

Indiana Conservation Reserve Enhancement Program 2022 Annual Report

Prepared by the CREP Program Manager Indiana State Department of Agriculture Division of Soil Conservation December 2022

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1. Introduction

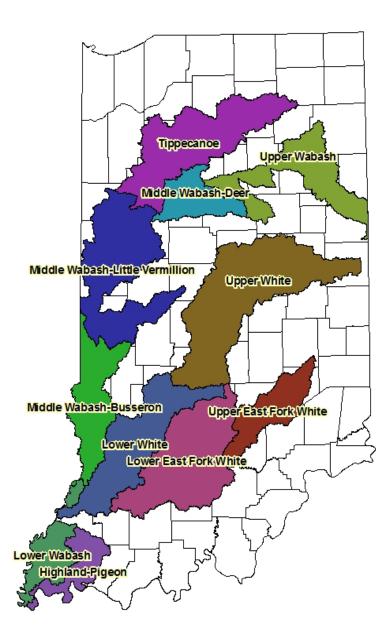
2022 marks the 17th year of the Conservation Reserve Enhancement Program (CREP) in Indiana. The program was first announced in 2005, covering three watersheds in Indiana and had an enrollment goal of 7,000 acres. The program expanded in 2010, to include eleven priority watersheds touching 65 counties (Figure 1) with an acreage enrollment goal of 26,250 acres.

The Indiana CREP aims to improve water quality and address wildlife issues by reducing erosion, sedimentation and nutrients, and enhancing wildlife habitats within specified watersheds in the Wabash River System. This program is designed to help alleviate some of the concerns of high non-point source sediment, nutrient, pesticide, and herbicide losses from agricultural lands by restoring grass and riparian buffers and wetlands to improve water quality, as well as to protect land from frequent flooding and excessive erosion by planting hardwood trees in floodplain areas along rivers and streams. CREP continues to address a major milestone of the Indiana State Department of Agriculture (ISDA) and the USDA Farm Service Agency (FSA), showcasing Indiana's progressive and meaningful implementation of conservation practices to protect Indiana's soil, water and related natural resources, and to help alleviate hypoxia in the Gulf of Mexico¹.

Through CREP, program participants receive financial cost-share and incentives from FSA and ISDA to voluntarily enroll in the program and implement conservation practices on environmentally sensitive land. The program operates under an Agreement between FSA and ISDA, Division of Soil Conservation (DSC), dated July 8th, 2005 and amended thereafter in August of 2010 and May of 2016. ISDA administers the CREP program on behalf of the State of Indiana and submits to FSA information summarizing the status of enrollments, progress and accomplishments of the Indiana CREP each year.

¹ Drainage from Indiana eventually finds its way to the Gulf via the Ohio and Mississippi Rivers. A fraction of nitrogen and phosphorus originating from Indiana end ups in the Gulf and contributes to a low dissolved oxygen area (hypoxic zone), threatening aquatic habitats in the Gulf.

FIGURE 1: 11 CREP ELIGIBLE WATERSHEDS



Watersheds include: Highland-Pigeon, Lower Wabash, Lower East Fork White, Lower White, Middle Wabash-Busseron, Middle Wabash-Deer, Middle Wabash-Little Vermillion, Tippecanoe, Upper East Fork White, Upper Wabash and Upper White.

2. Eligible Practices and Incentives

A. ELIGIBLE PRACTICES

The Indiana CREP offers a menu of conservation practices to address nonpoint source pollution runoff issues. Table 1 identifies the various conservation practices offered through CREP and are further discussed below. All these practices must be installed on former cropland, in other words the land must have a farming history as defined by FSA requirements. Only land physically located within the Highland-Pigeon, Lower Wabash, Lower East Fork White, Lower White, Middle Wabash-Busseron, Middle Wabash-Deer, Middle Wabash-Little Vermillion, Tippecanoe, Upper East Fork White, Upper Wabash, and Upper White watersheds may be enrolled in this CREP.

