

CONSERVATION RESERVE PROGRAM WATER QUALITY PRACTICES ANNUAL REPORT FISCAL YEAR 2020

Background

Section 2201 of the Agriculture Improvement Act of 2018 (the 2018 Farm Bill) requires that the Farm Service Agency publish an annual report of Conservation Reserve Program (CRP) summary statistics regarding conservation practices that have a positive impact on water quality to foster clean lakes, estuaries, and rivers (a.k.a., the CLEAR Initiative), including data on:

- New enrollments;
- Expirations;
- Geographic distribution of enrollment; and
- Estimated water quality benefits.

This report provides data on water quality practices and their impacts for fiscal year (FY) 2020. CRP conservation practices that have a positive impact on water quality include grass waterways, contour grass sod strips, filter strips, riparian buffers, wetlands or wetland buffers, saturated buffers, bioreactors, prairie strips, and other similar water quality practices (Table 1 shows the corresponding Conservation Practices).

New Enrollments

A total of 118,051 acres were newly enrolled across all CRP water quality practices in FY 2020 (Table 1). These new enrollments account for 20 percent of all new CRP enrollments in FY 2020. Wetland restorations (CP23 and CP23A) accounted for 54 percent of water quality enrollments (Table 1).

Table 1. New Enrollments FY 2020 (Acres) - Water Quality Practices

Practice Number	Practice Name	Acres ¹
CP8A	Grass Waterways, Non-easement	1,057
CP15A&B	Contour Grass Strip	297
CP21	Filter Strips	6,269
CP21B	Denitrifying Bioreactor on Filter Strips	41
CP21S	Saturated Buffer Filter Strips	26
CP22	Riparian Buffers	6,813
CP22B	Denitrifying Bioreactor on Riparian Buffers	2
CP22S	Saturated Buffer Riparian Buffers	0

CP23	Wetland Restoration	14,839
CP23A	Wetland Restoration, Non-floodplain	49,278
CP29	Marginal Pastureland Wildlife Habitat Buffer	4,779
CP30	Marginal Pastureland Wetland Buffer	1,925
CP31	Bottomland Timber Establishment on Wetlands	9,056
CP37	Duck Nesting Habitat	15,025
CP43	Prairie Strips	8,645
TOTAL WATER QUALITY PRACTICES²		118,051

¹ New enrollments in Signups 53, 54 and 400 as of October 31, 2020.

² Acres may not sum to total due to rounding.

Net Expirations

Table 2 shows the number of CRP water quality acres that were scheduled to expire in FY 2020, as well as the expiring acres that reenrolled, and net expirations across all water quality practices. A total of 278,094 acres expired and 153,408 acres were reenrolled across all water quality practices, for a net expiration of 124,695 acres. Bottomland timber establishment on wetlands (CP31) and contour grass strips (CP15A) had the highest reenrollment rates (at 72 percent and 71 percent, respectively), followed by non-floodplain wetland restoration (CP23A) and non-easement grass waterways (CP8A) (at 64 percent and 63 percent, respectively).

Table 2. Net Expirations FY 2020 (Acres) - Water Quality Practices

Practice Number	Practice Name	Expiring Acres ¹	Reenrolled Acres ²	Net Expirations
CP8A	Grass Waterways, Non-easement	14,776	9,235	5,540
CP15A	Contour Grass Strip	14,101	9,971	4,130
CP15B	Contour Grass Strips on Terraces	1,012	362	650
CP21	Filter Strips	76,166	42,932	33,234
CP21B	Denitrifying Bioreactor on Filter Strips	0	0	0
CP21S	Saturated Buffer Filter Strips	0	0	0
CP22	Riparian Buffers	54,270	25,760	28,510
CP22B	Denitrifying Bioreactor on Riparian Buffers	0	0	0
CP22S	Saturated Buffer Riparian Buffers	0	0	0
CP23	Wetland Restoration	31,675	18,545	13,130
CP23A	Wetland Restoration, Non-floodplain	28,016	17,902	10,114
CP29	Marginal Pastureland Wildlife Habitat Buffer	7,781	1,366	6,415
CP30	Marginal Pastureland Wetland Buffer	5,591	1,213	4,379
CP31	Bottomland Timber Establishment on Wetlands	13,868	10,023	3,854
CP37	Duck Nesting Habitat	30,837	16,098	14,739
CP43	Prairie Strips	0	0	0
TOTAL WATER QUALITY PRACTICES³		278,094	153,408	124,695

¹ Total acres expiring as of September 30, 2020.

