



Conservation Reserve Enhancement Program FY2020 Annual Report

Pennsylvania I-Chesapeake Bay Watershed

The Conservation Reserve Enhancement Program (CREP) is a partnership between state agencies and the U.S. Department of Agriculture, Farm Service Agency. Through these partnerships, CREP provides financial incentives to farm landowners willing to voluntarily implement conservation measures on sensitive land in lieu of continued agricultural production. Conservation practices implemented under CREP (e.g., stream buffers, conservation plantings, restored wetlands) contribute to improved water quality, reduced water losses, increased water storage, and increased habitat quantity and quality for a variety of wildlife species; but are targeted towards specific State or nationally significant conservation concerns. Under the terms of CREP agreements, partners are required to submit annual reports that summarize progress towards meeting CREP agreement goals. This is the FY2020 report for the Pennsylvania I-Chesapeake Bay Watershed CREP Partnership.

Introduction

The Conservation Reserve Enhancement Program for Pennsylvania's Chesapeake Bay was approved in 2000 and included the Susquehanna and Potomac River basins. It was added in 2004 to include the Upper Susquehanna River basin, revised in 2012 and amended in 2016. Its general purpose is to reduce nutrient and sediment loading in sections of the Susquehanna and Potomac River basins, improve water quality, enhance wildlife habitat, and produce nutrient reductions established under the Chesapeake Bay Agreement.

FY2020 Summary

CREP Acreage Cap: 219,746
Acres Re-enrolled in 2020: 4,026
New Acres Enrolled in 2020: 1,049
Total Acres Currently Enrolled: 85,490

Federal Commitments

Federal CRP Rental Payments: \$11,792,393

Federal Signup Incentive Payments: \$7,140

Federal Practice Incentive Payments: \$79,811

Federal Cost-Share Payments: \$454,864

Other Federal Incentive Payments: \$0

Non-Federal Commitments

During the reporting year, the Pennsylvania Department of Environmental Protection issued \$189,674.12 in CREP cost-share payments directly to producers in the Chesapeake Bay CREP.

Non-Federal Financial Commitments: \$189,674

Non-Federal Financial Commitments Directly to CRP Participants: \$189,674

Total Non-Federal In-kind Support: \$184,779

Total Non-Federal In-kind Support Directly to CRP Participants: \$1,874

Breakdown of Non-Federal In-kind Support

1: Pennsylvania Game Commission (PGC) and Pheasants Forever biologists impacted 13,937 acres in Pennsylvania's Chesapeake Bay counties through the completion of conservation plans, status reviews, contract updates and additional on-site habitat management and support. These biologists represent an estimated \$83,972 in non-federal in-kind support. – \$83,972

2: The Pennsylvania Game Commission (PGC) helped CREP participants in the Chesapeake Bay establish 38 acres of warm season grass. Assistance included loaning seed drills, calibrating seed drills, and delivery of seed drills to participants. Donation of CREP seed drills for CREP participants enrolled in the PGC Hunter Access Program represented an estimated \$1,254 of non-federal in-kind support. (38 acres at an estimated cost of \$33/acre) – \$1,254

3: The Pennsylvania Game Commission (PGC) assisted with CREP mid-contract management by conducting prescribed burns on 31 acres for Chesapeake Bay CREP participants in the enrolled in the PGC's Hunter Access Program. PGC personnel wrote approved prescribed fire plans, conducted the prescribed burns with PGC personnel, and used PGC personnel as a qualified burn boss. The PGC provided an estimated \$620 of non-federal in-kind support for controlled burns. (31 acres at 25% of \$80/acre) – \$620

4: The Chesapeake Bay Foundation (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. During this reporting period, CBF employed five field staff who provide technical assistance to Pennsylvania landowners for forested buffer planning, establishment, and maintenance in 12 counties. The bulk of their work activities are related to riparian forested buffers, the majority of which are contracted through CREP or EQIP. During FY20, CBF assisted 188 landowners and maintained 272 acres through the Keystone 10 Million Tree Partnership. In all, CBF provided an estimated \$98,932.50 of non-federal in-kind support to the Pennsylvania CREP as salary for field staff. – \$98,933

Other Non-Federal Commitments or Support: Through its Buffer Bonus Program, the Chesapeake Bay Foundation (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 best management practices, 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. In FY20, CBF offered the program in 12 Pennsylvania counties and obligated \$269,870 in vouchers to 18 producers.

