Appendix 6. Draft Text Produced for 2021 Report to Congress

Conservation Reserve Enhancement Program

Fiscal Year 2021

Report to the United States Congress

EXECUTIVE SUMMARY

The Conservation Reserve Enhancement Program (CREP) is a part of the Conservation Reserve Program under which the U.S. Department of Agriculture (USDA), through the Farm Service Agency (FSA), enters into an agreement with an eligible non-Federal partner (partner) to cost-effectively address specific resource concerns by combining and targeting the resources of USDA and the partner. Through such agreements, financial, educational, and technical assistance are provided to producers to voluntarily implement certain conservation measures on land in lieu of continued agricultural production. The agreement identifies the specific geographic area and conservation concerns to be addressed, and the commitments of both USDA and the partner. The partner for each agreement is required to submit an annual report regarding the status of the project.

This report to Congress is provided in accordance with Section 1231A of the Food Security Act of 1985, as amended, which requires the Secretary of Agriculture to submit a report to Congress annually that describes, with respect to each agreement the: 1) status of the agreement; 2) purpose and objectives of the agreement; 3) Federal and partner commitments made under the agreement; and 4) the progress made in fulfilling those commitments.

In Fiscal Year (FY) 2021, there were 32 separate agreements with 25 State governments through which 675,323 acres were enrolled. Ohio (112,077 acres) and Pennsylvania (99,685 acres) had the highest total enrollment of any states; combined, these two states accounted for 31 percent of U.S. CREP enrollment. Enrollment of new acreage in FY 2021 was largest in Minnesota (5,826 acres), Nebraska (5,101 acres), and Oregon (3,804 acres). Federal contributions in FY 2021 were $130,164,201 and partner contributions totaled $50,901,319.

FY 2021 STATUS OF AGREEMENTS

In FY 2021, there were 32 separate agreements with 25 State government partners through which eligible acreage was enrolled.

State	Agreement Name	New Acres Enrolled In FY2021	Acres Reenrolled In FY2021	Acres Currently Enrolled
Colorado	Colorado I-Republican River	1,828	130	27,570
Colorado	Colorado III-Rio Grande	722	0	10,046
Delaware	Delaware	0	181	3,132
Idaho	Idaho-Eastern Snake River Plain	0	0	18,407
Indiana	Indiana	1,013	1,270	21,311
Iowa	Iowa	100	2	3,707
Kansas	Kansas-Upper Arkansas River	285	0	23,430
Louisiana	Louisiana I-Lower Ouachita River	0	0	17,044
Maryland	Maryland	504	1,702	43,683
Minnesota	Minnesota Water Quality	5,826	1,109	27,416
Mississippi	Mississippi Delta	1,060	0	5,084
Montana	Missouri/Madison River	8	627	11,276
Nebraska	Nebraska II-Platte Repub. Res. Area	5,101	17,899	39,849
New Jersey	New Jersey	13	90	683
New York	New York I-New York City	1	17	1,309
New York	New York II-Syracuse	0	1	57
New York	New York III-Statewide	154	290	8,206
North Carolina	North Carolina	206	0	4,454
North Dakota	North Dakota	0	0	108
Ohio	Ohio I-Lake Erie	680	1,443	51,474
Ohio	Ohio III-Scioto River Basin	398	20,192	60,603
Oregon	Oregon	3,804	2,479	46,549
Pennsylvania	Pennsylvania I-Chesapeake Bay	1,056	4,084	85,158
Pennsylvania	Pennsylvania II-Ohio River Basin	202	1,034	14,451
Pennsylvania	Pennsylvania III - Delaware River	3	0	76
South Dakota	South Dakota-James River	585	15,101	75,649
Vermont	Vermont	50	45	2,234
Virginia	Virginia I-Southern Rivers	109	236	7,111
Virginia	Virginia II-Chesapeake Bay	74	217	10,551
Washington	Washington	173	679	13,495
West Virginia	West Virginia	115	204	5,097
Wisconsin	Wisconsin	1,311	1,211	36,103

TOTAL		**25,381**	**70,243**	**675,323**

FY 2021 FEDERAL AND ELIGIBLE PARTNER COMMITMENTS

The USDA issued a total of $130,164,201 in FY 2021 for all active agreements. Partner contributions totaled $50,901,319. Federal and partner contributions by agreement are provided below.

State	Agreement Name	FY2021 Cash and In-Kind Commitments			
		Federal Cash	Partner Cash	Partner In-Kind[a]	Total Partner
Colorado	Colorado I-Republican River	$3,826,569	$1,200,225	$182,000	$1,382,225
Colorado	Colorado III-Rio Grande	$1,703,715	$860,220	$900,200	$1,760,420
Delaware	Delaware	$464,353	$174,480	$81,455	$255,935
Idaho	Idaho-Eastern Snake River Plain	$2,319,097	$0	$6,324,071	$6,324,071
Indiana	Indiana	$6,047,720	$1,317,281	$190,248	$1,507,530
Iowa	Iowa	$2,148,746	$1,535,550	$0	$1,535,550
Kansas	Kansas-Upper Arkansas River	$3,266,064	$1,597,849	$309,208	$1,907,057
Louisiana	Louisiana I-Lower Ouachita River	$1,374,424	$0	$0	$0
Maryland	Maryland	$10,306,776	$1,336,460	$387,730	$1,724,190
Minnesota	Minnesota Water Quality	$11,187,628	NA	NA	NA
Mississippi	Mississippi Delta	$921,677	$87,964	$2,950	$90,914
Montana	Missouri/Madison River	$733,280	$0	$0	$0
Nebraska	Nebraska II-Platte Republican Res. Area	$7,887,314	$5,124,271	$1,532,889	$6,657,160
New Jersey	New Jersey	$206,305	$13,593	$37,932	$51,525
New York	New York I-New York City	$288,916	$200,286	$156,896	$357,182
New York	New York II-Syracuse	$6,645	$50	$556	$606
New York	New York III-Statewide	$1,536,924	$16,487,913	$0	$16,487,913
North Carolina	North Carolina	$633,652	$2,425,798	$189,309	$2,615,107
North Dakota	North Dakota	$3,588	$13,432	$4,700	$18,133
Ohio	Ohio I-Lake Erie	$14,290,566	$0	$275,598	$275,598
Ohio	Ohio III-Scioto River Basin	$16,278,045	$0	$663,458	$663,458
Oregon	Oregon	$4,521,898	$235,230	$44,655	$279,885
Pennsylvania	Pennsylvania I-Chesapeake Bay	$13,469,386	$254,913	$144,694	$399,607

Pennsylvania	Pennsylvania II-Ohio River Basin	$1,562,668	$3,064	$0	$3,064
Pennsylvania	Pennsylvania III - Delaware River	$12,972	$2	$0	$2
South Dakota	South Dakota-James River	$8,734,182	$2,799,185	$27,055	$2,826,240
Vermont	Vermont	$364,497	$139,432	$0	$139,432
Virginia	Virginia I-Southern Rivers	$1,392,034	$224,124	$6,196	$230,320
Virginia	Virginia II-Chesapeake Bay	$917,615	$13,281	$25	$13,306
Washington	Washington	$3,962,716	$2,082,115	$0	$2,082,115
West Virginia	West Virginia	$659,499	$8,825	$44,046	$52,871
Wisconsin	Wisconsin	$9,134,730	$785,412	$474,491	$1,259,903
TOTAL		**$130,164,201**	**$38,920,955**	**$11,980,364**	**$50,901,319**

* Partner in-kind activities may include outreach and promotion, monitoring, program administration, and related activities.

AGREEMENT PURPOSE

Agreement Name	Agreement Purpose (Actual Agreement Text)
Colorado I-Republican River	Reduce the amount of irrigation water consumptive use, conserve energy, and reduce agricultural chemicals and sediment from entering waters of the State from agricultural lands. Enhance aquatic and terrestrial wildlife habitat through establishment of permanent vegetative cover.
Colorado III-Rio Grande	Improve water quantity and quality, enhance habitat for wildlife populations, reduce irrigation water consumptive use, and reduce agricultural chemical and sediment runoff within the Rio Grande Basin in Colorado.
Delaware	Enhance water quality through reduction of agricultural nutrients to further the goal of restoring designated uses of the State's waterbodies and to enhance wildlife habitats.
Idaho-Eastern Snake River Plain	Improvement of water quantity and quality, enhancement of wildlife habitat through establishment of vegetative cover, reduce irrigation water consumptive use, and reduce agricultural chemical and sediment runoff to the waters of the State.
Indiana	Improve water quality and address wildlife issues by reducing erosion, sedimentation and nutrients, and enhancing wildlife habitats.
Iowa	Improve water quality by reducing nitrate loads to surface waters, enhance wildlife habitat, and increase recreational opportunities.
Kansas-Upper Arkansas River (UAR)	To reduce agricultural chemicals and sediment form entering waters of the State from agricultural lands that contribute to poor water quality in rivers and alluvial and high plains aquifers
Louisiana I-Lower Ouachita River	Help reduce the delivery of agricultural nonpoint source pollution by installing buffers and bottomland hardwoods, and restoring wetlands to improve water quality and improve both subsurface and surface water quality.
Maryland	Help reduce the occurrence of runoff, sediment, and nutrient accumulation in the Chesapeake Bay and promote enhanced wildlife habitats.
Minnesota Water Quality	Help improve water quality in the project area by establishing and maintaining buffers of permanent vegetation between eligible waterbodies and adjacent agricultural cropland, restoring and maintaining wetlands,

	establishing permanent vegetative cover in wellhead protection areas, and to establish beneficial habitat for terrestrial and aquatic wildlife habitat.
Mississippi Delta	Assist in the maintenance and/or improvement of current water quality conditions through the reduction of agricultural sources of sediment, nutrients, and waterborne pathogens in the targeted watershed.
Montana-Missouri/Madison River	Improve water quality and enhance fish and wildlife habitat along the Missouri and Madison Rivers.
Nebraska II-Platte Republican Resource Area	Improvement of water quantity and quality, and the enhancement of wildlife habitat, through establishment of vegetative cover to reduce irrigation water consumptive use and agricultural chemical and sediment runoff into waters of Nebraska.
New Jersey	Improve water quality, reduce impairment from agricultural non-point sources and restore ecological functions of New Jersey streams.
New York I-New York City	Enhancement of water quality by reduction of agricultural sources of sediment, nutrients, and waterborne pathogens and the enhancement of wildlife habitats.
New York II-Syracuse	Assist in the maintenance of current water quality conditions through the reduction of agricultural sources of sediment, nutrients, and waterborne pathogens.
New York III-Statewide	Maintenance or improvement of current water quality conditions through the reduction of agricultural sources of sediment, nutrients, and waterborne pathogens.
North Carolina	Enhancement of water quality by the reduction of sediment and nutrients, and the enhancement of fisheries and wildlife habitats for State and federally listed threatened and endangered species.
North Dakota	Address water quality issues by the reduction of sediment, nutrients and other pollutants entering rivers and streams within the project area, and the enhancement of habitat and forage for honeybees and other wildlife.
Ohio I-Lake Erie	Significantly reduce the amount of sediment and nutrients entering the targeted watersheds from agricultural sources
Ohio III-Scioto River Basin	Improve water quality, reduce agricultural nonpoint source pollution to surface waters, and reduce soil erosion.

Oregon	Assist in the recovery of fish species which have been listed as threatened or endangered species under the Federal Endangered Species Act.
Pennsylvania I-Chesapeake Bay Watershed	Reducing nutrient and sediment loading of the Upper and Lower Susquehanna and Potomac River Basins, improving water quality, enhancing wildlife, and producing nutrient reductions.
Pennsylvania II-Ohio River Basin	Reducing nutrient and sediment loading of the Ohio, Monongahela, and Allegany Rivers and the smaller streams and tributaries in the same watersheds.
Pennsylvania III- Delaware River Basin	Reducing nutrient and sediment loading of the Delaware River and the smaller streams and tributaries in the same watersheds.
South Dakota-James River	Improvement of water quality, reduction in soil erosion, flood control, enhancement of water wildlife habitat, and creation of public hunting and fishing access.
Vermont	Achieve non-point source pollutant reduction, enhance fish and wildlife habitat and to attain conservation goals established by the State.
Virginia I-Southern Rivers	Enhancement of water quality by reduction of sediment and nutrients within the Southern Rivers Basin and the enhancement of fish and wildlife habitats for State and federally listed threatened and endangered species.
Virginia II-Chesapeake Bay	Significantly reduce the amount of nutrients entering estuaries from agricultural sources to assist Virginia in achieving its nutrient reduction goals for agriculture in the area, the significantly reduce the amount of sediment entering water courses, and the enhance habitat for the preservation of natural diversity of biological resources.
Washington	Assist in the recovery of salmon species that have been listed as threatened or endangered species under the federal Endangered Species Act.
West Virginia	Certain purposes within the Kanawha River, Little Kanawha River, Monongahela River, Cheat River, Potomac River, and Ohio River watersheds of West Virginia.
Wisconsin	Improve the water quality of several waterbodies that drain agricultural lands throughout the State of Wisconsin, through a reduction of sediment and the nutrient loading to these waterbodies.

