems, the program helps protect national treasures, such as Pennsylvania’s portion of the Chesapeake Bay and the Ohio River Basin.

Like CRP, CREP contracts require a 10- to 15-year commitment to keep lands out of agricultural production. CREP provides payments to participants who offer eligible land. A federal annual rental rate is offered, plus cost-share of up to 100 percent of the eligible costs to install the practice: 50 percent from FSA and 50 percent from the PA Department of Environmental Protection (DEP). Further, the program generally offers a sign-up incentive for participants to install specific practices. FSA uses CRP funding to pay a percentage of the program's cost, and Pennsylvania provides the balance through Environmental Stewardship Act funds (Growing
Greener I and II). State government and nonprofit groups involved in the effort provide technical support and other in-kind services.

In order to be eligible, lands must have been planted with an agricultural commodity during four out of the six years between 2002 and 2007, and must have been held by the landowner for the last 12 months. Highly erodible lands (HEL) eligible for enrollment meet the following criteria: all pasture, hayland, and cropland within 180 feet of a stream regardless of Erodibility Index (EI) value; all cropland within 1,000 feet of a stream with EI > 8 and < 12; all cropland further than 1,000 feet from a stream with an EI of greater than 12. The EI is determined by dividing potential erosion (from all sources except gully erosion) by the T value, which is the rate of soil erosion above which long term productivity may be adversely affected.

For the landowner, CREP is not only a cost-effective way to address environmental problems and meet regulatory requirements; it can provide a viable option to supplement farm income as well. CREP is convenient for farmers and other landowners because it is based on the familiar CRP model. Enrollment is on a continuous and voluntary basis, permitting farmers and other landowners to join the program at any time rather than waiting for specific sign-up periods.

The PA CREP program is currently active in the Chesapeake Bay and Ohio River Watersheds. In 2012, the PA CREP partners finalized a draft proposal to expand the program into the seven counties in the PA portion of the Delaware River Basin including (from north to south): Bucks, Delaware, Lehigh, Monroe, Montgomery, Northampton and Pike. The Delaware River Basin CREP will coordinate federal, state and local efforts to address various natural resource issues throughout the project area by seeking to retire 20,000 acres of marginal cropland, pastureland and/or environmentally sensitive land to include: 16,000 acres of HEL practices, 2,000 acres of riparian forest buffers, 1,500 acres of other buffer practices, and 500 acres of wetland restoration.

PA DEP and the state FSA office worked with a contractor to complete an environmental assessment in compliance with the National Environmental Policy Act for the enactment of the Delaware River Basin CREP. The agreement between the Commonwealth and FSA National Office has been finalized. Training and signups for the Delaware River Basin CREP will be announced in 2017.

**Pennsylvania CREP Summary 2015-2016**

Pennsylvania CREP projects are designed to target environmental concerns of the Chesapeake Bay and Ohio River drainages, and the neighboring upland habitat. The program is voluntary and offers financial incentives to entice agricultural landowners and operators to enroll targeted environmentally sensitive and potentially wildlife-friendly acres of pastureland and cropland. This includes the establishment of native grass stands, riparian buffers, wetlands, wildlife habitat, grass filter strips and other land improvement practices. Pennsylvania CREP has a maximum authorized enrollment of 259,746 acres across 59 counties and currently has 151,908 acres under contract for the benefit of soil, water and wildlife. CREP is a model for success in finding cooperative solutions to environmental challenges of today and has been met with overwhelming interest and support by the agricultural community.
CREP contracts expire September 30th every year. Re-enrollment remains low for a variety of reasons. The primary reason for low re-enrollment, across the nation and in Pennsylvania, continues to be high commodity crop prices. FSA and partner agencies offer resources and assistance to landowners to determine what maintenance may be needed to keep acreage in compliance with their current contract, as well as opportunities to meet the established thresholds for re-enrollment in the future, and the state continues efforts to reach out to landowners prior to their contract expiration dates.