Total Other Non-Federal Commitments or Support: \$269,870

Other Non-Federal Commitments or Support Directly to CRP Participants: \$269,870

GOALS

Goal 1: Permit the Commonwealth's producers to voluntarily restore wetlands, riparian areas, and grasslands by enrolling up to 219,746 acres of farmland into the Chesapeake Bay CREP, through financial and technical assistance.

Progress: Pennsylvania currently has 85,490 acres of wetlands, riparian areas, and grasslands enrolled in the Chesapeake Bay CREP.

Difficulties: Barriers to enrollment and reenrollment are well-documented and affect conservation efforts nationwide. Many new enrollees find the length of time commitment daunting. Maintenance is often a barrier to reenrollment, whether because participants find maintenance requirements prohibitive, or because they are unable to find a contractor to complete the work. Some producers prefer a mown aesthetic along streams, rather than a riparian buffer. In addition, land rent in Pennsylvania is often quite high, so renting out the land is often more economical. Pennsylvania has been focusing on partner and outreach efforts to combat these issues.

Goal 2: Reduce erosion on cropland in the Chesapeake Bay watersheds by an estimated 3.5 million tons using April 22, 2000, as the beginning of the base period for measuring erosion reduction levels.

Progress: Pennsylvania's CREP program reduced an estimated 39,206.07 tons/yr. of sediment from entering the Chesapeake Bay Watershed during this program year.

*Estimated calculations based on data provided by the USDA Farm Service Agency and using loading rates and reduction coefficients based on a Chesapeake Bay Watershed model.

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Goal 3: Prevent 72,500 tons of sediment, and 4.4 million pounds of nitrogen and phosphorus from reaching the Chesapeake Bay using April 22, 2000, as the beginning of the base period for measuring erosion reduction levels.

Progress: Estimated pollution prevented from entering the Chesapeake Bay Watershed during this program year: *

39,206.07 U.S. tons/yr. of sediment
1,921,332 lbs./yr. of nitrogen
102,813 lbs./yr. of phosphorous

*Estimated calculations based on data provided by the USDA Farm Service Agency and using loading rates and reduction coefficients based on a Chesapeake Bay Watershed model.

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Goal 4: Restore and enhance riparian habitat corridors next to streams, estuaries, wetlands, and other watercourses by seeking to enroll at least 31,746 acres of buffers, grass filter strips, and wetlands.

Progress: Pennsylvania currently has 16,865.23 acres of buffers, grass filter strips, and wetlands enrolled in Chesapeake Bay CREP.

Difficulties: Barriers to enrollment and reenrollment are well-documented and affect conservation efforts nationwide. Many new enrollees find the length of time commitment daunting. Maintenance is often a barrier to reenrollment, whether because participants find maintenance requirements prohibitive, or because they are unable to find a contractor to complete the work. Some producers prefer a mown aesthetic along streams, rather than a riparian buffer. In addition, land rent in Pennsylvania is often quite high, so renting out the land is often more economical. Pennsylvania has been focusing on partner and outreach efforts to combat these issues.

Goal 5: Restore and enhance grassland habitats for declining grassland dependent wildlife and improve water quality by seeking to enroll 188,000 acres of highly erodible cropland in conservation cover plantings.

Progress: Pennsylvania currently has 68,624.97 acres of highly erodible cropland in conservation cover plantings through the Chesapeake Bay CREP.

Difficulties: Barriers to enrollment and reenrollment are well-documented and affect conservation efforts nationwide. Many new enrollees find the length of time commitment daunting. Maintenance is often a barrier to reenrollment, whether because participants find maintenance requirements prohibitive, or because they are unable to find a contractor to complete the work. Some producers prefer a mown aesthetic along streams, rather than a riparian buffer. In addition, land rent in Pennsylvania is often quite high, so renting out the land is often more economical. Pennsylvania has been focusing on partner and outreach efforts to combat these issues.