AGREEMENT OBJECTIVES AND PROGRESS

(As Reported by Partner)

Agreement Name	Objective Type	Objective	Progress and Methods Used
Colorado I-Republican River	Water Quantity	Reduce irrigation water use for agricultural purposes from the Ogallala Aquifer by 6.5 percent.	The average irrigation consumption in the RR CREP is approximately 1.5 acre- foot of irrigation water per acre of land irrigated. Water reduction is calculated by multiplying the irrigated acres retired through CREP times 1.5 resulting in an estimated acre foot of reduction per year. Irrigation use reduced by 5.8% to date.
	Water Quantity	Reduce irrigation water use by 49,800 to 69,200 acre-feet a year though purchases of landowner's permanent water rights and/or cancellation of the well permit.	Measuring devices have been required on all wells within the District since 2009. Actual well performance is measured annually, and that data is used to measure progress.
	Soil Erosion	Reduce soil erosion from 751,633 tons to 259,395 tons per year, a total reduction of 492,238 tons per year.	USDA-Natural Resources Conservation Service (NRCS) data provides average soil erosion for soil types within the CREP area for irrigated cropland and native vegetation. Erosion reduction is calculated by multiplying the difference by the total # of irrigated acres enrolled by the difference in soil erosion for irrigated cropland vs native vegetation. Goal is approximately 64% achieved.
	Water Quality	Reduce annual fertilizer and pesticide application by a minimum of 3,865 tons per year from 2004 levels	NRCS and Colorado State University provided an annual application rate for fertilizers and pesticides for acres under irrigation within the CREP area. The calculation simply

			reduces that number to zero for each acre enrolled in CREP. Goal is approximately 75% achieved
	Reduced Energy Use	Reduce the total annual use of electricity by 2.76 million kilowatt hours(KW-hrs) through reductions in groundwater pumping.	Each center pivot is operated by electricity and monitored by several power companies within the region. The electricity is quantified by acre and the total number of kWhrs is calculated by multiplying the # of acres retired through CREP by the electricity it takes to irrigate the enrolled acres. Goal is approximately 70% achieved.
Colorado III-Rio Grande	Soil Health	Reduce soil erosion from 681,252 tons to approximately 149,487 tons per year on all acres enrolled in CREP, a total reduction of approximately 531,765 tons.	Soil erosion is determined by soil type and is quantified by NRCS for irrigated agriculture and permanent cover. Progress is measured by calculating the difference and multiplying it by the number of acres enrolled. Approximately 25% of this goal has been achieved to date.
	Habitat	Establish up to 40,000 acres of habitat for numerous wildlife species, including several aquatic and wetland dependent species that are declining due to habitat loss and degradation.	Almost 25% of the 40,000 acres have been enrolled to date and due to the arid environment and complex aquifers, habitat goals will not be realized for many years. Specific measurements immediately following enrollment will not demonstrate long-term benefits.
	Water Quality	Reduce annual fertilizer and pesticide application from enrolled acres by approximately 3,650 tons per year from 2007 levels.	Progress is measured by using a baseline of fertilizer and pesticide application per acre and multiplying by the total number of acres enrolled. Almost 25% of this goal has been met to date for a reduction of approximately 900 tons per year.

	Water Quality & Habitat	Establish up to 40,000 acres of native vegetation throughout the project area.	Almost 25% of the 40,000 total acres (9,924 acres) have been enrolled to date. All enrolled acres are being checked by NRCS and Subdistrict #1 staff to ensure native vegetation is being established on enrolled acres.
	Water Quality & Habitat	Restore and enhance up to 750 acres of degraded temporary and permanent wetlands.	Up to 3,000 ac are targeted for this goal. However, there have been no signups and no interest expressed for this practice.
	Water Quantity	Reduce irrigation water use for agricultural purposes of the confined and unconfined aquifer within the targeted watershed by approximately 60,060 acre-feet of groundwater per year, equal to almost 12 percent water savings within the project area and 5 percent water savings throughout the entire Rio Grande basin in Colorado.	A minimum of one and one half (1.5) acre feet of water is applied to each acre of irrigated cropland in this region. Approximately twenty five percent (25%) or 9,924 acres have been enrolled in this CREP to date. Annual irrigation water reduced through this CREP to date is approximately 14,894 acre feet.
	Water Quantity	Increase stream flows in streams associated with the watershed within the project area.	Stream flows are monitored regularly by Colorado Department of Water Resources and Subdistrict #1, however other factors such as the extreme flashiness of the hydrograph, snowpack in surrounding mountains, annual precipitation during the growing season, and other factors make it difficult to attribute any specific changes to CREP enrollment. However, reduction in consumption on 9,924 acres does increase available water for stream flows as that water is either not diverted or remains in the groundwater system where it can migrate to the streams.

	Energy Reduction	Reduce energy consumption from an average-sized (125 acre) pivot from approximately 47,000 kilo-watt hour (kW-hrs) per year to less than 14,000 kW-hrs per year for the first three years during cover establishment on all pivots enrolled in the CREP. Subsequent years' energy consumption will be reduced to zero for all pivots enrolled in the CREP.	Each 125 acre pivot enrolled uses the data in the goal to estimate the total energy savings by year. With 79 pivots enrolled, the total reduction to date is approximately 17.3 million kW-hrs this year and 59 million KW-hrs to date or twenty nine percent (29%) of overall goal.
	Water Quality	Reduce the percentage of groundwater test wells containing nitrogen (NO3) levels above U.S.Environmental Protection Agency (EPA) standards.	Since there is no baseline target identified in this goal, it is not measurable. However, it is appropriate to presume that if wells servicing CREP acres are no longer pumping and fertilizing, a portion of them contained nitrogen levels above EPA standards, resulting in a lower percentage of total wells above EPA standards.
Delaware	Water Quality	Facilitate nutrient and sediment reduction pursuant to the State's goal of restoring designated uses of the States uses of surface waters.	While not designed to specifically assess the success of Delaware's CREP Program, Delaware's Department of Natural Resources and Environmental Controlmaintains two water quality monitoring networks, the General Assessment Monitoring Network (GAMN), and the Total Maximum Daily Load (TMDL) related monitoring network. All stations in the networks are monitored throughout the year for a suite of physical and chemical parameters. Some stations in selected watersheds are monitored for up to five key metals for dissolved and total concentrations in the water column. GAMN stations are long-term stations whose data assesses long-term trends and supports compilations of Watershed

			Assessment Reports as mandated by the Clean Water Act under Section 305 (b). TMDL related monitoring stations are generally in place for one (1) to two (2) years to support data needs for TMDL model development and calibration. Some stations monitor for sediment concentrations of selected constituents. TMDL related monitoring for watersheds of the Delaware Bay Drainage Basin began in FY2002. The purpose of the water quality-monitoring program is to collect data on the chemical, physical and biological characteristics of Delaware's surface water. The information collected under the program: Describes general water quality conditions in the State; Identifies long term trends in water quality; Determines the suitability of Delaware waters for water supply, recreation, fish and aquatic life, and other uses; Monitors achievement of water quality standards; Identifies and prioritizes high quality and degraded waters; Supports the Total Maximum Daily Load Program; and evaluates the overall success of Delaware's water quality management. Models can estimate cumulative CREP nutrient reductions by watershed for nitrogen (N), phosphorous (P) and sediment. The CREP practices in Delaware contribute to improving the State's water quality. By having the following CREP practices in place FY2007- 2021, the amount of each nutrient pollutant load that will not reach surface and/or ground waters on a yearly basis include; CP 3A – 2,032.28 acres, 81,735.22 lbs. of N and 2,126.9 lbs. of P reduction; CP4D – 384.73 acres, 12,492.65 lbs. of N and 361.01 lbs. of P reduction; CP9 – 186.21 acres, 5,255.84 lbs. of N and 113.63 lbs. of P reduction; CP21 – 308.12 acres, 7415.23 lbs. of N and 192.6 lbs. of P reduction; CP22 – 56.62 acres, 2,289.10 lbs. of N and 66.95 lbs. of P Reduction; CP23

			995.68 acres, 2,686.45 lbs. of N and 114.20 lbs./ of P reduction; CP23A – 74.02 acres, 2,408.75 lbs. of N and 110.72 lbs. of P Reduction. The total acres under CREP Practices from 2007 – 2021 is 3137.66 acres with a cumulative total of N and P reductions of 114,355.24 lbs. and 3,086.01 lbs., respectively. Load reductions are routinely incorporated into the TMDL development process both for both crediting purposes and for future reductions from additional BMP implementation.
	Habitat	Increase wildlife habitat and create wildlife corridors in the Chesapeake Bay, Delaware Bay and Delaware Inland Bays.	Delaware set a goal of establishing 10,000 acres of selected practices to meet the goals of the CREP Program. The Cumulative CREP Program Activity from FY2007-2021 is 3,137.66 acres which are currently under 10 to 15-year contract terms. This number accounts for contract loss and renewal. In FY2021 there was a loss of 64.3 acres due to six landowners not re-enrolling conservation practices. Two landowners had practices located in the Chesapeake Bay watershed and the other four landowners had practices located in the Delaware Bay watershed. There was one new producer contract for 4.89 acres located in the Delaware Bay watershed. There were 16 re-enrolled State contracts written for Signup55. The new and re-enrolled contracts by conservation practices for the three watersheds are as follows: (9) Delaware Bay, (6) Chesapeake Bay, and (1) Delaware Inland Bay. This represents 240.27 acres of new and/or renewal for Signup55. These acres are represented by the following conservation practices; 179.34 acres of CP3A; 19.92 acres of CP4D, 13.2 acres of CP9, 21.31 acres of CP21; and 6.5 acres of CP23A. Each of these practices are acres that were formerly farmland or marginal pastureland. By installing and managing these

			conservation practices, it provides areas for wildlife to seek and establish habitat that will be protected from disturbances. As these types of conservation practices are implemented, progress has been made to restore wildlife populations and habitat areas. Delaware has currently achieved approximately 31.38% of the 10,000-acre conservation practice implementation goal.
	Water Quality	Restore natural conditions for water temperature and dissolved oxygen in areas protected by riparian forested buffers.	The DNREC Watershed Assessment and Management Section conducts routine water quality monitoring throughout the state of Delaware at designated monitoring stations. Every 2 years, the state of Delaware combines watershed assessment reports, and the Watershed Assessment and Management Section publishes a report focusing on the results of the comprehensive water quality monitoring. The NRCS Guidelines for CREP practice establishment criteria for; CP22 Riparian Forested Buffers must be adjoining a Category 1 or 2 stream, ditch, water body or non-farmed wetland, or adjoin drainage ditches contributing to Category 1 and 2 impaired segments. Adjoin means touching the ditch or stream. This practice is made up of predominantly trees which provide shade for the water bodies they are adjacent to which help to control the water temperature and dissolved oxygen levels. There are 56.62 acres of Riparian Buffers that are planted along Delaware's waterways that are currently enrolled in CREP. The DNREC Nonpoint Source (NPS) Program currently conducts stream assessments throughout the state to survey for freshwater mussels. The presence and/or increased

			presence of freshwater mussels are a solid indicator of improved water quality.
	Water Quality	Provide conservation buffers on approximately 1,200 miles of the State's waterways and drainage systems.	In FY2021, the cumulative practice acres are 2,951.45 acres which include the following practices; CP3A-Hardwood Trees (2,032.28 acres), CP4D-Permanent Wildlife Habitat (384.73 acres), CP21-Filter Strips, (308.12 acres) CP22-Riparian Forested Buffers (56.62 acres) and CP23/23A-Wetland Restoration (169.7 acres). These conservation practices all must have a side along a waterway or drainage area. The only practice not included in the list above is the CP9 – Shallow Water Areas for Wildlife. This practice does not need to be installed along a stream or body of water- so the CP9 acres are being left out of the assumptions. An acre cannot convert to a mile because acres are a measure of area and miles are a measure of distance. The two are incompatible. By altering the question and making some assumptions, Geof Acton, a retired chartered surveyor's method, will help to estimate the length of conservation buffers in Goal #4. Taking the perspective and asking the question; "What is the length of the side of a square of which the area is 1 acre?" Then, a calculation can be made. An acre is 43,560 square feet, the square root of that is 208.71 feet. Since acres cannot be converted to miles, 1 acre can be described as a square of side ~ 209 feet or 0.04 miles (=4/100 of a mile). Since there are 2,951.45 acres along the Delaware waterways and drainage systems, they can be multiplied by the 209 feet (see) above to equal 616,853.05 feet. To convert 616,853 feet to miles, divide by 5,280 feet per mile which equals 116.82 miles.