In 2015, the Pennsylvania Association of Conservation Districts (PACD) created the CREP Outreach Program Office with funds awarded through a Growing Greener Watershed Protection Grant from the PA DEP. The outreach program was established to provide materials, resources and training to CREP partners and the public to accomplish four primary goals:

1. To increase the total acreage in CREP through new enrollees
2. To retain acres currently in CREP by increasing re-enrollment.
3. To ensure installed conservation practices are functioning properly by providing support and training to CREP partners and the public on proper maintenance of BMPs.
4. To promote CREP in the Delaware River Basin when it becomes approved for CREP

During 2015-2016, considerable progress was made on three of the four goals. However, the Delaware River Basin has not been approved for CREP at this time, so resources and outreach were not directed to that region during this period.

Tasks completed during this time can be divided into three major categories:

First, the CREP Outreach Resource Clearinghouse focused on making CREP information more accessible and user friendly. Outreach and education materials and resources have been consolidated in one location for distribution to CREP partners. The CREP PA brand was updated and modernized with a new logo, brochure and banner. The www.CREPPA.org website was overhauled and modernized, information was updated and the site was made more user friendly. A quarterly electronic newsletter and a listserv were created to allow better communication among partners. The office also produced a promotional video featuring two farmers sharing their experiences with the CREP program, which was distributed and posted online.
Second, 99 landowners and farmers attended three CREP Open House/Town Hall Meetings that were conducted for direct outreach to the public. PACD partnered with local conservation districts, NRCS, Pheasants Forever and others to provide training to the public on CREP program requirements and maintenance issues.

Third, CREP Mini-Grants were awarded to twenty conservation districts for CREP-focused training and outreach. Mini-grants have been approved for workshops, walk-abouts, one-on-one training on maintenance techniques, and other CREP topics. The 2015-2016 mini-grants resulted in the following outcomes:

- 2,458 farmers and landowners directly reached
- 1,034 acres intending to enroll
- 330 participants increased knowledge of CREP
- 270 participants increased knowledge of CREP maintenance
- 137 participants indicated they will re-enroll in CREP
- 109 participants indicated they plan to enroll in CREP
- 149 one-on-one visits were held
- 23 workshops were held
- 11 field days/walkabouts were held
- 14 projects conducted in the Chesapeake Bay; 6 conducted in the Ohio Watershed

**Acres Under Contract by Fiscal Year**

*Annual acres for 2000-2003 are estimated/approximate.*
## Summary of PA CREP Contracts by Practice, Acres, and Occurrences

**As of the end of September 2016**

<table>
<thead>
<tr>
<th>Practice</th>
<th>Description</th>
<th>Acres</th>
<th>Practice Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP1</td>
<td>Introduced grasses and legume planting</td>
<td>81,427.97</td>
<td>4,758</td>
</tr>
<tr>
<td>CP2</td>
<td>Native grass planting</td>
<td>29,208.1</td>
<td>2,169</td>
</tr>
<tr>
<td>CP3</td>
<td>Tree planting</td>
<td>4.8</td>
<td>1</td>
</tr>
<tr>
<td>CP3A</td>
<td>Hardwood tree planting</td>
<td>843.4</td>
<td>15</td>
</tr>
<tr>
<td>CP4B</td>
<td>Wildlife habitat corridor</td>
<td>No Data</td>
<td>No Data</td>
</tr>
<tr>
<td>CP4D</td>
<td>Permanent wildlife habitat</td>
<td>No Data</td>
<td>No Data</td>
</tr>
<tr>
<td>CP8A</td>
<td>Grassed waterways</td>
<td>224.1</td>
<td>252</td>
</tr>
<tr>
<td>CP9</td>
<td>Shallow water areas for wildlife</td>
<td>33.2</td>
<td>15</td>
</tr>
<tr>
<td>CP10</td>
<td>Vegetative cover already established (grass)</td>
<td>6,466</td>
<td>281</td>
</tr>
<tr>
<td>CP12</td>
<td>Wildlife food plots</td>
<td>1067.37</td>
<td>487</td>
</tr>
<tr>
<td>CP15A</td>
<td>Contour grass buffer strips</td>
<td>48.23</td>
<td>26</td>
</tr>
<tr>
<td>CP21</td>
<td>Filter strips</td>
<td>1130.66</td>
<td>392</td>
</tr>
<tr>
<td>CP22</td>
<td>Riparian forest buffers</td>
<td>24,334.05</td>
<td>4,446</td>
</tr>
<tr>
<td>CP23</td>
<td>Wetland restoration</td>
<td>1000.65</td>
<td>104</td>
</tr>
<tr>
<td>CP29</td>
<td>Marginal pastureland wildlife habitat buffer</td>
<td>1229.32</td>
<td>264</td>
</tr>
<tr>
<td>CP30</td>
<td>Marginal pastureland wetland buffer</td>
<td>452.5</td>
<td>74</td>
</tr>
<tr>
<td>CP31</td>
<td>Bottomland hardwood on wetlands</td>
<td>No Data</td>
<td>No Data</td>
</tr>
<tr>
<td>CP33</td>
<td>Habitat buffer for upland birds</td>
<td>72.9</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td></td>
<td><strong>151,908.39</strong></td>
<td><strong>13,663</strong></td>
</tr>
</tbody>
</table>