TABLE 1: CONSERVATION PRACTICES AND CODES ELIGIBLE WITHIN CREP

Conservation Practice	Practice Code
Permanent Native Grass	CP2
Hardwood Tree Planting	СРЗА
Permanent Wildlife Habitat, Non- easement	CP4D
Riparian Buffer	CP22
Filter Strips	CP21
Wetland Restoration	CP23
Wetland Restoration, Non- floodplain	CP23A
Bottomland Timber Establishment	CP31

Practices CP2, CP3A, CP4D, CP22 and CP21 must be installed on former cropland adjacent to an eligible stream, river or water body and meet additional buffer requirements. BUFFER REQUIREMENTS:

CP2 – minimum average width of 50 feet and a maximum width of 120 feet (up to 300 feet in alluvial soils)

CP3A, **C4D** and **CP22** – minimum average width of 35 feet and a maximum width of 180 feet (up to 300 feet in alluvial soils)

CP21 – minimum average width of 35 feet and a maximum width of 120 feet (up to 300 feet in alluvial soils)

CP23, CP23A and CP31 are not required to be adjacent to a stream, river or waterbody; however, CP 23 and CP31 are required to be located in the 100-yr floodplain.

B. FINANCIAL INCENTIVES

CREP provides financial incentives to landowners through both state and federal contributions. Through CREP, eligible Indiana participants who establish one of the prescribed conservation

practices receive cost-share and rental payments as outlined below. All Contracts within the CREP program cannot be less than 14 years and no more than 15 years.

FEDERAL INCENTIVES

- Cost-share Assistance: Cost-share for practice installation based on 50% of an eligible cost, Not-to-Exceed rate determined by FSA and NRCS; and for wetland restorations, 50% of engineering design estimate.
- Annual Rental Payment: An annual payment for the life of the contract. The payment consists of:

Base Soil Rental Rate: Determined by calculating the normal CRP weighted average soil rental rate for the three predominant soil types using the current posted applicable local soil rental rates for cropland.

Incentive Payment of 40% of the base rental rate without regard to other incentive payments for all practices offered and eligible for CREP.

- Signing Incentive Payment (SIP): A one-time payment of \$100 per acre for new land enrolled in CP21, CP22, and CP 31, and \$150 per acre for new land enrolled in CP23 and CP23A. This payment may be made after the contract has been signed and is approved. Re-enrolled acres are not eligible for the SIP payment.
- Practice Incentive Payment (PIP): A one-time payment equal to 40% of the eligible installation costs to establish CP21, CP22, CP23, CP23A and CP31.

STATE INCENTIVES

After practice installation, participants receive a one-time payment from the state equal to:

- \$100 per acre for land enrolled or re-enrolled in Native Grasses (**CP2**), Wildlife Habitat (**CP4D**) or Filter Strips (**CP21**).
- \$400 per acre for land enrolled or re-enrolled in Hardwood Tree Planting (**CP3A**), Riparian Buffer (**CP22**), or Bottomland Timber Establishment (**CP31**).
- \$950 per acre for land newly enrolled in Wetland Restorations (CP23 or CP23A).
- \$400 per acre for land re-enrolled in Wetland Restorations (**CP23** or **CP23A**).



Bottomland Timber Establishment



Filter Strip



Wetland Restoration

3. CREP Goals and Accomplishments

There are many partners involved with the promotion, administration, technical assistance and funding of CREP in order to meet and work toward the goals and objectives of the program. Our CREP partners include USDA-FSA, USDA Natural Resources Conservation Service (NRCS), Indiana Department of Natural Resources (IDNR), Soil and Water Conservation Districts (SWCD), and the State Soil Conservation Board (SSCB), all of which are a part of the Indiana Conservation Partnership (ICP). CREP is one of the top priorities of this partnership. The SSCB provides policy and funding direction to the ISDA, DSC on the administration of the Clean Water Indiana (CWI) program, which helps to fund the state incentives for the CREP program. These partners as well as the staff within the DSC help to carry out the CREP program in Indiana.

In addition, ISDA partners with The Nature Conservancy (TNC) to help promote the program in certain watersheds, and provide support dollars for the Indiana CREP. Since 2018, the Indiana Chapter of The Nature Conservancy (TNC) has provided support dollars in the amount of \$556,840 to help pay for the state incentives available to landowners through the Indiana CREP program. Without this support, the program would not continue to reach its goals and accomplishments each year.