			These conservation buffers are being monitored by the same systems that are in place for Goal #1 and Goal #3. Currently, there are approximately 116.82 miles out of the 1,200 miles covered with conservation buffers from CREP in Delaware's waterways and drainage systems. Approximately 9.7% of the State's waterways and drainage systems have one of the CREP conservation buffers alongside.
Idaho-Eastern Snake River Plain	Water Quantity	The main objective for CREP is to retire irrigated cropland reducing the groundwater consumptive use. This program compliments other water saving efforts for the overall strategy to stabilize and replenish the ground water levels in the Eastern Snake Plain Aquifer (ESPA).	Quick references for water savings use estimations of CREP acres enrolled times 2 ac-ft. Total water reductions including idled areas within field boundaries, not paid by CREP, are calculated by Idaho Department of Water Resources. IDWR monitors amount and direction of flow each year thru the ESPA. Idaho Soil and Water Conservation Commission staff performs onsite visits and field checks making sure no watering has taken place.
	Habitat	Conserve and improve wildlife habitat.	Improving water quantity helps with flow and temperature for aquatic species. Upland wildlife and bird habitat benefit from permanent vegetative cover and protection during nesting seasons. Columbian sharp-tailed grouse are one of six subspecies of sharp-tailed grouse. Currently, Columbian sharp-tailed grouse inhabit less than 10% of its former range. About 75% (20,000-50,000) of the remaining birds occur in Idaho (1998).

			Throughout their historical range, the decline of Columbian sharp-tailed grouse has been primarily attributed to the loss of native grassland and shrub-grassland vegetation types. The federal farm program known as the Conservation Reserve Program (CRP & CREP) has generally had a major positive impact on sharptail/upland bird populations in Idaho. Between these programs, hundreds of thousands of acres were seeded to a mixture of perennial grasses and forbs. The extensive, undisturbed grassland that developed on these seeded areas has provided secure nesting and brood-rearing habitat, especially where alfalfa/forbs was included in the seeding mix. Currently in Idaho, approximately 70% of Columbian sharp-tailed grouse habitat occurs on private land with the remaining 30% on public land. In most areas, the birds are dependent on both private and public land to meet their seasonal habitat requirements.
Indiana	Water Quality	Protect a minimum of 3,000 linear miles of watercourses through the installation of conservation buffer practices.	Indiana State Department of Agriculture uses an excel spreadsheet through SharePoint to record and track all practices that are enrolled and that have signed a state landowner participation agreement form. When a project is recorded as completed in the state's tracking system, the CREP Leader records the length in feet of the practice that is protecting a body of water. (The definition for a body of water is taken from the CRP Manual.) The feet are then converted to miles. Through the installation of conservation buffer practices in the Indiana CREP, approximately 994.5 linear miles of watercourses are currently protected within

			the Indiana CREP watersheds. Overall, this is 33.15% of the goal to protect 3,000 linear miles of watercourses in the targeted CREP watersheds.
	Water Quality	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.	ISDA uses the Region 5 Sediment and Nutrient Load Reduction Model developed by the U.S. Environmental Protection Agency (EPA) to estimate the sediment, nitrogen and phosphorus load reductions from individual best management practices installed on the ground. 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. These estimates are then recorded in the SharePoint tracking sheet. Practices installed in 2021 resulted in a reduction of 7,647 tons of sediment, 8,397 lbs. of phosphorus, and 15,990 lbs. of nitrogen. Overall, since the expansion of the program in 2010, reductions include 78,978 tons of sediment, 90,851 lbs. of phosphorus, and 178,701 lbs. of nitrogen.
	Water Quality	Increase the acres of wetlands in the watersheds for erosion control, sediment reduction, stormwater retention, and nutrient uptake.	ISDA uses an excel spreadsheet through SharePoint to record and track all practices that are enrolled. The acres of wetland restorations are tracked through this reporting system and can be tallied and reported. In 2021, according to the state's tracking system, approximately 526.59 acres of wetland restorations were completed, and 213.03 acres were enrolled. In total since the inception of the program in Indiana, CREP has restored or enhanced approximately 5,749 acres of wetlands.
	Water Quality	Seek enrollment of up to 26,250 acres of eligible cropland, including frequently flooded	ISDA uses an excel spreadsheet through SharePoint to record and track all the CREP eligible practices that are enrolled, which can be tallied and reported. According to the

		agricultural lands, and restorable wetlands.	ISDA's tracking system, there are approximately 22,641 acres that have been enrolled, with approximately 21,507 of those acres completed. According to the federal tracking system, there are 21,311 acres that are under contract, which is different than what the state has tracked and we believe that is because of the differences in when practices are recorded by each system.
Iowa	Water Quality	Annually, add the capacity to remove 300 to 600 tons of nitrate-nitrogen from agricultural tile drainage. Over the next ten years, this would add wetland capacity to annually remove 3000 to 6000 tons of nitrate nitrogen from agricultural tile drainage. Over a 60-year life, each wetland acre would remove approximately 20 to 40 tons of nitrate-nitrogen.	Three wetlands were constructed in 2021 which remove an estimated 38,220 pounds of nitrogen from the receiving waters. These wetlands will remove 2,867 tons of nitrogen over their 150-year lifespan. Cumulatively, all the CREP wetlands constructed to date remove 756 tons per year of nitrogen at a weighted average cost of $0.245 per pound of nitrogen removed from the receiving waters. 2021 Preliminary Report on Performance of Iowa CREP Wetlands: Monitoring and Evaluation of Wetland Performance Iowa State University monitors selected wetlands in Iowa as part of an ongoing monitoring effort associated with the Iowa Conservation Reserve Enhancement Program (CREP). The monitored wetlands are selected to span a wide range in wetland-to-watershed area ratio and inflow nitrate concentrations in order to ensure a broad range in hydraulic and nitrate loading rates. Fifteen wetlands were monitored in 2021, including 14 Iowa CREP wetlands and one mitigation wetland (DD15-N). Local assistance was provided to collect weekly water quality samples which were delivered to ISU for nutrient assays for one of the monitored CREP wetlands, referred to as the TJ wetland herein. Although water flow through the TJ wetland was not monitored, we can estimate the flow the wetland might have received by scaling

			discharge from a nearby USGS gage station. Wetland Performance (Nitrate mass loss and removal efficiency) Wetland performance is a function of hydraulic loading rate, hydraulic efficiency, nitrate concentration, temperature, and wetland condition. Of these, hydraulic loading rate (HLR, the total volume of water received per area of wetland surface per unit of time) and nitrate concentration are especially important for CREP wetlands. The range in HLR expected for CREP wetlands is significantly greater than would be expected based on just the four fold range in wetland/watershed area ratio approved for the Iowa CREP. In addition to spatial variation in precipitation (average precipitation declines from southeast to northwest across Iowa), there is large annual variation in both precipitation and water yield. The combined effect of these factors results in annual loading rates to CREP wetlands that vary by more than an order of magnitude, and will to a large extent determine nitrate loss rates for individual wetlands. Mass balance analysis and modeling has been used to examine the long term variability in performance of CREP wetlands including the effects of spatial and temporal variability in temperature and loading patterns. The results of the mass balance calculations for the 2021 and prior monitoring years (2004 through 2020).The results demonstrate that hydraulic loading rate is clearly a major determinant of wetland nitrate removal performance. In addition to calculating the measured percent nitrate removal, the nitrate mass removal is also calculated. The expected average nitrate mass removal for CREP wetlands can be estimated based inflow flow-weighted average (FWA) nitrate concentration, hydraulic loading rate, and the percent loss function shown in Figure 3. Inflow FWA nitrate

			concentrations observed for 2004 through 2021 CREP wetlands not having another wetland upstream of them average 13.6 mg N L-1 and range from 5.0 to 30 mg N L-1. The observed average nitrate mass removed for these same wetlands is 1,680 kg N ha-1 yr-1 (1,500 lb N acre-1 yr-1). While the percent nitrate loss is high at low HLR, those cases tend to occur during drier years having low nitrate loads, and hence, low total nitrate mass loss. Because of the non-linearity of the percent loss function (see Figure 3), long term nitrate mass loss is dominated by wetter years having high nitrate loads and high HLRs, even though wetter years tend to have lower percent removal.
	Water Quality	Reduce sediment entering surface waters in the Lake Panorama Watershed by 80,000 tons per year following filter strip and riparian buffer establishment. This has the potential of significantly reducing total sediment accumulation into Lake Panorama.	Progress toward meeting Goal 2 has been very limited. While some landowners have installed grade control structures or filter strips using state cost-share programs in recent years, no landowners have signed up for the available CREP incentives in the watershed.
	Water Quality	Reduce or maintain soil erosion on the agricultural land enrolled in the CREP to below the soil loss tolerance level for the soils present (2-5 tons per acre).	The wetland upland buffer seeding is required to be a CP-23 consisting of perennial native warm season grasses and native forbs. This perennial vegetation protects the soil and keeps soil erosion to a minimum. Soil erosion estimates made for these sites document that annual soil erosion rates are less than one ton per acre per year. Additionally, CREP sites are located in landscape positions dominated by low-gradient slopes. If the upland buffer area includes steeper

			slopes, these areas are generally small acreages and are also protected by the perennial vegetation and plant residues.
	Water Quality	Demonstrate a variety of available wetlands technologies and their value for improving water quality.	Two types of wetland development technologies are being researched, evaluated and being demonstrated currently. The first technique is “Tile Zone Wetlands”. The second technique is wetland development on floodplain landscapes. “Tile Zone Wetlands” are being researched and implemented in field trials. This type of wetland is suited to pothole, low-gradient landscapes. To create a wetland using this design, existing tile lines are intercepted by a newly installed “interceptor” tile line which re-directs drainage water to surface outlet to a pothole lower in the landscape. After this drainage water is treated by flowing though the wetland, it is collected and re-deposited into the same tile line that it originated from further downslope in the landscape, or to another suitable outlet. This type of wetland design has several advantages. First, the amount of surface water entering the wetland is greatly reduced since primarily only tile drainage water is directed to the wetland. Secondly, since the wetland is a naturally formed pothole, the earthwork cost for a structure and berm are eliminated or minimal. Third, the easement area necessary for this type of wetland could be much smaller since the volume of water treated and size of the wetland would also be smaller. Researchers at Iowa State University are actively identifying sites which may work for this type of design. Several tile zone sites are being designed and implemented through the Water Quality Initiative. More sites that meet CREP criteria are in the design stage and scheduled for implementation in 2022. The second wetland development technique is floodplain

			wetlands. In this technique, areas on existing floodplains are constructed with berms or excavation to create a depression or holding cell for tile to be directed into the wetland or have surface drainageways with tile-dominated baseflow re-directed into the wetland. This technique targets tile-drainage water like tile zone wetlands and may have the wetland inlet designed to allow the baseflow into the wetland while bypassing the high-volume surface runoff from storm events. A floodplain site meeting CREP criteria was planned for construction in 2021. However, due to permitting delays, this wetland is delayed to 2022 or later.
Kansas-Upper Arkansas River (UAR)	Water Quantity	Enroll a maximum of 28,950 acres into CREP in the project priority area (25,950 irrigated acres, 3,000 from dryland pivot corners as part of whole field enrollment), with a goal of up to 18,600 acres put into native grass.	As of Sept. 30, 2021, a total of 23,430 acres have been offered, accepted, and enrolled into the UAR CREP program. Of the total number of acres currently enrolled, only 2.6% (624 acres) was farmed dryland. Offers which are predominately "Tier 2 soils" comprise 7.7% (1,804 acres) of the total approvals to date. Essentially 100% of the 23,430 total enrolled acres have been placed into the native grass practices of CP2 or CP4d, with 827 acres enrolled in practice CP4d. This objective is 80% complete.
	Water Quality	Reduce the application of groundwater for irrigation in the targeted area by 45,125 acre-feet, annually, with the enrollment of 25,950 irrigated acres.	As of Sept. 30, 2021, a total of 47,643 acre-feet of authorized water rights for irrigation have been permanently retired from the enrollment of 22,806 irrigated acres. This rate is averaging just over 2 acre-feet per acre, a rate higher than estimated in the CREP objective, particularly because the majority of the enrollment in the project area has been in the western counties where water appropriation allowances are the highest in the state, and some irrigated acreage is authorized on land which is not being enrolled at the irrigated rate due to FSA restrictions. This objective

			continues to be increasingly exceeded with each additional year since 2017 and is 100% complete.
	Water Quality	By 2020, increase the frequency of meeting minimum desirable stream flows in the Arkansas River at the USGS gaging stations at Great Bend and Kinsley from 71 percent and 52 percent, respectively, as measured in 1996–2004.	No assessment of this objective has been made as of Sept. 30, 2021. Measurement of the impact of enrollment of acres into the Upper Arkansas River CREP on minimum desirable stream flow will begin after water rights have been terminated and enough time has elapsed to have an effect on the system. Most of the acres enrolled have just recently terminated the water rights, or are still allowed temporary limited irrigation to establish vegetation on soils susceptible to wind erosion.
	Water Quality	Reduce stream flow transit losses due to inefficiencies in the delivery of the water by improving the channel and canal delivery system.	Improvements to the stream flow delivery system are underway. Construction is complete on the cleaning and reshaping of the canal used by the South Side Ditch Company to enhance delivery of water to its members and to more efficiently deliver water to the downstream Farmers Ditch Company during a drought. A significant number of water check control structures on this system are under construction that will greatly improve water management and system delivery efficiency of water to irrigated fields using buried pipelines instead of leaky ditch lateral structures (which are difficult to maintain). It is estimated that water delivery to the Farmers Ditch Company via the refurbished canal has at least 15% less stream flow transit loss than delivery via the river channel. Also, significant upgrades and enhancements were initiated on the Amazon Canal intake structure and flume across Sand Creek near the Lakin Golf Course during 2015 and concluding in 2016. This site was featured in a 2016 Kansas Natural Resources legislative tour of southwest Kansas hosted by the KGS that summer. Additional improvements are underway or being planned for