Practices as Percentage of Total Acres

1999-2016 (Practices not shown in graph are less than 1% and not reportable.)

CP1: Introduced grasses and legume planting
CP2: Native grass planting
CP3: Tree planting
CP3A: Hardwood tree planting
CP4B: Wildlife habitat corridor
CP4D: Permanent wildlife habitat
CP8A: Grassed waterways
CP9: Shallow water areas for wildlife
CP10: Vegetative cover already established (grass)
CP11: Established trees
CP12: Wildlife food plots
CP15A: Contour grass buffer strips
CP21: Filter strips
CP22: Riparian forest buffers
CP23: Wetland restoration
CP29: Marginal pastureland wildlife habitat buffer
CP30: Marginal pastureland wetland buffer
CP31: Bottomland hardwood on wetlands
CP33: Habitat buffer for upland birds

2015-2016 (Practices not shown in graph are less than 1% and not reportable.)

CP1: Introduced grasses and legume planting
CP2: Native grass planting
CP3: Tree planting
CP3A: Hardwood tree planting
CP4B: Wildlife habitat corridor
CP4D: Permanent wildlife habitat
CP8A: Grassed waterways
CP9: Shallow water areas for wildlife
CP10: Vegetative cover already established (grass)
CP11: Established trees
CP12: Wildlife food plots
CP15A: Contour grass buffer strips
CP21: Filter strips
CP22: Riparian forest buffers
CP23: Wetland restoration
CP29: Marginal pastureland wildlife habitat buffer
CP30: Marginal pastureland wetland buffer
CP31: Bottomland hardwood on wetlands
CP33: Habitat buffer for upland birds
Practices by Occurrence

As of the end of September 2016

Figures shown are taken from the “Summary of PA CREP Contracts by Practice, Acres, and Occurrences” on Page 7 of this report. Practices are arranged from the largest number of occurrences to the smallest.

CP1: Introduced grasses and legume planting
CP22: Riparian forest buffers
CP2: Native grass planting
CP12: Wildlife food plots
CP3: Tree planting
CP3A Hardwood tree planting
CP4B Wildlife habitat corridor
CP4D Permanent wildlife habitat
CP8A Grassed waterways
CP9: Shallow water areas for wildlife
CP10: Vegetative cover already established (grass)
CP11: Established trees
CP15A: Contour grass buffer strips
CP21: Filter strips
CP23: Wetland restoration
CP29: Marginal pastureland wildlife habitat buffer
CP30: Marginal pastureland wetland buffer
CP31: Bottomland hardwood on wetlands
CP33: Habitat buffer for upland birds
## Practices by Federal and State Maximum Cost Share Per Acre