Goal 6: Improve the water quality and restore damaged riparian areas of the Susquehanna and Potomac Watersheds to facilitate the health of fish, game, and other wildlife populations.

Progress: Under the Chesapeake Bay CREP, Pennsylvania currently has 16,865.23 acres of buffers, grass filter strips, and wetlands and 68,624.97 acres of highly erodible cropland in conservation cover plantings.

Difficulties: Barriers to enrollment and reenrollment are well-documented and affect conservation efforts nationwide. Many new enrollees find the length of time commitment daunting. Maintenance is often a barrier to reenrollment, whether because participants find maintenance requirements prohibitive, or because they are unable to find a contractor to complete the work. Some producers prefer a mown aesthetic along streams, rather than a riparian buffer. In addition, land rent in Pennsylvania is often quite high, so renting out the land is often more economical. Pennsylvania has been focusing on partner and outreach efforts to combat these issues.

Field Reviews

Field Reviews:

Field Review Findings:

Were Findings Reported to FSA?

Outreach Activities

Outreach Activity 1: The Pennsylvania Game Commission (PGC) and Pheasants Forever (PF) biologists conducted or participated in 17 outreach events, including CREP workshops, tours, and presentations, reaching over 710 participants. An additional 245 landowners were reached through targeted mailings. PGC and PF biologists had 1,312 landowner contacts regarding USDA conservation programs.

Outreach Activity 2: The CREP Outreach Resource Clearinghouse is a function of the CREP Outreach Program Office, which is managed by the PA Association of Conservation Districts (PACD) through a grant from the PA Department of Environmental Protection (DEP).

The clearinghouse provides a central location for CREP materials and works to make new and existing materials both accessible and user-friendly. During this reporting period, the clearinghouse supported CREP in the Chesapeake Bay through the following activities:

Distributed over 200 pieces of outreach and education material to CREP partners and the public

Regularly updated the PA CREP website at www.creppa.org with new information and events

Maintained a listserv for program partners to encourage communication about the program

Created and distributed a bi-yearly e-newsletter via an email distribution list, the partners listserv, the PA CREP website and Facebook page, and a highlight in the PACD Front Page e-newsletter

Promoted the program at the PA Farm Show. Other regular outreach events, such as Penn State's Ag Progress Days, were cancelled due to COVID-19

Maintained an active presence on committees and panels that support the program, including the FSA CREP Technical Committee, the DCNR Riparian Forest Buffer Advisory Committee, the Chesapeake Bay Foundation's 10 Million Trees Initiative, the DCNR Riparian Buffer CREP Advisory Committee, the PA Lawn Conversion Program and the Wildlife Advisory Committee

Partners worked to update one section each of the "Landowner Guide to Buffer Success

Outreach Activity 2: The CREP Mini-Grant Program is a function of the CREP Outreach Program Office, which is managed by the PA Association of Conservation Districts (PACD) through a grant from the PA Department of Environmental Protection (DEP).

The mini-grant program provides funds for Pennsylvania's conservation districts to implement educational and outreach activities that support and extend the work of PA CREP. Projects focus on enrollment, re-enrollment, and maintenance, and have been approved for workshops, walkabouts, one-on-one training on maintenance techniques, and other program topics.

The COVID-19 pandemic made this a challenging year for the mini-grant program. Events were shifted to a virtual format where possible, but this was not practical in all instances, particularly in areas where high speed internet is not widely available, or the target audience has a limited comfort level with the necessary technology. Grantees are looking forward to planning in-person events for future grant rounds.