			river routing model study to improve river management and state-line river flow delivery efficiency to the South Side, Farmers and Garden City Ditch systems that will be implemented as part of the Western Water Conservation Projects Fund expenditures.
	Water Quality	By 2020, reduce the rate of groundwater declines in the alluvial aquifer and the hydraulically connected High Plains aquifer in the CREP area from those measured during the winter months for the pre-CREP five-year period (2003 to 2007) and pre-CREP ten-year period (1998 to 2007).	A water use analysis tool and preliminary assessment of this objective has been initiated in 2018 by DWR and is described in the September 26, 2018, CREP Steering Committee Meeting report. This effort will continue to be refined and re-assessed until 2020 and beyond. The impact of enrollment of acres into the Upper Arkansas River CREP on groundwater conditions will be made in 2020 and after all water rights have been terminated.
	Water Quality	By 2020, reduce the outward migration of river salinity within the High Plains aquifer from the currently projected extent based on 1990s groundwater conditions in the Arkansas River valley.	As of Sept. 30, 2021, 22,806 irrigated acres have been offered, approved and enrolled into the UAR CREP program. Some of the offered acres are close to the river, and most are further south of the river. An assessment of this objective will be made in the future, once more acres are enrolled, and when most of the wells are permanently turned off. Due the significant enrollment which occurred in 2018, a number of the wells are still in use for limited irrigation to help establish permanent vegetative cover. While no formal assessment of this objective is made at this time, the state's comprehensive stream water quality monitoring network, and past and future data from the groundwater quality networks of GMD3 and GMD5 as described below, will be used to determine progress in meeting this objective.

	Water Quality	By 2020, reduce the bacterial, nutrient and pesticide levels in the Arkansas River in Edwards and Pawnee counties from the 1990–2000 levels.	Bacterial impairments under the new state definition are in the middle reaches of the basin. Intense sampling for bacteria after 2016, concentrating on the Kinsley area, was conducted. Additional data will be available through the monitoring network as described in Objective #6. However, an assessment of this objective will not be made at this time. As of Sept. 30, 2021, only 912 acres have been enrolled into the CREP program in Pawnee County. 127 acres were enrolled in Edwards County in 2017.
	Habitat	Increase aquifer recharge and wildlife habitat by enrolling 400 acres of otherwise eligible playa lakes and soils, and other suitable locations for shallow water development through the use of CRP conservation practices CP4D, CP9, CP23, and/or CP23A as suitable to the specific land.	As of Sept. 30, 2021, no acres have been formally offered for the CP9 Shallow Water Areas practice. Approximately 8 acres of playa soils occur on acres offered into the CREP program.
	Water Qulaity	Reduce agricultural use of highly erodible soils with a goal of enrolling 7,000 acres that are unsuitable for dryland farming.	As of Sept. 30, 2021, approximately 20,319 acres of soils unsuitable for dryland farming have been enrolled in the CREP program. This objective continues to be increasingly exceeded with each additional year since 2008 and is 100% complete.
	Soil	Reduce the amount of soil lost to erosion by approximately 80,000	With 23,430 acres enrolled in the CREP program as of Sept. 30, 2021, the amount of soil lost to erosion will be reduced

		tons per year on all enrolled acres.	by about 93,720 tons per year. 100% of this objective has been met.
	Habitat	Protect the ecological and recreational viability of the Cheyenne Bottoms State Wildlife Area in Barton County (CBSWA), Kansas, with improved Arkansas River stream flow, as measured by an increase of the average annual bird count at the CBSWA in 2015 to 2023 as compared to those recorded from 1996 to 2004, and with increased human visitation rates in years 2015 to 2023 as compared to those recorded from 1996 to 2004.	No assessment of this objective has been made as of Sept. 30, 2021. The impact of enrollment of acres into the UAR CREP on the ecological and recreational viability of Cheyenne Bottoms will not be discernible until water rights have been terminated and wells turned off. Many application acres just recently had the associated water rights terminated or have limited irrigation to establish permanent vegetative cover. Monitoring of the average annual bird count and human visitation rates will continue.
	Energy	Reduce energy consumption from an average of 59,850 kW-hrs to less than 5,000 kW-hrs per pivot for the first two years on pivots which become enrolled in the CREP. In subsequent years, energy consumption will be reduced to zero, as the pivots eligible for limited irrigation will be removed from the enrolled parcel. Total energy savings for the term of the CREP contracts will approach 8-million kW-hrs.	With 22,842 irrigated acres enrolled in CREP as of Sept. 30, 2020, more than 7 million kW-hr of energy savings may be achieved each year. This objective continues to be increasingly exceeded with each additional year since 2013 and is 100% complete.

Louisiana I-Lower Ouachita River	Water Quality	Reduce by 30 percent sediment loading to streams, bayous, and lakes by assisting participants with the installation of conservation measures which reduce erosion rates, with an emphasis on those lands that are highly erosive and are eroding at a rate equal to or slightly above tolerance.	Over the life of the CREP project over 49,417 acres of farmland have been enrolled and have had conservation cover established on those acres. This conservation cover has helped reduce on an estimated average of over 5 tons of sediment delivery per acre per year to the targeted watersheds. This estimate is based on NRCS Revised Universal Soil Loss Equation (RUSLEII).
	Water Quality	Reduce runoff containing dissolved nitrogen and phosphorus by a reduction of 2,100 tons of nitrogen and 975 tons of phosphorus annually in the project area. The hypoxia zone that lies in the northern Gulf of Mexico would benefit from this reduction with a decrease in excess nitrogen and phosphorus delivered from the Mississippi River and its tributaries.	Over the life of the CREP project over 49,417 acres of farmland have been enrolled and have had conservation cover established on those acres. This conservation cover has helped reduce phosphorus load delivery to the targeted watersheds by idling farmland.
	Water Quality	Increase shallow water areas and wetlands to serve as nutrient/chemical uptake and filtering sites for neo-tropical migrants, shore birds, waterfowl, and other wetland dependent species.	Over 100 acres of shallow water areas have been installed since the CREP inception.

	Habitat	Establish more critical habitat for fish and wildlife resources by assisting landowners and operators in developing 13,500 acres of bottomland wildlife habitat, 17,000 acres of wetland habitat, and 4,500 acres of riparian buffers.	Over 49,417 acres of conservation cover (Trees and Native Grasses) have been established under the Louisiana Lower Ouachita River Basin "Macon Ridge" Conservation Reserve Enhancement Program (LA CREP I) agreement
Maryland	Water Quality	Reduction of nutrient pollution from agricultural lands of approximately 11,500,000 pounds of nitrogen and 1,100,000 pounds of phosphorus on an annual basis.	Maryland's Watershed Implementation Plan (WIP) outlines specific actions and strategies that it will take to achieve pollution limits set by U.S. Environmental Protection Agency (EPA) by 2025. Maryland listed 41 agricultural milestone actions in their goals to accelerate Chesapeake Bay restoration and meet the total maximum daily load (TMDL) goal. These actions included four categories of CREP practices: highly erodible land protection, riparian grass buffers, riparian forest buffers and wetlands. Progress toward each practice is tracked and reported though the Soil Conservation Districts and reported annually to EPA for progress. Subsequently, a suite of modeling tools are employed by the EPA Chesapeake Bay Program to estimate nutrient and sediment delivery across the watershed. In addition to newly installed practices, Maryland Department of Agriculture completes site inspections and field verification over the lifespan of the Best Management Practice (BMP) to ensure water quality benefits remain. Additionally, Department of Natural Resourcesadministers the CREP easement program to acquire permanent interest in CREP lands, ensuring the retention and maintenance of CREP practices beyond the life of the initial CREP contract.

			These acres are entered into the protected lands layer available on the state iMap system, and part of the easement monitoring system within DNR. Based on enrolled acreage through FFY21, progress is estimated at 1,870,495 pounds of nitrogen and 34,422 pounds of phosphorus annually from the updated suite of Chesapeake Bay modeling tools. Based on FY20 enrolled acreage, progress toward the goal is estimated as 2,061,060 pounds of nitrogen and 37,693 pounds of phosphorus reduced annually.
	Water Quality	Reduction of sediment loading into streams from agricultural lands of approximately 200,000 tons of sediment on an annual basis.	Progress estimated at 28,004 tons sediment reduced annually based on the updated suite of Chesapeake Bay modeling tools.
	Habitat	Increase the survivability, distribution, and abundance of targeted fish, wildlife and plant species in the Chesapeake Bay region. Emphasis for Rare and Declining Species Habitat enrollments will be given to high priority species listed under the North American Waterfowl Management Plan and State and Federally listed threatened or	CREP acres have expanded conservation cover for critical wildlife habitat. Of the CREP acres currently enrolled, 18,669 (40%) are within the BioNet mapping of important areas for rare species. In addition, the currently enrolled CREP practices are providing an estimated $20,932,567 a year in ecosystem services. This includes the value of air pollution removal, carbon sequestration, groundwater recharge, nutrient removal, flooding and stormwater mitigation, wildlife and biodiversity, and surface water protection. CP21, which makes up 44% of CREP enrollment, is providing 33% of the ecosystem services value; CP22,

		endangered species, such as bald eagles, Delmarva fox squirrel, Eastern bog turtle, dwarf wedge mussel, glassy darter and harparella.	which makes up 21% of CREP enrollment, is providing 45% of the ecosystem services value; CP1, which makes up 13% of CREP enrollment, is providing 7% of the ecosystem services value; and CP23, which makes up 4% of CREP enrollment, is providing 2% of the ecosystem services value. Among these many ecosystem benefits, the importance of the program to birds in need of conservation can be estimated using available data. CREP in Maryland provides important habitat to a minimum of 90,867 additional breeding birds annually compared to similar non-CREP acres. Species of Greatest Conservation Need that use grasslands and shrublands such as northern bobwhite, grasshopper sparrow, eastern meadowlark, and prairie warbler have particularly benefited, with an additional 22,325 birds using habitat created via CREP buffer practices. CREP wetland practices have provided valuable habitat for waterfowl species such as the regionally-prioritized American black duck, with an estimated 2,355,744 duck-use days resulting from current CREP enrollments.
Minnesota Water Quality	Water Quality	Reduce phosphorus by 19,200 pounds per year	
	Water Quality	Reduce nitrogen by 1,220,000 pounds per year	
	Water Quality	Reduce sediment runoff by 123,000 tons per year	
Mississippi Delta	Water Quality	Improved water quality	1,060.2 acres enrolled in FY 2021