<table>
<thead>
<tr>
<th>CREP PRACTICE</th>
<th>SRR INCENTIVE</th>
<th>COST SHARE</th>
<th>INCENTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP1 – Establishment of Cool Season Grass</td>
<td>(1)</td>
<td>50%</td>
<td>50% up to $40/acre (5)</td>
</tr>
<tr>
<td>CP2 – Establishment of Native Grasses (Mixed Varieties)</td>
<td>(1)</td>
<td>50%</td>
<td>50% up to $120/acre (5)</td>
</tr>
<tr>
<td>CP4D – Permanent Wildlife Habitat</td>
<td>(1)</td>
<td>50%</td>
<td>50% up to $160/acre (5)</td>
</tr>
<tr>
<td>CP8A – Grassed Waterways</td>
<td>150%</td>
<td>50%</td>
<td>50% up to $1000/acre (5)</td>
</tr>
<tr>
<td>CP9 – Shallow Water Area for Wildlife</td>
<td>(1)</td>
<td>50%</td>
<td>N/A</td>
</tr>
<tr>
<td>CP12 – Wildlife Food Plot</td>
<td>(1)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CP15A – Establishment of Permanent Vegetative Cover: Contour Strips</td>
<td>150%</td>
<td>50%</td>
<td>50% up to $65/acre (5)</td>
</tr>
<tr>
<td>CP21 – Filter Strips</td>
<td>150%</td>
<td>50%</td>
<td>50% up to $70/acre</td>
</tr>
<tr>
<td>CP22 – Riparian Buffer (Without Fencing)</td>
<td>150%</td>
<td>50%</td>
<td>50% up to $850/acre (2)</td>
</tr>
<tr>
<td>CP22 – Riparian Buffer (With Fencing)</td>
<td>150%</td>
<td>50%</td>
<td>50% up to $1250/acre (2)</td>
</tr>
<tr>
<td>CP23 – Wetland Restoration</td>
<td>150%</td>
<td>50%</td>
<td>50% up to $740/acre</td>
</tr>
<tr>
<td>CP29 – Wildlife Habitat Buffer (without fencing) (4)</td>
<td>150%</td>
<td>50%</td>
<td>None</td>
</tr>
<tr>
<td>CP29 – Wildlife Habitat Buffer (with fencing) (4)</td>
<td>150%</td>
<td>50%</td>
<td>50% up to $400/acre (2)</td>
</tr>
<tr>
<td>CP30 – Wetland Buffer (4)</td>
<td>150%</td>
<td>50%</td>
<td>None</td>
</tr>
<tr>
<td>CP33 – Habitat Buffer For Upland Birds</td>
<td>150%</td>
<td>50%</td>
<td>50% up to $65/acre (5)</td>
</tr>
</tbody>
</table>

**Disclaimer:** Practices outlined by federal and state maximum cost share per acre.
NOTES:

(1) SRR Incentive varies with the weighted EI for the eligible acres offered according to the following chart:

- $8 \leq EI \leq 12$  75% Incentive
- $12 < EI \leq 20$  150% Incentive
- $20 < EI \leq 25$  175% Incentive
- $25 < EI \leq 30$  200% Incentive
- $EI > 30$  225% Incentive

(2) The State of Pennsylvania cost share reimbursement is only available on Riparian Buffers that are 50 feet or more in width. In the case of CP 29, no mowing will be done in the first 50’ from top of bank. The cost share will not be paid until the participant completes a PA Stream Buffer Tracking Form and submits it to the State FSA office.

(3) Incentive only available if land enrolled in CREP is also enrolled in the Pennsylvania Game Commission Farm Game or Safety Zone Program. Maximum payment to any one CREP participant is $2,999.99.

(4) Eligible only on Marginal Pastureland.

(5) Pennsylvania cost share will be provided to the limits indicated for this practice if any of the following apply:

a. The participant agrees to enroll all areas eligible along the riparian corridor on the enrolled tract in practice CP22 and/or CP29 at a minimum of 50 feet from bank.

b. The participant signs a maintenance agreement for post planting establishment on practice CP22 and/or

c. The participant has no water bodies on the offered tract but has water bodies on adjacent tract(s) and agrees to sign an agreement to maintain all existing and functioning forested buffers or enroll all eligible areas in CP 22 and/or 29 at a minimum width of 50 feet from bank on all tracts adjacent to the offered tract.

d. The participant has no water bodies on the offered tract or on adjacent tracts(s).
CREP Partner Resources and Activities

Cost-Share Arrangements

Pennsylvania Department of Environmental Protection (DEP): Since 2000, Pennsylvania has obligated $37,318,240 for direct cost share payments and administration of the payments through Growing Greener Grants to PACD.

For the current reporting period, Pennsylvania DEP has obligated $255,226 for direct cost share payments to farmers through a Growing Greener grant to the Pennsylvania Association of Conservation Districts, Inc. (PACD). Of this funding, $254,726 is dedicated to the Chesapeake Bay Basin and $500 to the Ohio River Basin.

Pennsylvania Game Commission (PGC): The PGC provided incentive payments to landowners to re-enroll in CREP totaling $274,525 in the federal fiscal year. These are in-kind costs, not non-federal match.