In the written Agreement between FSA and ISDA the goals and objectives of the program are stated as:

- Protect a minimum of 3,000 linear miles of watercourses through the installation of conservation buffer practices
- Reduce the amount of sediment, phosphorus, and nitrogen entering rivers and streams in the designated watersheds by 2,450 tons per year of sediment, 2,400 pounds per year of phosphorus, and 4,700 pounds per year of nitrogen.
- Increase the acres of wetlands in the watersheds for erosion control, sediment reduction, storm water retention, and nutrient uptake.
- Enroll 15% of the eligible watersheds' cropland subject to normal CRP acreage limits by county
- Seek enrollment of 26,250 acres of eligible cropland, including frequently flooded agricultural lands, and restorable wetlands.

A. <u>Linear Miles of Protection on Watercourses</u>

Through the installation of conservation buffer practices in CREP, approximately **1,047.5** linear miles of watercourses are currently protected within the Indiana CREP watersheds. This is an additional 53 miles in this past year. Overall, this is 34.9% of the goal to protect 3,000 linear miles of watercourses in the targeted CREP watersheds. Table 2 lists the total length of buffers that have been installed since 2005 when CREP began in Indiana.

TABLE 2: CONSERVATION BUFFER LENGTHS

2005-2010	2010 - current	Total
2,627,367 feet	2,903,515 feet	5,530,882 feet
		1,047.5 linear miles

Of these 1,047 miles, the Tippecanoe River and its tributaries are being protected by 504 miles of buffers, and the Upper White River and its tributaries are being protected by 147 miles of buffers. To see a comparison of the rivers and tributaries that are being protected in the Indiana CREP watersheds, refer to table 3 below.

TABLE 3: CONSERVATION BUFFER LENGTHS WITHIN THE CREP WATERSHEDS

Buffer Lengths on the rivers and tributaries					
	Length in miles				
Highland- Pigeon	35.25				
Lower Wabash	7.08				
Lower East Fork White	45.53				
Lower White	38.81				
Middle Wabash-Busseron	15.09				
Middle Wabash-Deer	18.62				
Middle Wabash-Little Vermillion	34.75				
Tippecanoe	503.62				
Upper East Fork White	81.44				
Upper Wabash	120.44				
Upper White	146.91				

^{*} Note: Buffer lengths are calculated so that lengths of projects re-enrolled from CREP to CREP are not duplicated.

B. SEDIMENT AND NUTRIENT LOAD REDUCTIONS THROUGH CREP

The CREP program actively continues to work toward the goal of reducing the amount of sediments and nutrients, such as phosphorus and nitrogen, into the rivers and streams within the designated watersheds by applying buffers, planting trees and restoring wetlands. The DSC uses the Region 5 Sediment and Nutrient Load Reduction Model developed by the Environmental Protection Agency (EPA) to estimate the sediment, nitrogen and phosphorus load reductions from individual best management practices installed on the ground. To date, CREP leaders apply this model to each conservation practice enrolled and installed through the CREP to estimate the positive effects of the practice on water quality. This data continues to be gathered and provides cumulative information on the estimated sediment and nutrient load reductions in the Indiana CREP watersheds.

The annual goal to reduce sediment and nutrients from entering rivers and streams in the designated watersheds is 2,450 tons of sediment, 2,400 pounds of phosphorus, and 4,700 pounds of nitrogen. Table 4 below shows the sediment and nutrient load reductions for the CREP practices that were installed in 2022. The table also shows the overall benefits of the nutrient load reductions since the program's expansion in 2010.

TABLE 4: ESTIMATED NUTRIENT LOAD REDUCTIONS IN CREP WATERSHEDS

Year	Sediment (Tons)	Phosphorus (lbs.)	Nitrogen (lbs.)
2022	6,633	8,946	17,392
Overall	85,907	100,288	197,091

^{*&#}x27;Overall' refers to the estimated total sediment and nutrient load reductions since the program's expansion in 2010 according to the Region 5 model calculations.

C. WETLANDS

One of the CREP objectives is to increase the acres of wetlands in the watersheds for erosion control, sediment reduction, storm water retention, and nutrient uptake. During the first 5 years of the CREP program in Indiana, from 2005-2010 when we had 3 designated watersheds, the amount of enrollment of wetland acres was 1,061.7 acres.



Benefits of wetlands include erosion control, sediment reduction, storm water retention, nutrient uptake, and wildlife habitat creation.