	Habitat	Improved wildlife habitat	1,060.2 acres enrolled in fy 2021
Montana-Missouri/Madison River	Habitat	Establish, restore, and improve up to 11,000 acres of riparian buffers along approximately 524 miles of the Missouri and Madison Rivers and their tributaries within a 2-mile-wide corridor in nine counties.	The goal is being measured by the number of acres that are established, restored, or improved within the two-mile corridor of the Missouri or Madison Rivers.
	Habitat	Establish and improve up to 14,000 acres of permanent, native and introduced wildlife habitat with the 2-mile-wide corridor of the Missouri and Madison Rivers.	The specific measurable criteria of success will be acres of permanent wildlife habitat restored.
	Water Quality	Restore up to 1,000 acres of degraded wetlands within a two-mile-wide corridor of the Missouri and Madison Rivers. Wetland restoration within the corridor will support the fish and wildlife habitat restoration and water quality goals of the project.	The specific measurable criteria of success will be acres of wildlife habitat restored.
Nebraska II-Platte Republican Resource Area	Water Quantity	Reduce the application of water for cropland irrigation in the project area by 125,000 acre-feet	The estimated consumptive use savings for curtailing irrigation on the CREP program acres for the 2021 irrigation season is 36,528 acre-feet. The implied irrigation efficiency within Goal 1 and Goal 2 is 0.68. Therefore, the expected reduction in application of water for 2021 is 53,718 acre-

		annually from 2004 irrigated usage levels.	feet. This is 43% of the goal. For the 2021 irrigation season, there were approximately 40% of the maximum acres enrolled in the program. The progress is in line with the level of participation. The Nebraska Legislature passed a bill in 2017 that makes re-enrollment of irrigated land under a surface water appropriation more likely, because the number of years that a surface water appropriation may be protected from cancellation for nonuse was increased from 15 to 30 years. This paved the way for 15-year contracts to be renewed for another 15 years without placing the water appropriation in jeopardy.
	Water Quality	Increase surface and groundwater retention by a target amount of 85,000 acre-feet of water annually within the project area reservoirs, groundwater tables and streams.	The retention of surface and groundwater is dependent and synonymous with the reduction in consumptive use. Consumptive use of irrigation water is lost to the lakes, streams and groundwater aquifer through the activity of irrigation. The estimated retention (consumptive use) from all sources is 36,528 acre-feet for 2021. That is 40% of the goal. As stated in the summary for Goal 1, this is in line and correlated with the overall level of participation. Goal 1 and Goal 2 are closely related. The Nebraska Legislature passed a bill in 2017 that makes re-enrollment of irrigated land under a surface water appropriation more likely, because the number of years that a surface water appropriation may be protected from cancellation for nonuse was increased from 15 to 30 years. This paved the way for 15-year contracts to be renewed for another 15 years without placing the water appropriation in jeopardy.
	Habitat	Provide up to 85,000 additional acres of native grassland habitat for wildlife in the project area, increasing the populations of	Under the MOA 85,000 acres may be put into the following practices: Permanent Native Grasses CP2, Permanent Wildlife Habitat CP4D, and Rare and Declining Habitat CP25. In addition, practice Wildlife Food Plot CP12 may be

		pheasants and other ground nesting birds by 25 percent in the area.	used in conjunction with any of the three primary practices. Currently all but 111.4 acres of the enrolled acres in the CREP program are in these practices. Therefore, the practices are attractive to producers. Monitoring of wildlife populations in the Platte-Republican Basins CREP area continues to be completed by the Nebraska Game and Parks Commission (NGPC) using standard game surveys. The primary impact on wildlife in the CREP area at this point has been the enrollment of >39,000 acres of formerly cropped irrigated fields into appropriate wildlife cover. The bulk of the CREP acres were enrolled in the spring of 2005 and were planted to perennial cover in the fall of 2005 and spring of 2006 and now are being reenrolled. The NGPC has graphed several species' survey data showing prevalence since 2005. The survey data provides a baseline for detecting changes in populations that can be attributed, at least in part, to the CREP enrollment. Annual variations in wildlife populations are very common, and in Nebraska, are typically tied to weather conditions. Surveyed wildlife populations in the CREP area are compared to those across the state to better understand the relative impact of CREP habitat enrollments on Nebraska wildlife populations of interest. Pheasants declined in the PR CREP area, and bobwhite quail continued to decline likely due to the harsh 2021 winter and ongoing drought. All surveyed species in the CREP area though are faring better than the statewide average. Without suitable habitat like that provided by CREP acres, this may not have been the case.
	Habitat	Provide up to 15,000 additional acres of conservation buffers and restored wetlands.	There are Sign-up Incentive Payments (SIP) and Practice Incentive Payments (PIP) for applicable practices; Filter Strips CP21, Riparian Buffer CP22, Wetland Restoration CP23 and Wetland Restoration/Non-Floodplain CP23A to

			encourage achieving this goal. Cover establishment is reimbursed with a 50/50 share between the USDA and State Partner to further incentivize participation. The 15,000-acre target is further broken down to 10,000 acres for CP21 and CP22, and 5,000 acres for CP23 and CP23A. Currently there is only one contract for 111.43 acres of CP23 practice. It is unusual in that it has irrigated land situated partly in a wetland area.
	Water Quality	Seek to reduce the application of triazine products by approximately 93,000 pounds annually, when fully enrolled, from existing application rates in the project area.	Under the terms of the program, lands included under contract must be replanted to native grasses and, therefore, would not be treated with herbicides. The average amounts of application associated triazine compounds is 1.3 pounds per acre. Therefore, the amount of triazine that likely would have been applied to the contracted acres, had they remained as irrigated cropland is approximately 51,800 lbs. The goal has only partially been met. This is in part due to 40% participation rate for total enrolled acres.
	Water Quality	Seek to reduce leaching of nitrate compounds into project area streams and groundwater by 5,900,000 pounds annually, when fully enrolled, from the 2004 application rates.	Under the terms of the program, lands included under contract must be replanted to native grasses and, therefore, would not be fertilized. The average amounts of application associated nitrogen is 200 pounds per acre. Therefore, the amount of nitrogen that likely would have been applied to the contracted acres, had they remained as irrigated cropland is approximately 7,970,000 lbs. It is likely the goal has been met.
	Water Quality	Seek to reduce the application of phosphate products by approximately 2,440,000 pounds annually, when fully enrolled,	Under the terms of the program, lands included under contract must be replanted to native grasses and, therefore, would not be fertilized. The average amounts of application associated phosphate is 20 pounds per acre. Therefore, the

		from 2004 application rates in the project area.	amount of phosphate that likely would have been applied to the contracted acres, had they remained as irrigated cropland is approximately 797,000 lbs. The goal was not met and is one of the furthest from being met.
	Water Quality	Assist community public water supplies (surface and groundwater) by reducing nitrogen and phosphorus levels from agricultural activities.	Nebraska's Natural Resources Districts (NRDs) are the primary regulator of nonpoint source pollution in groundwater. NRDs develop and implement groundwater quality managements plans that describe monitoring, assessment, and thresholds triggering regulatory measures. There are many examples throughout the state of increased regulatory measures to protect and restore community public water supplies. NRDs partner with local communities, agricultural producers, and the private sector to leverage resources to protect water quality. Education and outreach is offered and cost-share is available for best management practices that help producers reduce water use and fertilizer application. Nitrate levels are annually measured and monitored and trigger levels for regulations have been implemented in several NRDs. The Nebraska Department of Environment and Energy (NDEE) administers the Wellhead Protection Program and state Nonpoint Source Management program. Together, these programs offer planning and financial assistance to public water systems interested in protecting and restoring their water supplies. Recently, NDEE is funding nonpoint source planning efforts specific to community water system wellhead (source water) protection areas. Once these community-based plans are approved by EPA, implementation is eligible for federal Clean Water Act

			Section 319 nonpoint source funds. Eight such plans are currently approved and in development.
	Education	Provide educational assistance to project area irrigators to develop a more efficient use of applied water, nutrients, and herbicides.	The Natural Resources Districts (NRDs) have been successful in working with state and local partners including NeDNR, the Nebraska Department of Environment and Energy (NDEE), Universities, and University of Nebraska - Lincoln Extension service, to research groundbreaking technology, cropping strategies, and input practices that best address local management needs. This research has been used to engage producers and stakeholders and demonstrate both the economic and conservation impacts of best management practices. Several NRDs have developed their own programs and networks that work to demonstrate efficiency impacts and offer producers real-time data and information to assist in making effective conservation-minded management decisions. While there are special Water Quality and Quantity Management Areas where certain practices are required, many of the most effective practices being implemented by producers across the state are done so voluntarily. Utilizing NRD funds to leverage state and federal dollars, local boards have been able to provide cost-share incentives to producers for innovative, research-driven advances in irrigation management. A few examples of some of the programs offered or required by NRDs are: NRD-level cost-share programs offering technical assistance of 0-100% on purchase of soil moisture sensing equipment; required flow meters on groundwater wells over specified capacity; allocate a certain number of inches that can be pumped over a certain number of years;

			Require soil sampling for water quality indicators. In addition to support from extension offices, NRDs, and NRCS district conservationists, locally driven producer groups, such as the Nebraska Water Balance Alliance, have worked to provide producer seminars and education events on technologies and practices that can be adopted by producers to improve irrigation management. A recent example of a creative program to engage producers in adoption of new technologies is the testing Ag Performance Solutions (TAPS) program (taps.unl.edu). This program provides opportunities for producers to virtually compete against each other as well as University of Nebraska-Lincoln (UNL) scientists for (1) most profitable farm, (2) highest input (water and nitrogen) use efficiency, and (3) greatest grain yield. The goal of the competition is to promote efficiency and profitability while giving a chance to learn from those who grow corn profitably. The competition is supported by UNL Extension, NRDs, non-profit organizations, and agricultural industries, among others. The program has grown each year and has expanded to different farming scenarios. The data gathered each year is being analyzed to provide better support and recommendations for agricultural producers.
	Habitat	Monitor the aquatic communities and associated habitat parameters in project area reservoirs and rivers to determine biological relationships.	The fisheries program with Nebraska Game & Parks Commission (NGPC) has been involved in an on-going limnological assessment at Harlan County Reservoir during the entire Nebraska CREP program timeframe. NGPC has a consistent data base of abiotic, zooplankton and larval fish collection results. For the Platte River basin the NGPC conducts standardized annual fish monitoring surveys that on the reservoirs. The Nebraska Department of Environment

			and Energy facilitates water quality sampling and management statewide through delegated programs from EPA through the Clean Water Act. During FFY 2021, monitoring within the CREP area was conducted through 3 monitoring programs. Monitoring results are used to produce the Integrated Report that combines the 303(d) list of Impaired Waters and the 305(b) Water Quality Report every two years. The report is used for future water quality management, particularly though the National Pollution Discharge Elimination System (discharge permits for point sources) and the Section 319 Nonpoint Source Pollution grant program. Common lake impairments in the CREP area are for fish consumption, nutrients, pH, and chlorophyll, while stream impairments are predominantly for E. coli bacteria. Bacteria TMDLs have been established for 11 stream segments in the CREP area. Bacteria TMDLs for 26 stream segments in the Republican River basin are in progress.
	Energy	For irrigation purposes, reduce the total consumption of fossil fuels by 350,000 gallons and electricity use by 10 million kW-hrs.	The Nebraska Department of Energy's data indicates that approximately 55 percent of all irrigation pumps are powered by electricity, and 45 percent are powered by fossil fuels. Nebraska Public Power District, one of the Nebraska Platte/Republican CREP partners, provided information from a 2001 Report – "Estimated Irrigation Costs" by Roger Selley, University of Nebraska at Lincoln. Using assumptions based upon that report, the following method has been employed each year to estimate the energy savings from the CREP program in Nebraska. The representative distribution system is a 135-acre center pivot pumping 800 gallons per minute and applying 9.5 acre-inches per acre with a lift of 100 feet at 60 percent efficiency, the annual electric usage is 45,966 kilowatt hours, and fossil fuels

			(diesel, propane and gasoline) average 4,600 gallons. The formulas used below are (electric consumption = acres x .55 x (46,000 kilowatt hours/135 acres)) and (fossil fuel consumption = acres x .45 x (4,600 gallons/135 acres)). Using this method, the 2021 estimated electrical energy savings would have been 7,467,942 kilowatt hours. The estimated fossil fuels savings would have been 611,013 gallons. It appears the fossil fuel goal is likely met. The electrical energy savings was about 75% met.
New Jersey	Water Quality	Reduce water quality impairments from agricultural run-off and to improve water quality along both impaired and unimpaired New Jersey streams. Maintenance and restoration of ecological functions of streams by reducing biological impairments and improving water quality.	Monitoring stations are being established throughout the state in an effort to obtain information regarding water quality. In the future, New Jersey Department of Environmental Protection (NJDEP)will be able to monitor the effectiveness of the NJ CREP through their comprehensive ambient monitoring network. There will be approximately 206 Ambient Monitoring Stations, located at perennial streams throughout the state. The monitoring consists of macro-invertebrate sampling and habitat quality monitoring and assessment. In addition, the reporting of practice implementation will be enhanced to include HUC 14 information, hydrologic soil groups involved, type of practice, extent of project, drainage area and land use type. This additional information will allow the NJDEP to show CREP coverage areas on a statewide map. This data will also allow the calculation of estimated load reductions that have been achieved by the implementation of CREP practices.
New York I-New York City	Water Quality	Reduce the amount of silt and sedimentation entering the tributaries, main stems, and	Progress toward achieving the goal of reducing the amount of sediments entering the New York City drinking water supply system may be estimated through modeling. The

		reservoirs in the Catskill and Delaware watersheds of the New York City drinking water supply system.	Chesapeake Assessment Scenario Tool (CAST) estimates edge of stream load reductions for total suspended solids (TSS) using coefficients for various BMPs. The impact of riparian buffer plantings was assessed in CAST using scenarios of current acreage of riparian forest buffer plantings compared to a 2007 baseline scenario. Riparian forest buffer plantings with exclusion fencing in the estimated 1309.1 acres of CREP lands under contract as of 09/30/21 showed the potential to reduce total TSS by ~4,800 tons annually. In addition to CREP, WAP has implemented thousands of additional agricultural BMPs (including nutrient management plans, cover crops and exclusion fencing) since the NYC CREP agreement was signed in 1998 that have also helped reduce the amounts of sediments entering the water supply system.
	Water Quality	Reduce the amount of phosphorous and nitrogen entering the tributaries, main stems, and reservoirs in the Catskill and Delaware watersheds of the New York City drinking water supply system.	Progress toward achieving the goal of reducing the amounts of phosphorous and nitrogen entering the New York City drinking water supply system can also be estimated through modeling described in Goal #1. CAST estimated that the 1309.1 acres of riparian forest buffers under contract as of 9/30/21 had the potential to reduce phosphorous by ~ 8 tons and nitrogen by ~32 tons annually.
	Water Quality	Reduce the amount of waterborne pathogens entering the tributaries, main stems, and reservoirs in the Catskill and Delaware watersheds of the New	It is difficult to evaluate progress toward achieving the goal of reducing the amount of water borne pathogens entering the New York City drinking water supply system attributable to CREP because of the size and dynamics of the watershed. In addition to CREP, there are numerous programs and