² Number of expiring acres that reenrolled as of October 31, 2020.

³ Acres may not sum to total due to rounding.

Geographic Distribution

Figure 1 shows the geographic distribution of new CRP water quality enrollment acreage across the United States. The data for FY 2020 newly enrolled acres by each water quality practice by state are shown in Appendix Table A1.

Figure 1. New Enrollments FY 2020, All Water Quality Practices

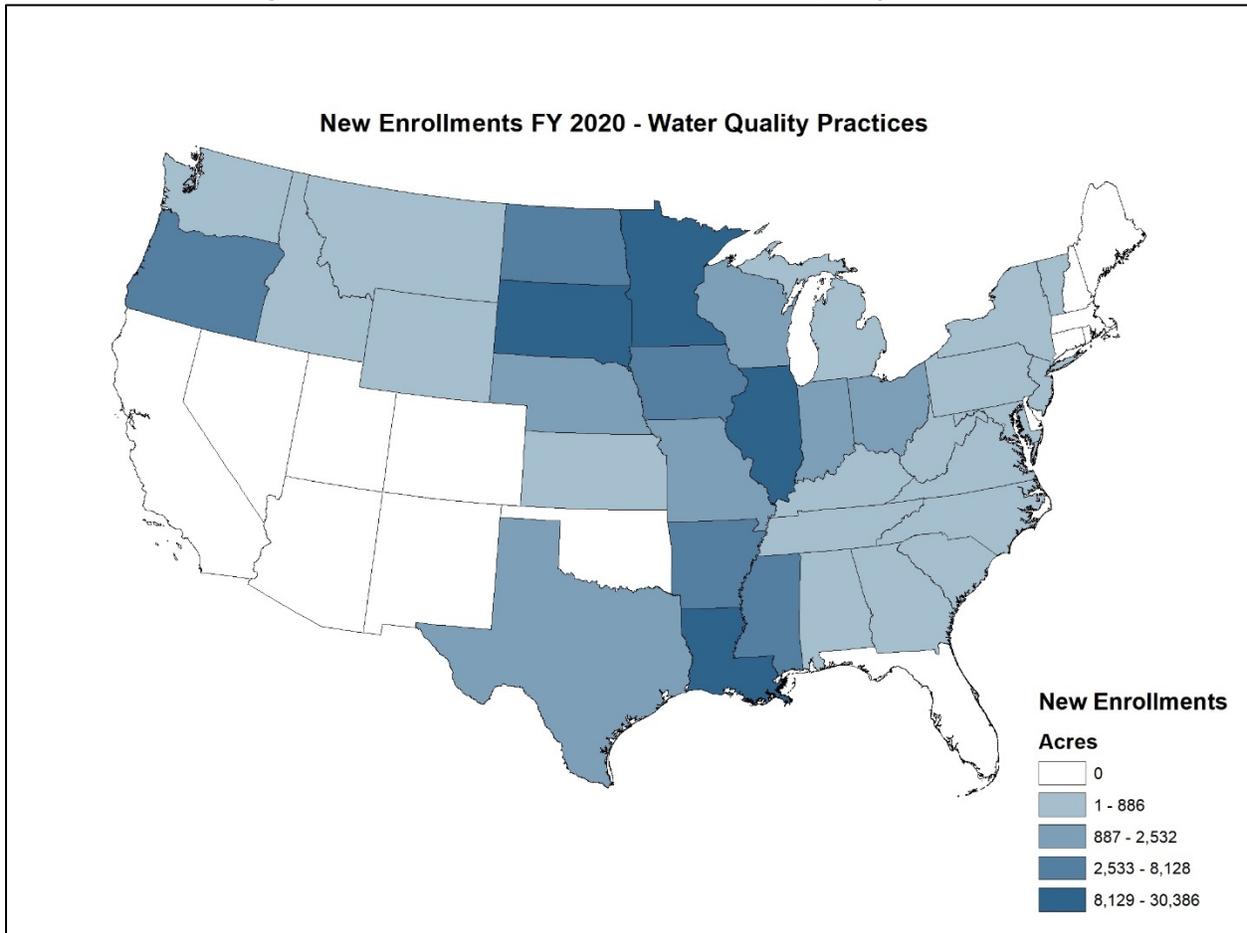
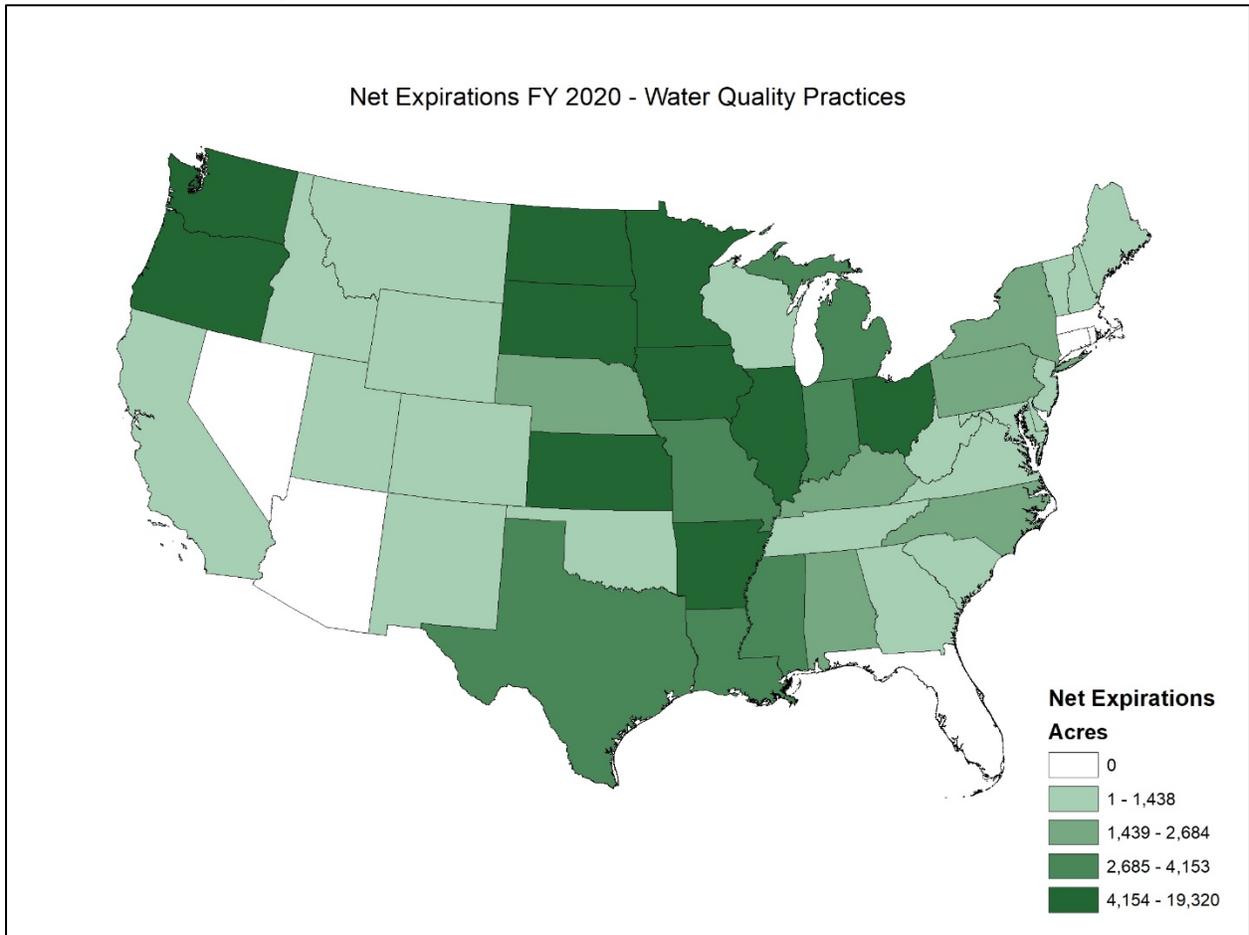


Figure 2 shows the geographic distribution of net expirations for all water quality practices in FY 2020. State level data for net expired acres is shown in Appendix Table A2.