In the 2019-20 program year, mini-grants were awarded to sixteen conservation districts in the Chesapeake Bay watershed. To date, they have resulted in the following outcomes:

- 179 farmers and landowners directly reached
- 98 participants increased their knowledge of CREP
- 103 participants increased their knowledge of CREP maintenance
- 71 participants indicated they will re-enroll in CREP
- 9 participants indicated they plan to enroll
- 17 participants requested further assistance
- 107 one-on-one visits held
- 5 workshops held
- 2 field days/walkabouts held

Success Stories

The Lancaster County Conservation District completed a 1,400 linear feet (LF) of streambank restoration project on Eshleman Run, a tributary to the Pequea Creek. In addition, a 200 LF tributary and a 500 LF tributary to Eshleman Run also had streambank regrading completed as part of this project. Several instream aquatic habitat and streambank stabilization devices were installed as well, such as, 1,054 ft. of muddills for aquatic cover, 179 ft. of grade control used to provide riffle/pool habitat for aquatic life, 1 rock rubble vane installed to direct high flows, 1 brush mattress area added to protect stream banks and wetland habitat for aquatic and terrestrial wildlife, 1 long vane installed to direct stormwater flows, 2 rock banks and wetland habitat for aquatic and terrestrial wildlife, 1 log vane installed to direct stormwater flows, 2 rock cross vanes added to concentrate high flows toward the center of the stream, and 2 livestock/equipment crossings installed. The CREP program also installed over 2,000 LF of streambank fencing on the project. A minimum of 35 ft. wide riparian buffer was planted by volunteers within the fenced in area using approximately 600 native trees and shrubs totaling 4 ac. of buffers.

Challenges

In addition to the regular enrollment challenges noted earlier in this report, the COVID-19 pandemic affected every aspect of the Pennsylvania CREP program this year. It limited everything from technical support to outreach activities, from one-on-one time with landowners to annual outreach events like Penn State's Ag Progress Days. Pennsylvania's CREP partners look forward to increasing outreach, visits, and assistance throughout the next program year.

Future Actions

Pennsylvania continues to focus on outreach, through program partners and the CREP Outreach Program Office, to encourage new and re-enrollment in the program. Planning for a statewide virtual partnership training is already underway to help ensure partnership staff are prepared to help with current and potential future enrollees. A short mini-grant round with a focus on virtual outreach is also planned.

A proposal to DEP's Growing Greener Program to continue the CREP Outreach Program Office is also under consideration. In addition to continuing the CREP Outreach Resource Clearinghouse and CREP Mini-grant Program (see additional information under Part 4: Outreach Activities), the proposal proposes to undertake an aggressive marketing research and outreach campaign. This campaign will inventory the existing outreach program and materials, define the target audience, and use focus groups and other tried-and-true tools to develop a customized outreach plan incorporating quantifiable and measurable goals.

Suggestions for Improvement

Providing mid-contract management incentive payments for practices would help landowners keep practices in compliance with their conservation plans and maintain eligibility for re-enrollment. In addition, a statewide program to coordinate contractors for mid-contract maintenance could help landowners find knowledgeable contractors and ensure consistent work for contractors.

Additional Information

In addition to direct cost-share, DEP invests significant funds in conservation through other programs that complement PA CREP by working toward the same goals and objectives.

EPA Section 319 Nonpoint Source Grant Program: DEP receives Section 319(h) Nonpoint Source grant funds from the U.S. Environmental Protection Agency each year to implement Pennsylvania's approved Nonpoint Source Management Program. Through this program, during this reporting period, DEP has invested approximately \$1,107,091 in projects to reduce nonpoint source pollution in the Chesapeake Bay Watershed.

The Natural Resources Conservation Service (NRCS): During this reporting period, NRCS and its partners cooperated to provide boots-on-the-ground technical support for all aspects of the CREP program: resource assessment, plan writing, practice implementation, assistance with practice maintenance, and project monitoring. Common practices included warm season grasses and wildflowers, cool season grasses and legumes, tree and shrub habitat, and various types of riparian buffers. NRCS and partners also conducted outreach to encourage landowners to sign up for CREP practices—especially forested riparian buffers.

Through an agreement with Pheasants Forever, with matching support from the Game Commission, NRCS partially funded six Pheasants Forever biologists working on CREP in the Chesapeake Bay Watershed. These biologists worked on all habitat projects, each providing service to multi-county areas. Overall, partnership biologists provided CREP assistance in 20 Bay counties and NRCS staff provided CREP assistance in the remaining 25 Bay counties.

Date Completed: 12/29/2020

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