		York City drinking water supply system	practices in the NYC watershed dedicated to controlling and monitoring pathogens, including ultra-violet treatment. Furthermore, the WAP has implemented thousands of additional agricultural best management practices since the CREP agreement was signed in 1998, including calf housing and young stock manure storage practices, which have helped reduce the amounts of pathogens from agricultural activities entering the water supply.
	Habitat	Promote the continued health and viability of natural habitats and ecosystems in the Catskill and Delaware watersheds of the New York City drinking water supply system, including those of endangered species, such as the Bald Eagle, and native cold-water fish.	It is difficult to evaluate progress in promoting the continued health and viability of natural habitats and ecosystems in the Catskill and Delaware watersheds of the New York City drinking water supply system for endangered species such as the bald eagle and native cold water fish because of the size and dynamics of the watershed. True aquatic habitat benefits for cold water species or eagle habitat will be achieved when canopy closure over CREP reaches on steams is achieved. The Stroud Water Research Center in southeastern PA, which has highly productive soils and a warmer, extended growing season than the NYC Watershed, estimates reaching canopy closure in 15 years with perfect tree maintenance management. WAP staff estimate that it will take at least 25 years to achieve canopy closure in the NYC watershed based on soils, climate and management.
New York II-Syracuse	Water Quality	Reduce the risk of pathogens from animal waste applied to pasture and cropland.	SLWAP has a working relationship with all farms in the watershed. There are 46 agricultural operations meeting the definition of a "farm". 38 of the 46 Farms have participated in NYS AEM Tiers 1 and 2. 37 farms have been fully implemented. 8 farms that do not "participate" in the SLWAP receive an annual visit from the SLWAP Planner.

			Some of these farms has SLWAP plan and design BMPs and then the farm self implements.
	Water Quality	Reduce sediment deposition in Skaneateles Lake and its tributaries attributable to erosion of cropland.	Numerous BMPs have been implemented in the watershed since 1994 to help keep the soil on the land, nutrients in the soil and the water clean.
	Water Quality	Reduce nutrient runoff from animal waste and fertilizer applied to adjacent cropland and pastures.	The majority of the production acres in the watershed are enrolled in the SLWAPs nutrient management program. Manure is analyzed for nutrient content, spreaders are calibrated and farmers receive fertilizer recommendations targeted to crop production goals.
	Water Quality	Assist the City of Syracuse in continuing to meet filtration avoidance criteria issued by the NY State Department of Health (DOH) in order to comply with the Safe Drinking Water Act.	City has indefinite filtration avoidance waiver from NYS DOH
	Water Quality	Establish, preserve, or enhance wildlife habitat leading to an increase in populations and diversity of birds, mammals, and aquatic organisms.	One farm has requested more assistance in enhancing their songbird and small mammal populations on their farm.
New York III-Statewide	Water Quality	Reduce Phosphorous from 145,284 lbs. per year to 72,642 lbs. per year	Phosphorus reductions for CREP practices cost-share and/or for complementary practices in the eligible watersheds contracted in 2021, are estimated by using the Chesapeake Assessment Scenario Tool (CAST, Chesapeake Bay Program). Monitoring of the reductions is accomplished by

			performing the CAST analysis annually. 2021 saw Phosphorus reductions estimated at 12,683 lbs.
	Water Quality	Reduce Nitrogen from 77,316 lbs. per year to 38,688 lbs. per year	Nitrogen reductions for CREP practices cost-share and/or for complementary practices in the eligible watersheds contracted in 2021, are estimated by using the Chesapeake Assessment Scenario Tool (CAST, (Chesapeake Bay Program). Monitoring of the reductions is accomplished by performing the CAST analysis annually. 2021 saw Nitrogen reductions estimated at 147,081 lbs.
	Water Quality	Reduce Sedimentation from 175,316 tons per year to 70,216 tons per year	Sediment reductions for CREP practices cost-share and/or for complementary practices in the eligible watersheds contracted in 2021, are estimated by using the Chesapeake Assessment Scenario Tool (CAST, Chesapeake Bay Program). Monitoring of the reductions is accomplished by performing the CAST analysis annually. Values for sediment were calculated using the average of reduction coefficients within CAST for pastureland and a range of values available for cropland. 2021 saw sediment reductions estimated at 6,666 tons.
	Water Quality	Establish riparian buffers adjacent to 4,598 stream miles	Progress towards establishing riparian buffers adjacent to 4,598 stream miles is not measured or monitored. Miles of riparian buffer is not the reportable standard or measured unit for that practice. Progress towards this goal is unknown.
	Water Quality	Establish riparian buffers adjacent to 473,457 acres of surface waters	Progress towards establishing riparian buffers adjacent to 473,457 acres of surface waters is not measured or monitored. Acres of surface waters per riparian buffer is not

			the reportable standard or measured unit for that practice. Progress toward this goal is unknown.
	Water Quality	Establish conservation cover on areas that serve EPA-approved wellhead zones.	Progress towards establishing conservation cover on EPA-approved wellhead zones is minimal with no existing CREP projects reported to fit this description.
North Carolina	Water Quality	Restore and enhance riparian habitat corridors next to streams, drainage ditches, estuaries, wetlands, and other water courses by enrolling up to 85,000 acres of riparian forested buffers, grass filter strips and other riparian tree plantings.	29,019 acres.
	Habitat	Restore up to 15,000 acres of non-riparian wetlands either associated with drainage ditches or adjacent to primary fishery nursery areas to address impacts associated with drainage.	2,439 acres
North Dakota	Habitat	Enroll 20,000 acres of cropland in the Conservation Reserve Program (CRP) consisting of filter strips, riparian buffers, and pollinator habitat to improve and maintain water quality and wildlife habitat, including habitat and forage for pollinators.	932.19 acres have been enrolled towards this goal. Well short of the desired goal. These acres are providing habitat for all species. Annual compliance monitoring is completed.

	Habitat	Enroll 40,000 acres of land into the North Dakota Game and Fish Department's Private Land Open to Sportsmen (PLOTS) program.	1,544 acres of CREP and Non-CREP have been enrolled towards this goal.
	Water Quality	Improve water quality in the project area by enrolling 1,500 acres annually reducing the amount of Nitrogen, Phosphorus and sediment entering rivers, streams and other waterbodies by 75,000 pounds of Nitrogen per year; 37,500 pounds of Phosphorus per year and 4,750 tons of sediment per year.	1,184 tons of sediment, 101,696 lbs. N, 10,170 lbs. P
Ohio I-Lake Erie	Water Quality	To install 67,000 acres in conservation practices on 10 percent of the total riparian acres in the basin.	Progress is measured by the amount of practices that are installed annually. During the 2021 fiscal year 680 acres of new practices were installed. We recognize that we may have lost acres due to some producers not re-enrolling. More than 90% of these newly installed practices were total riparian acres in the basin.
	Water Quality	To protect farmlands from erosion and to reduce loads of sediment to Lake Erie.	Progress in measured by data collected by Heidelberg College through water quality sampling. Final flow values from USGS generally do not become available until at least a year after the end of the water year of interest. Since these data are needed to calculate loads, calculations for the most recent year are based on provisional data and are subject to revision. After 20 years the sediment saved is substantially greater than the target savings for the entire program, and more than double the target for sediment saved through

			2020! Cumulative discharge through 2020 is about 11% above that expected (calculated from the average of 1990-1999) and recent discharges have been higher than expected since 2008. Concern has been expressed in past reports that when we encounter some years with above-average discharge, the reported "savings" may shrink rapidly. We have since had multiple years with above-average discharge, most notably 2007, 2008, 2011, 2015, 2017 and 2019; and the sediment savings remain.
Ohio III-Scioto River Basin	Water Quality	Reduce sediment and phosphorus loading by 20 percent and nitrogen loading by 30 percent on an annual basis upon reaching enrollment goals.	Absent of field scale monitoring sediment, phosphorus and nitrogen loads can only be estimated. Site variabilities and annual water volume in runoff influence riparian buffer effectiveness. While buffer effectiveness greatly varies, A Penn State University study reported the relative gross effectiveness of filter strips for sediment reduction as follows: sediment 65 percent, phosphorus 75 percent, and nitrogen 70 percent. Similar, anEPA report on buffers shows the effectiveness of trapping sediment to range from 41 to 100 percent and nitrogen removal efficiency between 9 to 100 percent. While it is difficult to measure the level of effectiveness when compared to loading. Research shows that buffers do reduce sediment and nutrient level contributions to streams and rivers. For the Scioto CREP enrollment of conservation practices effectively reached the 70,000 -acre enrollment goal in 2010. Since this time and up until last year conservation practices have been at peak enrollment levels. This would mean conservation practices are achieving the greatest benefit from 2010 to present as the maximum level of conservation practices were in place during this time period. Regarding sediment and nutrient loads, Heidelberg University maintains a statewide tributary monitoring program and measures loading in Ohio's river

			systems throughout the year. For the Scioto River, water monitoring station is maintained on the main stem of the River near Chillicothe. Annual loads are calculated for suspended solids, total phosphorus, nitrate, and total nitrogen. A table in section 5 of this report summarizes the annual loads reported for the Scioto River. 2011,2018, and 2019 are all wet years and the highest years of measured discharge. 2019 being the highest discharge ever reported. Ohio EPA conducts a mass balance study for Ohio's major river systems. The mass balance study computes annual phosphorus and nitrogen loads and allocates loads to 3 primary contributor groups: non-point source, point source, and household sewage systems. The 5-year average load distribution for the Scioto River watershed shows 62 percent of the total phosphorus and 81 percent of the total nitrogen coming from non-point sources.
	Permanent Protection	Seek up to 5,000 acres of permanent conservation easements	There are 585 acres that are permanently protected with conservation easements. These easements protect approximately 8 miles of streambank. Funding for these easements came from Clean Ohio grant funds and a one-time contribution from the Nature Conservancy.
	Water Quality	Stabilize and improve the distribution and abundance of species in the Scioto River watershed. Use Index of Biotic Integrity (IBI), Invertebrate Community Index (ICI) and the Qualitative Habitat Evaluation Index (QHEI) to measure progress.	Overtime the distribution and abundance of species in the Scioto River have shown continued improvement. The lower mainstem of the Scioto River has been regularly surveyed and assessed by Ohio EPA since 1979. Ambient biological monitoring since that time has documented steady and regular improvement, culminating in full warmwater habitat aquatic life use attainment in 2011; many sites supported exceptional or near exceptional fish and macroinvertebrate communities. Currently, the Scioto River stands as Ohio's richest and most intact large river system.

			As a result of the improvements Ohio EPA is recommending that a portion of the Scioto River be redesignated as exceptional warm water habitat in lieu of the current warmwater habitat designation. Gross measures of biological community performance for the Scioto River have greatly improved over time.
	Habitat	Increase targeted habitats in the Scioto River Watershed by at least 15 percent to benefit targeted wetland, grassland, and riparian corridor species groups.	Habitat for wildlife has experienced growth and distribution as a result of CREP. Pheasant distribution in Ohio is closely tied to Ohio's top CRP counties, many of which are counties with Scioto CREP. The distribution map included in section 5 of this report is from "The second Atlas of Breeding Birds in Ohio" and shows Ohio's pheasant distribution as well as the top 12 CRP counties in Ohio. While this study focuses specifically on pheasants, the increased growth applies to other grassland bird species commonly found in Ohio. This study shows the direct connection between CRP cover and grassland bird distribution and abundance. Land use plays a major role in the number of pheasant and grassland bird species. As the percent of CRP grassland cover increases, so does pheasant occurrence. In section 5 of this report is a chart that shows the percent land cover for CRP, developed land, and forest cover. These charts show major increases in pheasant occurrence when CRP cover reaches 10-15%. In contrast, an increase for both developed land and forest cover show a decrease in pheasant occurrence. As the data shows, Ohio has experienced significant increases in wildlife as a result of the Scioto CREP.