Since the expansion in 2010, the program has seen a significant increase in the number of wetland acres installed, including 4,937 acres of wetland restorations completed and an enrollment of 5,609 acres. In 2022, 265 acres of wetland restorations were completed/re-enrolled, and 491.9 acres were newly enrolled.

In total since the inception of the program in Indiana, CREP has restored/enhanced or reenrolled 5,998 acres of wetlands.

D. ACREAGE ENROLLMENT

A main goal of the CREP program in Indiana is to enroll 26,250 acres of eligible cropland including frequently flooded agricultural lands, and restorable wetlands. To date, according to the ISDA's tracking system, there are approximately 23,516 acres that have been enrolled in the Indiana CREP, which is 89.6% of the acreage enrollment goal, and approximately 22,293 of those acres have been completed or re-enrolled since the program's inception. According to the federal tracking system, there are 21,487 acres that are under contract. The number of acres that the state shows as enrolled and completed is different than what FSA has under contract for two reasons: 1) because of the differences in when practices are recorded by each system, and 2) the state system still records the total number of acres to show overall success of the program (including acres that have expired and were not re-enrolled). However, in 2023, we will be updating our tracking system to not only continue to record overall acres enrolled but also only those acres that are currently enrolled and under contract.

Table 5 on the next page provides a detailed listing of the practices and acres that have been completed in each CREP watershed since the beginning of the program, as well as the number of acres of enrollment by practice into the program that have not yet been established. Figure 2 illustrates the overall comparison in percentage of enrolled conservation practices.



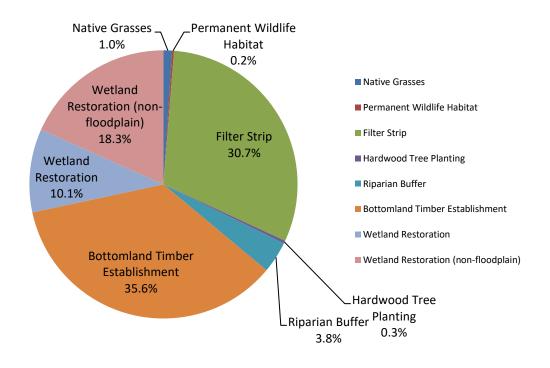
Wildlife Habitat

TABLE 5: TOTAL ACREAGE OF COMPLETION AND ENROLLMENT TO DATE

CREP Watershed	Native Grasses	Permanent Wildlife Habitat	Filter Strip	Hardwood Tree Planting	Riparian Buffer	Bottomland Timber Establishment	Wetland Restoration	Wetland Restoration (non- floodplain)	Total
	CP2	CP4D	CP21	СРЗА	CP22	CP31	CP23	CP23A	
	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres
Highland-Pigeon	2.50	0.0	235.86	10.80	17.52	243.80	0.0	0.0	510.48
Lower Wabash	0.0	0.0	11.63	0.0	0.0	663.30	0.0	0.0	674.93
Lower East Fork White	53.50	45.20	168.71	41.60	83.17	751.44	287.16	0.0	1,430.48
Lower White	10.70	0.0	193.62	0.0	129.29	2,349.07	138.53	0.0	2,821.21
Middle Wabash- Busseron	2.0	0.0	14.32	0.0	19.70	1,572.69	839.21	91.60	2,539.52
Middle Wabash- Deer	6.60	0.0	117.91	0.0	0.0	73.10	37.17	59.42	294.20
Middle Wabash- Vermillion	4.50	0.0	174.94	6.97	87.12	757.35	505.89	177.70	1,714.47
Tippecanoe	93.84	0.0	3760.45	0.0	11.21	41.80	209.00	3,358.90	7,475.20
Upper East Fork White	0.0	0.0	508.55	0.0	48.30	201.92	0.0	0.0	758.77
Upper Wabash	23.15	7.0	1016.26	2.56	64.19	282.43	117.85	89.10	1,602.54
Upper White	39.89	0.0	679.00	1.00	407.55	1,256.40	0.0	87.18	2,471.02
Total CREP	_		_						
Completion	236.68	52.20	6881.25	62.93	868.05	8,193.30	2,134.81	3,863.90	22,293.12
Total CREP									
Enrollment	243.27	53.20	7213.97	74.14	897.74	8,373.75	2,364.63	4,306.92	23,527.62

^{*} CREP Completion refers to those projects where conservation practices have been installed on the ground or reenrolled into the program.