Easement Payments

Pennsylvania’s CREP agreement does not require Pennsylvania to make easement payments. However, in 2006, DEP refocused state participation in CREP to encourage installation of edge of stream practices such as Riparian Forest Buffers (buffers). As part of this refocusing effort, the department requires landowners to install buffers through CP22 and protect any existing buffers through a Riparian Forest Buffer Protection Land Owner Assurance on their properties for the duration of the CREP contract (which is 15 years for the majority of participants). If landowners install and/or protect buffers on their streams or have no streams on their tract or adjoining tracts, they are eligible for state cost share on other conservation practices that are more than 180 feet from the stream. To date, 621 landowners have signed agreements with DEP to protect existing buffers. DEP’s Watershed Support Staff (WSS) continue to inspect existing buffers and have completed inspections on 4527 acres of existing buffers to date.

Riparian Buffer (CP22) with fencing. Photo courtesy of PACD.
The purpose of the inspection is to ensure the buffers are being protected, determine their size and composition, and identify candidate buffers for permanent protection under conservation easement. With the exception of a very small percentage (less than 5% of the properties inspected), all were cooperating within the terms of the Riparian Buffer Protection Agreement. Those that were operating outside the agreement terms were referred to local field personnel who helped the property owners to address any outstanding issues.

In addition, the CREP Riparian Forest Buffer Protection Land Owner Assurance has helped DEP to expand permanent riparian easement opportunities by working with other state agencies and non-governmental organizations to target limited resources to high priority interests within the partnership. Partners in this effort include the PA Fish and Boat Commission, PA Department of Conservation and Natural Resources, Western PA Conservancy, Juniata Clean Water Partnership, and the Blair and Huntingdon County Conservation Districts. The partnership began with a pilot on the Frankstown Branch of the Little Juniata which was very successful and is expanding into other areas, primarily looking at WIP and/or TMDL related planning. The Little Juniata River Pilot project anticipates 500 acres of forested buffers protected by the end of 2015.

In addition to the Little Juniata River Project, DEP has recently begun a new project in collaboration with the Western Pennsylvania Conservancy, which has yielded more than 1400 acres of riparian easements in just over a year. The main focus of this program is to work with landowners that have buffers installed with CREP funding who are at the end of their contracts and do not plan to re-enroll.

**Technical Assistance**

**The Natural Resources Conservation Service (NRCS):** Through an agreement with Pheasants Forever and with matching support from the Game Commission, NRCS funded six Pheasants Forever biologists working on CREP in the Chesapeake Bay Watershed. There was also one Pennsylvania Game Commission biologist working on CREP in the Chesapeake Bay Watershed. These biologists worked on all habitats, providing service to multi-county areas. These wildlife biologists, along with NRCS field staff and state office staff, assisted landowners with existing CREP contracts or with new conservation plans for new contracts. The Chesapeake Bay Foundation, with funding support from NRCS, continues to assist NRCS with riparian buffer CREP applications and contracts.

Re-enrollment options were available in the lower Chesapeake beginning in 2011. Technical assistance was provided in 2016 for farmfield eligibility and field visits to assess the existing wildlife habitat and/or the conversion of cropland to wildlife habitat. Practices included warm season grasses and wildflowers, cool season grasses and legumes, tree and shrub habitat, and riparian buffer habitat, just to name a few. NRCS staff, biologists, and partners also assisted new contract holders with implementation of conservation practices. Throughout 2016, NRCS staff conducted outreach to encourage landowners to sign up for wildlife practices and stream buffers while conserving the natural resources on their farm.

**Pennsylvania Game Commission (PGC):** As part of outreach efforts, Pennsylvania Game Commission (PGC) and Pheasants Forever (PF) employees conducted or participated in 29 outreach events including CREP workshops, tours, and presentations. Through these events
PGC and PF were able to reach over 1,170 landowners. Additionally, an outreach mailing targeted to Pennsylvania counties covered by PGC and PF biologists resulted in 2,736 inquiries regarding USDA conservation programs. PGC and PF biologists impacted 12,212 CREP acres in Pennsylvania through the completion of conservation plans, status reviews, and contract updates.