Oregon	Water Quality	Restore 100% of the area enrolled for the riparian forest buffer practice to a properly functioning condition in terms of distribution and growth of woody plant species, filtration of nutrients and sediment from agricultural runoff, shade and stabilization of stream banks under normal non-flood conditions	Oregon Watershed Enhancement Board (OWEB) worked with 5 CREP technicians in Oregon to pilot a monitoring approach beginning in 2019 to track contract performance and inform management of CREP buffers. This monitoring approach, developed in coordination with OWEB-funded CREP technicians, includes completion of a CREP monitoring checklist and repeating the Stream Visual Assessment Protocol (SVAP) on a subset of active contracts. OWEB is compiling the data from the past years monitoring report and their findings will be submitted as a supplemental report prior to 12/31/21.
	Water Quality	Provide a way for farmers and ranchers to voluntarily meet the water quality requirements established under federal law and under Oregon's water quality act.	Please see supplemental monitoring report associated with Goal 1.
	Water Quality	Attain enrollments for the following targets for a maximum of 100,000 acres enrolled in Oregon under CREP: 1. Coastal Basins - 1,250 acres of riparian forest buffer; 1,000 acres of restored wetlands = 2,250 acres 2. Columbia Basin - 8,000 acres of riparian forest buffers; 1,000 acres of restored wetlands =	Based on annual participation of CREP enrollments, Oregon is meeting Goal 3 as enrollments continue to convert land into CREP that otherwise would not be under a conservation use.

		9,000 total acres 3. Interior drainages - 3,500 acres of riparian forest buffers, 1,000 acres of restored wetlands = 4,500 total acres 4. The Tualatin Watershed Option implemented by Clean Water Services has worked to restore the Tualatin Watershed primarily through riparian forest buffer practices.	
	Habitat	This is the primary goal that the listed goals 1-3 aim to address, while also providing additional benefits as listed in goals 1-3: A number of fish species native to Oregon have been either listed or proposed for listing as threatened or endangered species under the federal Endangered Species Act. This Agreement for this Oregon CREP seeks to help alleviate some of these problems.	As a result of the nearly 48,000 acres that are enrolled in CREP, the water temperatures and shade provided by riparian buffer practices, in addition to filtering agricultural runoff, have provided improved habitat for a number of fish species located in the state.
Pennsylvania I-Chesapeake Bay Watershed	Water Quality & Habitat	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,	Pennsylvania currently has 80,587.31 acres of wetlands, riparian areas, and grasslands enrolled in the Chesapeake Bay CREP. Note: the calculated sum acreage for the wetlands, riparian areas, and grasslands used the conservation practices CP1, CP2, CP8A, CP9, CP10, CP15A CP21, CP22, CP23, CP29,

		through financial and technical assistance.	CP30, and CP33 based on the Chesapeake Assessment Scenario Tool (CAST) "category." Conservation practices CP3A, CP4D and CP12 were excluded from the calculation.
	Water Quality	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.	Pennsylvania's Chesapeake Bay CREP program is responsible for preventing an estimated 38,288.86 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 the Chesapeake Bay Watershed Model.)
	Water Quality & Habitat	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.	Estimated pollution prevented from entering the Chesapeake Bay Watershed during this program year: - 38,288.86 tons/yr. of sediment - 1,879,975 lbs./yr. of nitrogen - 100,402 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 the Chesapeake Bay Watershed Model.)
	Water Quality & Habitat	Restore and enhance riparian habitat corridors next to streams, estuaries, wetlands, and other watercourses by seeking to enroll at least 31,746 acres of	Pennsylvania currently has 16,202.73 acres of buffers, grass filter strips, and wetlands enrolled in Chesapeake Bay CREP. Note: the calculated sum acreage for the buffers, grass filter strips and wetlands used the conservation practices CP8A, CP9, CP15A, CP21, CP22, CP23, CP29, CP30, and CP33

		buffers, grass filter strips, and wetlands.	based on the CAST "category." Conservation practices CP1, CP2, CP3A, CP4D, CP10 and CP12 were excluded from the calculation.
	Water Quality & Habitat	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.	Pennsylvania currently has 67,283.85 acres of highly erodible land (HEL) in conservation cover plantings through the Chesapeake Bay CREP.
	Water Quality & Habitat	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.	Under the Chesapeake Bay CREP, Pennsylvania currently has 16,202.73 acres of buffers, grass filter strips, and wetlands and 67,283.85 acres of HEL in conservation cover plantings.
Pennsylvania II-Ohio River Basin	Water Quality & Habitat	Permit the western Commonwealth's producers to voluntarily restore and protect wetlands, highly erodible land (HEL), and riparian areas by enrolling up to 40,000 acres of cropland into the Ohio River Basin CREP.	Pennsylvania currently has 14,451.23 acres of cropland enrolled in the Ohio River Basin CREP.
	Water Quality	Reduce erosion on cropland by an estimated 10,154 tons per year using March 4, 2004 as the beginning of the base period for	Pennsylvania's CREP program is responsible for preventing an estimated 4,960.07 tons of sediment from entering the Ohio River Basin during this program year.

		measuring erosion reduction levels.	(Estimated calculations based on data provided by the USDA Farm Service Agency and using loading rates and reduction coefficients based on the Chesapeake Bay Watershed Model.)
	Water Quality	Prevent 10,154 tons of sediment, 738,500 pounds of nitrogen, and 16,000 pounds of phosphorous per year from entering the Ohio River and Gulf of Mexico, using sediment and nitrogen loading levels measured on March 4, 2004.	Estimated pollution prevented from entering the Ohio River and Gulf of Mexico during this program year: - 4,960.07 tons/yr. of sediment - 269,589 lbs./yr. of nitrogen - 7,957 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 the Chesapeake Bay Watershed Model.) - 4,996.13 U.S. tons/yr. of sediment - 271,018 lbs./yr. of nitrogen - 8,005 lbs./yr. of phosphorous These estimates are based on data provided by the USDA's FSA and use loading rates and reduction coefficients based on a Chesapeake Bay Watershed model.
	Water Quality & Habitat	Restore and enhance riparian habitat corridors next to streams, estuaries, wetlands and other watercourses by seeking to enroll at least 6,000 acres of buffers, grass filter strips, and wetlands.	Pennsylvania currently has 2,206.09 acres of buffers, grass filter strips, and wetlands enrolled in the Ohio River Basin CREP.

	Water Quality & Habitat	Restore cover on up to 34,000 acres of HEL to protect water quality and create wildlife habitat, particularly grassland habitat for song and ground-nesting birds, by planting native warm-season grasses and/or cool-season grasses, creating field borders, and protecting intact habitats.	Pennsylvania currently has 10,672.39 acres of HEL enrolled in the Ohio River Basin CREP.
Pennsylvania III - Delaware River Basin	Water Quality & Habitat	Permit Pennsylvania landowners and operators to voluntarily restore and protect wetlands, highly erodible land, and riparian areas by enrolling up to 20,000 acres of farmland into the Delaware River Basin CREP.	Pennsylvania currently has 75.77 acres enrolled in the Delaware River Basin CREP.
	Water Quality	Reduce erosion in the Delaware River, and ultimately the Delaware Bay, by an estimated 557 tons per year when fully enrolled.	The Delaware River Basin CREP is responsible for preventing an estimated 11.74 tons of sediment from entering the Delaware River, and ultimately the Delaware Bay, 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 the Chesapeake Bay Watershed Model.)

	Water Quality	Prevent 557 tons of sediment, 349,500 pounds of nitrogen and 12,353 pounds of phosphorus per year from entering the Delaware River and Bay when fully enrolled.	Estimated pollution prevented from entering the Delaware River Basin during this program year: - 11.74 tons/yr. of sediment - 932 lbs./yr. of nitrogen - 29 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 the Chesapeake Bay Watershed Model.)
	Water Quality and Habitat	Restore up to 4,000 acres of riparian buffers and wetlands; this will reduce flooding, improve in-stream water quality, stabilize stream banks and floodplains, reduce water temperature, increase time to runoff, facilitate groundwater recharge, and provide a host of other benefits to humans and wildlife.	Pennsylvania currently has 3.45 acres of buffers, grass filter strips, and wetlands enrolled in the Delaware River Basin CREP. Note: the calculated sum acreage for the buffers, grass filter strips and wetlands used the conservation practices CP8A, CP9, CP15A, CP21, CP22, CP23, CP29, CP30, and CP33 based on the Chesapeake Assessment Scenario Tool (CAST) "category." Conservation practices CP1, CP2, CP3A, CP4D, CP10 and CP12 were excluded from the calculation.
	Water Quality and Habitat	Restore up to 16,000 acres of HEL to protect water quality and create wildlife habitat, particularly grassland habitat for song and ground-nesting birds, by planting native warm-season grasses and/or cool-season	Pennsylvania currently has 72.32 acres of HEL enrolled in the Delaware River Basin CREP.

		grasses, creating field borders, and protecting intact habitats.	
South Dakota-James River	Water Quantity	Establish 15,000 acres of permanent vegetive cover adjacent to rivers and streams.	Over 33,000 acres of permanent vegetative cover have been established adjacent to rivers and streams in the James River Watershed. This is measured and monitored by performing a spatial analysis in Geographic Information System software of the acres of land enrolled in the James River watershed CREP that are adjacent to a river or stream.
	Water Quantity	Provide and maintain a reduction of sediment, phosphorous, and nitrogen runoff from agricultural land previously used for row crops if not enroll through this CREP, as follows: by 90 percent for sediment from 80,000 tons/year to 8,000 tons/year; by 75 percent for phosphorus from 134,000 lbs/year to 33,500 lbs/year; and by 85 percent for nitrogen from 450,000 lbs/year to 67,500 lbs/year.	Sediment has been reduced by 97.8% from 67,733 tons/year to 1,490 tons/year; phosphorus has been reduced by 95.3% from 102,404 lbs/year to 4,813 lbs/year; nitrogen has been reduced by 85.6% from 337,254 lbs/year to 48,565 lbs/year on the 75,649.1 acres of cropland enrolled. This is measured by running each piece of land enrolled in CREP through the Spreadsheet Tool for Estimating Pollutant Loads (STEPL) model to estimate reductions. It is monitored by these lands continuing to be maintained in perennial vegetative cover and complying with the CRP contract.
	Habitat	Produce an additional 285,000 pheasants annually.	According to the 2006 report by Nielson et al., Estimating response of ring-necked pheasant (Phasianus colchicus) to the Conservation Reserve Program, 100,000 acres of CRP is estimated to produce 285,000 pheasant annually. Based on the number of acres enrolled in CREP it is estimated that over 215,600 additional pheasants are produced annually.

	Habitat	Contribute and additional 60,000 ducks to the fall flight annually.	According to the 2007 report by Reynolds and Shaffer, Waterfowl Response to the Conservation Reserve Program and Swampbuster Provision in the Prairie Pothole Region, 1992-2004, 100,000 acres if CRP in estimated to produce 60,000 ducks annually. Based on the number of acres enrolled in CREP it is estimated that over 45,000 additional ducks are produced annually.
	Habitat	Create 85,000 acres of permanent vegetative cover by restoring wetlands and grasslands to store water and serve as breeding habitat for migratory and resident wetland- and grassland-dependent species including bobolink, upland sandpiper, chestnut collared longspur, western meadowlark, grasshopper sparrow and savannah sparrow, dickcissel, and sedge wren.	This is being measured and monitored by the number of acres enrolled in the James River Watershed CREP, all of which help meet this goal. Over 75,649 acres of permanent vegetation has been created providing prime nesting and breeding habitat for migratory and resident wildlife. The South Dakota Department of Game, Fish and Parks completed a research study from January 1, 2013 to December 31, 2015, in which it contracted with two PHD students attending South Dakota State University. The objectives of the study were to assess the benefits of CREP to grassland nesting birds. Three years of field work were completed for this study with final reports completed in the spring of 2017 and included in the FFY2017 CREP report. In short, the researchers observed a rapid response in game and non-game grassland birds using lands enrolled in the CREP. They conducted observations on 693 breeding bird transect surveys and documented 3,081 individuals consisting of 49 species. Seven of eight CREP focal bird species of conservation concern were documented (only excepting chestnut collard longspur). They also observed several other non-game species, as well as ring-necked pheasant, sharp-tailed grouse, and 9 waterfowl species. Nest searching of 144 fields yielded 731 nests of 28 different

			species, including the same 7 CREP focal species of conservation concern.
	Habitat	Open 1,000 blocks, as defined for the purposes of this CREP in Section IV. K, of private land to public hunting and fishing access.	This is measured and monitored by performing a spatial analysis in Geographic Information System software of the lands enrolled in the James River watershed CREP. There were 975 blocks of CREP open to public hunting and fishing access during FFY2021.
Vermont	Water Quantity	Supplement existing efforts to achieve phosphorus reductions attributable to non-point sources (NPS) described in the Lake Champlain Basin Program (LCBP). The LCBP identifies a NPS phosphorus reduction target of 48.3 tons per year.	The purpose of the program is to supplement all other ongoing efforts throughout the state to meet their respective TMDL goals. According to a modeling tool developed by EPA known as the BMP Scenario Tool completed by the Agency of Agriculture for TMDL reporting purposes the total phosphorous reduction attributed to CREP buffers in the Lake Champlain Basin is currently 7.81 metric tons per year or 3.66% of the required reduction for Vermont across all sectors and 5.66% of the required reduction for the agricultural sector.
	Habitat	The Connecticut River Basin and Hudson River Basin drainage into Long Island Sound. The TMDL identifies a nitrogen reduction target of 1,173 tons per year for Massachusetts, New Hampshire and Vermont. The TMDL provides that point sources and NPS must show a 25 and 10 percent reduction, respectively. Vermont CREP efforts in the	In the Connecticut River watershed where nitrates are the primary nutrient of concern, we estimate the CREP is responsible for an annual loading reduction of 6,262.69lbs per year. This reduction is based on a 50% reduction efficiency which was determined after a careful review of the literature.