FIGURE 2: PERCENTAGE OF CONSERVATION PRACTICES ENROLLED IN CREP



E. ADDITIONAL BENEFITS

When conservation practices are applied, there are several benefits that come from these practices beyond the benefits listed above in the nutrient load reduction and wetlands sections. These additional benefits include creating wildlife habitat and protecting floodplains through planting of trees, which also can improve air quality. All of the acres applied through the CREP program are considered to be wildlife habitat acres.

Through the CP31 Bottomland Timber Establishment practice, trees are planted in floodplain areas to protect waterbodies. In 2022, 122 acres of new trees were planted through CP31, resulting in approximately 73,416 trees being planted. Since the inception of the program in late 2005, 7,280.9 acres of new trees have been planted or re-enrolled into the program, resulting in the planting of approximately 4,368,516 trees.



Bur Oak species in a Bottomland Planting

4. 2022 Completed Practices and Acres

In 2022, landowners installed or re-enrolled a variety of conservation practices offered through CREP. According to the state's tracking system, 1,519 acres were enrolled, which includes approximately 379.4 acres being re-enrolled from CRP to CREP and 550.4 acres from CREP to CREP. This is the third year that acres within the program were able to be re-enrolled back into CREP within the original three watersheds.

In 2022, there were a total of 1,235.14 practice acres that were completed, with 705.42 acres newly completed on the ground or re-enrolled from CRP to CREP, and 529.7 acres that were re-enrolled from CREP to CREP. Table 6 below provides a breakdown of the practice acreage completed in 2022. (Note: these numbers are given according to the State's tracking system.)

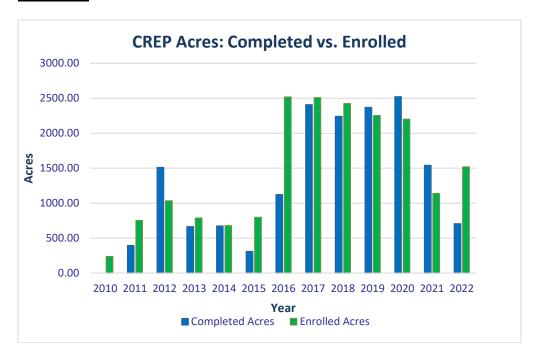
TABLE 6: 2022 COMPLETED PRACTICES*

Completed Practices*		(in acres)						
2022	CP2	CP21	СРЗА	CP22	CP31	CP23	CP23A	Total
New Program								
Acres	3.20	265.43	11.3	39.12	136.72	168.88	80.77	705.42
CREP to CREP	0.00	209.44	2.50	40.23	261.82	0.00	15.73	529.72
								1,235.14

^{*} Completed practices are those projects where conservation practices have been installed on the ground or have been re-enrolled into the program.

Figure 3 below shows a comparison of each year, Completed vs. Enrolled acres, since the expansion in 2010.

FIGURE 3: COMPLETED ACRES VS. ENROLLED ACRES FROM 2010-2022



^{**} There were no CP4D practices installed in 2022.

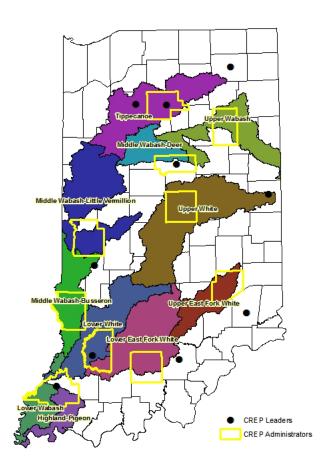
5. Financial Contributions

A. INDIANA'S DIRECT PROGRAM COSTS FOR CREP

The ISDA, Division of Soil Conservation (DSC) maintains 10 CREP Leaders, who are located throughout the state, as shown in Figure 4 below, to provide technical assistance to landowners, create conservation plans and oversee daily CREP activities. These CREP Leaders work with landowners/participants to enroll them in the program which provides state financial incentives to establish one of the eligible and prescribed conservation practices. In 2022, the state paid out \$671,932.50 in direct payments to participants for installation of practices,

In an effort to streamline the payment process, the CREP Leaders and the CREP Program Manager works closely with 10 Soil and Water Conservation Districts (SWCDs) to help administer funds to participants. Figure 4 also outlines the 10 counties that are the Administrating SWCDs. The State paid \$67,193.25 in administrative fees to partnering SWCDs in 2022.