**The Chesapeake Bay Foundation (CBF):** CBF receives public and private grant funding, which is used to advance CREP riparian forest buffer establishment and maintenance in the Pennsylvania portion of the Chesapeake Bay Watershed. CBF employs six field staff who provide technical assistance to Pennsylvania landowners for forested buffer planning, establishment, and maintenance in 19 watershed counties. Each staff person is positioned in one of PA’s CREP counties and also provides service to neighboring counties. The bulk of their work activities are related to riparian forested buffers, the majority of which are contracted through CREP. During FY16, CBF worked with over 410 watershed landowners and provided technical assistance towards contracting 210.7 acres of new CREP riparian forested buffers. Staff also conducted public outreach on CREP forested buffers at several large agriculture focused trade and community events.

![Before and after pictures of a newly planted riparian forested buffer (CP22) with new animal walkways leading to the barnyard. Photos courtesy of the Chesapeake Bay Foundation.](image)

In recent years, CBF has worked to link the establishment of riparian forested buffers to the adoption of other important agricultural BMPs, testing the hypothesis that farmers are willing to forgo production on streamside land and plant forested buffers in exchange for additional financial assistance to pay for practices that improve production and efficiency elsewhere on the farm. Through its Buffer Bonus Program, CBF issues vouchers to producers who install riparian forested buffers, the value of which is based on buffer acreage. The vouchers can be used to pay out-of-pocket expenses associated with the installation of other farm BMPs such as barnyard improvement, waste management facilities, alternative water sources, nutrient management planning, cover cropping, reduced tillage, or fencing. To participate in the program, farmers must have or obtain a current conservation plan as required by state law, and must pledge to address all identified runoff concerns from animal concentration areas and any identified milkhouse waste issues. CBF currently offers the program in 13 Pennsylvania counties. In FY16, CBF obligated $147,000 in vouchers to 10 producers for whole-farm projects.
**Other Technical Assistance:** Several existing programs in Pennsylvania support the same program goals and objectives as PA CREP. These activities include the funding of 43 Chesapeake Bay Program technicians and six engineers in CREP counties; providing Growing Greener funds to hire watershed specialists in the 59 CREP counties to assist in the development of watershed plans; and Pennsylvania Department of Agriculture (PDA) and State Conservation Commission (SCC) funding for agriculture conservation technicians in 45 CREP counties. These technicians develop and assist in the implementation of resource management plans that can include nutrient management plans and conservation plans.

**In-kind Services**

Financial contributions for in-kind services took place throughout the reporting period. Examples include meeting with state representatives to discuss CREP, meetings throughout the CREP counties, advertisements in numerous local newspapers and newsletters, the distribution of brochures/literature at various events, the display of the CREP exhibit, and one-on-one interaction with farmers to promote the CREP Program.

In addition to PA CREP staff assignments made by the DEP, PACD, CBF and PGC, each of the CREP partners has provided additional in-kind support for the program. All of the PGC services for this reporting period are considered in-kind services, not non-federal match. PGC expended $375,603 on nine positions providing technical assistance to the CREP program in the federal fiscal year.

**Monitoring and Evaluation**

A subcommittee of the Statewide CREP committee was formed in 2004 to discuss monitoring and evaluation of CREP practices in PA. To complement DEP’s ongoing evaluation of waterbodies, the CREP subcommittee decided to initiate a special long-term project for site specific water quality monitoring where water quality, stream habitat, and aquatic life (macroinvertebrates and fish) could be assessed for impact by CREP practices.

The subcommittee decided to look for areas that are expected to show significant (or at least easily detectable) positive change in response to riparian forest buffer establishment, streambank fencing or other streamside improvement practices resulting from CREP. Other criterion for the site includes landowners who would welcome sampling efforts on their property for at least five years. The table below provides summary information on the sites monitored to date by DEP as part of the CREP impact project.