		Connecticut River Basin will account for a majority of Vermont's nitrogen reduction for the Long Island Sound TMDL.	
	Water Quality	Supplement existing efforts to achieve phosphorus reductions in the Lake Memphremagog Basin has been identified as a phosphorus-impacted watershed. Vermont's CREP efforts in the Lake Memphremagog Basin are designed to help reduce the NPS phosphorus level by 10 percent.	The purpose of the program is to supplement all other ongoing efforts throughout the state to meet their respective TMDL goals. According to a modeling tool developed by EPA called the BMP Scenario Tool completed by the Agency of Agriculture for TMDL reporting purposes the total phosphorous reduction attributed to CREP buffers in the Lake Memphremagog Basin is currently 0.1396 metric tons per year or 1.16% of the required reduction for Vermont across all sectors.
Virginia I-Southern Rivers	Water Quality	Riparian buffer enrollment of 13,500 acres.	To date, approximately 15,616.51 acres of buffer have been restored through this CREP agreement along with 894.38 miles of stream buffered.
	Water Quality	The second goal for this CREP agreement is wetland enrollment of 1,500 acres.	Thus far, less than 1% of SR CREP sign-ups have been for CP-23 Wetland Restoration on cropland with a total of 16 completed contracts.
	Water Quality	The SR CREP's third goal is 3,000 acres of enrolled permanent CREP easements.	Most CREP easements were enrolled between 2004 and 2011 with over 1745 acres STATEWIDE enrolled for the Bay and Southern Rivers.
Virginia II-Chesapeake Bay	Water Quality	This CREP agreement includes a goal of 22,000 acres of buffers enrolled in riparian buffers.	To date, approximately 18,624.52 acres of riparian buffer have been enrolled under the Chesapeake Bay CREP agreement.

	Water Quality	The CREP agreement includes a goal of 3,000 acres of wetland enrollment.	Thus far, the CP-23 Wetland Restoration practice has been fairly unpopular in Virginia. Only 10 CP-23 BMPs have been implemented in the history of this CREP agreement, which is less than half a percent of the total CREP sign-ups.
	Water Quality	The CREP agreement for the Bay includes a goal of 6,000 acres of CREP easements.	Most CREP easements were enrolled between 2004 and 2011 with over 1745 acres STATEWIDE enrolled (Bay and Southern Rivers). In the Bay, approximately $715,610 in state funding has gone towards easements.
Washington	Habitat	Restoration of 100 percent to the area enrolled for the riparian forest practice to a properly functioning condition in terms of distribution and growth of woody plant species.	Annual monitoring evaluates growth rate, species diversity, and percent invasive species. Annual reports for the past 5 years have shown that most sites have growth rates appropriate for their location, or better. Monitoring has shown that species diversity stabilizes over time as buffers mature
	Water Quality	Reduction of sediment and nutrient pollution from agricultural lands adjacent to the riparian buffers by more than 50 percent.	A recent literature review by Washington Department of Ecology noted that most sediment trapping in a buffer tends to occur in the first few meters (Lee et al. 2003, Zhang et al., 2009; Gharabaghi et al., 2006; Dosskey et al., 2002). In particular, Yuan et al., (2009) found that a 5-m buffer can trap about 80% of incoming sediment. Buffers in the Washington CREP program average 142 ft (433.28 m) width, greatly exceeding the 80% reduction afforded by 5 m and the 50% reduction goal.
	Water Quality	Establishment of adequate vegetation on enrolled riparian areas to stabilize 90 percent of	Annual monitoring shows that CREP sites have stable banks with adequate vegetation and no active erosion.

		stream banks under normal (non-flood) water conditions.	
	Water Quality	Reduction of the rate of stream water heating to meet State ambient water quality standards by planting adequate vegetation on all riparian buffer lands.	Annual monitoring shows that for small streams, CREP provides substantial canopy cover that should meet the goal of reduced stream water heating for salmonid health. In several watersheds where we have implemented CREP along a large portion of the creek (Tucannon River in southeast Washington; Tenmile Creek in Whatcom County; Chimicum Creek in Jefferson County) stream temperatures have reduced over time and salmon have returned in greater numbers than before CREP.
	Water Quality	Provision of a contributing mechanism for farmers and ranchers to meet the water quality requirements established under federal law and under Washington's water quality laws.	Farmers and ranchers that participate in CREP immediately realize a physical separation of their activity from streams and salmon habitat. Provision of off-stream water when riparian forest buffers are installed also enables ranchers to comply with water quality standards. A study by the Washington State Department of Agriculture (Hancock, et.al., 2019) found that hedgerows, a practice allowed under Washington CREP on small streams, reduce pesticide deposition from aerial spray operations by 96% compared to fields without hedgerows.
	Habitat	Provision of adequate riparian buffers on 2,700 stream miles to permit natural restoration of stream hydraulic and geomorphic characteristics which meet habitat requirements of salmonids.	CREP currently provides riparian forest buffer along approximately 930 miles of streamside on streams that support salmon. Annual increases in mileage have been approximately 30 miles per year.

West Virginia	Program enrollment	Enroll 9,160 acres annually.	Positive progress.
	Water Quality	Reduce runoff, sediment, and nutrients from ag enterprises.	Positive progress, as monitored through the State's Watershed Implementation Plan (WIP) goals, EPA models, Department of Environmental Protection (DEP) reviews, West Virginia Department of Agriculture (WVDA) monitoring, Nutrient Management Plans, EPA test sites, local water districts, and Source Water Protection Plans (SWPP).
	Water Quality	Promote water quality.	Positive progress, as monitored through the State's WIP goals, EPA models, DEP reviews, WVDA monitoring, Nutrient Management Plans, EPA test sites, local water districts, and Source Water Protection Plans (SWPP).
	Habitat	Enhance wildlife habitats.	Positive progress, as monitored through the State's WIP goals, EPA models, DEP reviews, WVDA monitoring, Nutrient Management Plans, EPA test sites, local water districts, and Source Water Protection Plans (SWPP).
Wisconsin	Water Quality	Riparian Project Area: The state seeks to improve the water quality of several water bodies that drain agricultural lands throughout the State of Wisconsin, through a reduction of sediment and the nutrient loading to these water bodies. Improving water quality through CREP will assist in improving water quality in the state's list of	Wisconsin CREP continues to have high enrollment activity in the Riparian Project Area. The state tracks enrollment, payments, landowner transfers, buyouts and environmental benefit progress information through a statewide CREP database. Wisconsin had 3,593 active CREP contracts on 41,436 acres as of October 1, 2021. About three quarters of the acres enrolled in Wisconsin CREP are in riparian practices. Filter strips (CP21) comprise the majority of the riparian practices with 65% (18,788 acres), while riparian buffers (CP22) make

		impaired waters (303d list). Wisconsin's CREP includes over 95 percent of the waters included on the state's list of impaired waters that are impacted by agricultural activities. The specific goals for Wisconsin's CREP are to: - Reduce nutrient runoff of phosphorus (610,000 pounds) and nitrogen (305,000 pounds) by up to 10 percent and sediment (335,000 tons) in runoff by up to 15 percent from cropland and pastureland in the project areas. - Establish riparian buffers on up to 50 percent (about 3,700 miles) of the stream miles in the project area that drain farmland which currently is without adequate buffers.	up another 21% (6,187 acres). There are also 2937 acres of wetland restorations (CP23) that are currently under active CREP agreements or easements in the state. During the 2021 federal fiscal year, the state processed 274 CREP contracts totaling 2,880 acres, including 272 15-year agreements and 2 easements across the CREP project areas. Of these, 188 were new CREP contracts on 2,074 acres. The state saw a net gain of acres enrolled in federal fiscal year 2021 as new and reenrolled acres were greater than acres under contracts that expired this year. Wisconsin authorized $28 million in funding for CREP. As of October 1, 2021, the state has made 12,451 CREP incentive and cost share payments to landowners totaling almost $20.9 million. In addition, counties reported they have spent a total of $4.1 million in non-federal staff and other costs to administer CREP. Since inception, state and local costs for CREP total $25.0 million. Wisconsin CREP works with landowners to enroll agricultural land with runoff concerns into filter strips, riparian buffers, grassed waterway and small wetland restorations to improve water quality. An environmental benefits report that calculates an estimate of annual reductions in agricultural runoff for each for CREP site is completed by county land conservation staff and reported to the state who compiles the values into the state CREP database. Below are the 2021 summary results of the estimated total annual reduction in phosphorus, nitrogen and sediment runoff along with the length of stream or shoreline buffered.

			Pounds of Phosphorus: 82,250 Pounds of Nitrogen: 44,270 Tons of Sediment: 40,474 Miles of Stream or Shoreline Buffered: 727 miles It should be noted that State CREP enrollment totals are slightly different than federal totals, as multiple CRP-1 contracts can be associated with a single state CREP contract and active CREP contracts for the state include both 15-year agreements and perpetual easements. Additionally, FSA Offices often finalize CREP CRP-1 contracts close to September 30th of each year. Subsequently, submittal of the majority of state CREP agreements for processing occurs into the following fiscal year. The state works with the FSA state office to cross reference state and federal CREP enrollment for each CRP sign-up to monitor and ensure all CRP-1s are accounted for that federal fiscal year.
	Habitat	Grassland Project Areas: The state seeks to enhance wildlife habitats for endangered grassland birds and other wildlife species in two grassland project areas in north central and southcentral Wisconsin; the goal is to improve habitat for several grassland birds included under the Endangered Species Act. The specific goals for Wisconsin's CREP are to: - Establish an additional 10 percent (15,000 acres) of	Wisconsin CREP has two grassland project areas that can enroll up to 15,000 acres. In total, about 11,000 acres of grassland conservation practices are currently under an active CREP contract in the CREP grassland project areas. The conservation practices unique to these project areas include CP1 (permanent introduced grasses), CP2 (permanent native grasses), and CP25 (rare and declining habitat: prairie and oak savanna restoration). For Wisconsin CREP these practices must be placed adjacent to and within 1,000 feet of an eligible water body and be on steep slopes in order to address water quality issues as well as provide habitat for birds and pollinators. The CREP southern grassland project area reached its maximum allowable acres (10,000 acres) of grassland

		grassland habitat acreage within the grassland project areas to increase populations of endangered or threatened grassland birds.	practice acres in 2016. Each year since then, acres that have come available for grassland practice from expirations have been filled with new enrollment. The CP25 practice makes up just over 65% of the grassland practices established in the southern grassland project area. The northern grassland project area enrolled about a fifth of its allowable grassland practices. The CP1 is the primary practice established through CREP in that region. There are 265 acres of grassland practices now under CREP perpetual conservation easements with the majority located in the southern grassland project area. Both of the grassland project areas overlap with the CREP riparian project area allowing the landowners various conservation options. Landowners in these regions often have multiple CREP contracts on their farm operation that correlate to either grassland or riparian practices.
	Water Quality	Lake Superior Project Area: The state seeks to reduce peak discharge flows from agricultural lands in the Lake Superior Basin that increase erosion and sedimentation in the steams and the outlets to Lake Superior. The specific goals for Wisconsin's CREP are to: - Reduce the peak runoff flow in critical areas of the Lake Superior Basin by 10 to 15 percent. The reduction in peak flow will be greater in the upper portions of watersheds with	This project area includes the conservation practices available under the CREP riparian project area as well as CP30 (Marginal Pastureland Wetland Buffer). Minimum and maximum widths for buffer practices in this region are set higher in order to target the reduction in flow rate. State and federal incentive and annual rental payment incentives are also higher for practices in this project area. The primary objective of CREP practices in this region is to reduce the peak flow in critical areas of the Lake Superior Basin and on individual fields to reduce the hydrologic runoff curve number (RCN) on the red clay soils on cropland and marginal pastureland. According to the agreement application, riparian buffers will greatly reduce the rate of runoff due to the "roughness" of the vegetation and the reduction in raindrop energy. Planting of trees on slumping

		concentrations of agricultural lands. On individual participating farmland, reduce the overall hydrologic runoff curve numbers (from an average RCN of 89 to an RCN of 77 on the red clay soils on cropland and marginal pastureland). Based on models, this should reduce peak flow in streams thereby reducing stream scouring (bank cutting and erosion) and reducing sediment levels in the streams and to their outlets at Lake Superior.	banks will not only stabilize the bank and reduce sediment loss to the stream, but the trees established also will prevent small channels from becoming further incised. Two of the four counties in the Lake Superior project area have had landowners enroll in the CREP program for a total of five contracts covering 132 acres. Three of the contracts are perpetual easements on 43.1 acres. All 132 acres currently enrolled in CREP in this project area are riparian buffers (CP22).