FIGURE 4: ISDA CREP LEADERS AND SWCD ADMINISTRATORS



NON-FEDERAL SUPPORT

Each year the SSCB appropriates \$660,000 from Clean Water Indiana to go toward supporting practice installations and incentive fees to participating landowners, and administrative fees to the SWCD CREP Administrating counties.

In addition, in 2022, The Nature Conservancy and the ISDA signed an agreement for the TNC to provide funds to be used toward the incentive payments to landowners for the installation of eligible CREP practices, in the amount of \$75,000. These dollars were provided through Enterprise to establish wetland restorations and bottomland tree plantings in the floodplain within any of the CREP watersheds.

B. INDIANA'S IN-KIND SERVICES TO CREP

As mentioned above DSC maintains 10 CREP Leaders to provide technical assistance to landowners, create conservation plans and oversee daily CREP activities in their specified watersheds. Also, the CREP & Water Quality Initiatives Program Manager handles all aspects of the program and provides technical expertise and critical decision-making, and the DSC Director provides overall supervision and assistance in decision-making. DSC Resource Specialists, located throughout the state, also accommodate seasonal workload and marketing opportunities within CREP as needed. The DSC's staff time contributes to the overall in-kind services.



State partners, such as the SSCB, IDNR and TNC also contribute to the state's overall contribution through administration, conservation plan development, program costs on easements, and staff time.

Table 7 shows a detailed summary of the direct program costs and the in-kind services provided by the state and its partners. The table also shows the amount of federal dollars that were paid out to landowners during federal fiscal year 2022.

TABLE 7: INDIANA'S OVERALL ANNUAL DIRECT PROGRAM COSTS AND IN-KIND MATCH

Direct Program Costs from CWI	2022 Total
State Funds for Practice Costs to Participants	\$671,932.50
SWCD Administrative Fees	\$67,193.25
State In-Kind Match	
CREP Program Manager and 3 State office staff	\$66,862.74
10 CREP Leaders	\$138,184.85
Resource Specialist Time	\$3,203.70
SWCD County Administrators Time	\$11,765
SSCB	\$1,050
CREP Steering Committee	\$234
DNR (conservation plan development and	
easement processing time)	\$2,000
TNC In-kind and Admin Time	\$14,400
Commitment from CWI	\$660,000
Total	\$1,636,826.04
Federal Total	\$6,060,586.00

6. The Future of CREP in Indiana

The CREP program in Indiana continued to see high interest from landowners despite average crop prices, and this can be seen by the continued enrollment of acres in 2022. We anticipate that high interest by landowners and farmers will continue in 2023.

The Nature Conservancy has signaled that it will continue to support the CREP in Indiana by providing support dollars to be used toward direct payments to the landowners and participants in the program. These additional funds beyond what is given through the Clean Water Indiana (CWI) program, will allow landowners to enroll in the program and allow more practices to be installed on the ground. The ISDA, CREP Program Manager will continue to partner with organizations to cover demand.

Goals for 2023 include expanding the program in the state to make the program last longer and continue to get conservation on the ground and improve water quality by:

- 1) increasing the acreage enrollment goal;
- 2) adding additional watersheds in the state; and
- 3) adding a new practice to the list of eligible CREP practices.

In 2023, the ISDA plans to update our CREP tracking system. At this time, the state system still records the total number of acres that have been enrolled and installed since the program's inception in order to show overall success of the program (including acres that have expired and were not re-enrolled). ISDA will continue to record overall acres enrolled and completed, but will update the system to also record only the acres that are currently enrolled and under contract. By doing this, the acres that ISDA has in their system will more closely match the acreage count that is recorded by the Farm Service Agency.

This is an exciting time to be involved in conservation in Indiana. ISDA is proud to be playing a key role in expanding CREP, and expanding opportunities for landowners while improving the environment.

ISDA would like to thank the efforts of our many partners in conservation who have supported CREP in Indiana over the years. We realize that without the support of the SSCB, the CWI program, the Indiana DNR, the FSA, NRCS, TNC and all of our conservation partners, the success of this program would not be possible.