<table>
<thead>
<tr>
<th>County</th>
<th>Landowner</th>
<th>Stream /Watershed Name</th>
<th>Start</th>
<th>End</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams</td>
<td>King</td>
<td>Unnamed Tributary to Latimore Creek</td>
<td>2004</td>
<td>2015</td>
<td>Stream is showing improvement.</td>
</tr>
<tr>
<td>Bradford</td>
<td>Various</td>
<td>Milk Creek Watershed &amp; Stephen Foster Lake</td>
<td>2006</td>
<td>2015</td>
<td>Streams and lake are showing improvement.</td>
</tr>
<tr>
<td>Centre</td>
<td>Walizer</td>
<td>Unnamed Tributary to Little Fishing Creek (known locally as Rock Run)</td>
<td>2006</td>
<td>2011</td>
<td>Stream chemistry improved.</td>
</tr>
<tr>
<td>County</td>
<td>Landowner</td>
<td>Stream /Watershed Name</td>
<td>Start</td>
<td>End</td>
<td>Notes</td>
</tr>
<tr>
<td>------------</td>
<td>-----------</td>
<td>------------------------------------------------</td>
<td>------</td>
<td>------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>Northumberland</td>
<td>Kaufman</td>
<td>Schwaben Creek (tributary to Shamokin Creek)</td>
<td>2012</td>
<td>2015</td>
<td>Stream is showing improvement.</td>
</tr>
<tr>
<td>York</td>
<td>McClelland</td>
<td>Pierceville Run</td>
<td>2006</td>
<td>2011</td>
<td>Stream restored and removed from List of Impaired Waters.</td>
</tr>
</tbody>
</table>

With regard to agency responsibilities for monitoring wildlife habitat benefits of CREP practices, the PA Game Commission (PGC), in cooperation with Penn State University, established “bird” routes to monitor all bird species and mammals (rabbits only) in the original 20 CREP counties in the lower Susquehanna.

Based on this study, PGC observed that CREP has resulted in an increase in the population of four species of wintering raptors, including the Northern Harrier. In addition, CREP has made the reintroduction of wild pheasants feasible in several locations in Pennsylvania. Populations in most areas have been steadily increasing. If CREP acres can be retained over time, they will become successful wild pheasant areas. The final report for this study, *Evaluating the Effects of CREP on Ring-necked Pheasants and Grassland Birds and Farmland Birds*, and the related article, *Association of Wintering Raptors with Conservation Reserve Enhancement Program Grasslands in Pennsylvania,* were published in the 2010 Journal of Field Ornithology.

*Native warm season grass planting (CP2)*

*This report is a collaborative effort between the Pennsylvania Association of Conservation Districts, Inc. (PACD), the Pennsylvania Department of Environmental Protection, the USDA Farm Services Agency, the Pennsylvania Fish and Boat Commission, the Pennsylvania Game Commission, the USDA Natural Resources Conservation Service, and the Chesapeake Bay Foundation. Questions may be submitted to PACD, who will direct inquiries to the appropriate agency.*

*The Pennsylvania Association of Conservation Districts, Inc. (PACD)*

www.pacd.org – 717.238.7223 – pacd@pacd.org
Appendix A: PA CREP Partners and Resources

Partners

- Chesapeake Bay Foundation: [www.cbf.org](http://www.cbf.org)
- PA Association of Conservation Districts: [www.pacd.org](http://www.pacd.org)
- PA Department of Environmental Protection: [www.dep.pa.gov](http://www.dep.pa.gov)
- PA Game Commission: [www.pgc.state.pa.us](http://www.pgc.state.pa.us)
- Pheasants Forever: [www.pheasantsforever.org](http://www.pheasantsforever.org)
- USDA Farm Service Agency: [www.fsa.usda.gov](http://www.fsa.usda.gov)

Resources

- Pennsylvania’s CREP website: [www.creppa.org](http://www.creppa.org)
- PA Department of Agriculture: [www.agriculture.pa.gov](http://www.agriculture.pa.gov)
- PA Department of Conservation and Natural Resources: [www.dcnr.state.pa.us](http://www.dcnr.state.pa.us)
- PA Ducks Unlimited: [http://www.ducks.org/Pennsylvania/](http://www.ducks.org/Pennsylvania/)
- PA Farm Bureau: [www.pfb.com](http://www.pfb.com)
- PA Fish and Boat Commission: [www.fishandboat.com](http://www.fishandboat.com)
- PA State Conservation Commission: [http://www.agriculture.pa.gov/Protect/StateConservationCommission](http://www.agriculture.pa.gov/Protect/StateConservationCommission)
- Penn State Cooperative Extension: [http://extension.psu.edu/](http://extension.psu.edu/)
- Stroud Water Research Center: [www.stroudcenter.org](http://www.stroudcenter.org)
- Wild Turkey Federation: [http://www.nwtf.org/about/state/pennsylvania](http://www.nwtf.org/about/state/pennsylvania)