Figure 2. Net Expirations FY 2020, All Water Quality Practices



Estimated Water Quality Benefits

CRP practices reduce the amount of nutrients leaving a field in runoff and percolate, leading to water quality benefits.¹ Table 3 shows estimated water quality benefits for all CRP water quality practice enrolled acres in FY 2020. Water quality practices reduced nutrient losses in 2020 by an estimated 388 million pounds of nitrogen and 71 million pounds of phosphorus, compared to land that is cropped. Additionally, CRP water quality practices reduced sedimentation by 156 million tons in 2020.

Table 3. Water Quality Benefits, FY 2020

	Reductions (not leaving field or intercepted by buffers)
Sediment (million tons)	156
Nitrogen (million lbs.)	388
Phosphorous (million lbs.)	71

¹ More information and documentation on the benefits estimation methodology are available at the FSA website: https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdfiles/EPAS/PDF/estimation_methodology.pdf.

Appendix

Table A1. New Enrollments FY 2020 (Acres) - Water Quality Practices, by State (page 1)

STATE	GRASS WATERWAYS (CP8)	CONTOUR GRASS STRIPS (CP15A)	CONTOUR GRASS STRIPS (CP15B)	FILTER-STRIPS (CP21)	DENITRIFYING BIOREACTOR ON FILTER-STRIPS (CP21B)	SATURATED FILTER-STRIPS (CP21S)	RIPARIAN BUFFERS (CP22)	DENITRIFYING BIOREACTOR ON RIPARIAN BUFFERS (CP22B)
ALABAMA	0	0	0	12	0	0	162	0
ALASKA	0	0	0	0	0	0	0	0
ARKANSAS	0	0	0	31	0	0	406	0
CALIFORNIA	0	0	0	0	0	0	0	0
COLORADO	0	0	0	0	0	0	0	0
CONNECTICUT	0	0	0	0	0	0	0	0
DELAWARE	0	0	0	0	0	0	0	0
FLORIDA	0	0	0	0	0	0	0	0
GEORGIA	0	0	0	43	0	0	58	0
HAWAII	0	0	0	0	0	0	7	0
IDAHO	0	0	0	0	0	0	0	0
ILLINOIS	261	0	0	574	2	9	756	0
INDIANA	136	0	0	524	10	0	46	0
IOWA	150	48	3	954	1	8	454	2
KANSAS	92	0	28	157	2	6	73	0
KENTUCKY	97	0	0	342	0	0	62	0
LOUISIANA	0	0	0	16	0	0	30	0
MAINE	0	0	0	0	0	0	0	0
MARYLAND	1	0	0	11	1	0	15	0
MICHIGAN	6	0	0	151	0	0	33	0
MINNESOTA	30	0	0	658	0	1	266	0
MISSISSIPPI	0	0	0	0	0	0	1,546	0
MISSOURI	8	0	0	38	0	0	224	0
MONTANA	6	0	0	0	0	0	0	0
NEBRASKA	20	2	2	202	1	0	48	0
NEVADA	0	0	0	0	0	0	0	0
NEW JERSEY	6	0	0	1	0	0	5	0
NEW MEXICO	0	0	0	0	0	0	0	0
NEW YORK	0	0	0	0	0	0	11	0
NORTH CAROLINA	0	0	0	4	0	0	29	0
NORTH DAKOTA	0	0	0	82	0	0	0	0
OHIO	215	0	0	525	0	0	51	0
OKLAHOMA	0	0	0	0	0	0	0	0
OREGON	0	0	0	0	0	0	1,296	0
PENNSYLVANIA	0	0	0	0	0	0	268	0
PUERTO RICO	0	0	0	0	0	0	0	0
SOUTH CAROLINA	0	0	0	0	0	0	21	0
SOUTH DAKOTA	22	0	0	270	25	2	68	0
TENNESSEE	2	0	0	39	0	0	18	0
TEXAS	3	0	41	0	0	0	382	0
UTAH	0	0	0	0	0	0	0	0
VERMONT	0	0	0	0	0	0	59	0
VIRGINIA	0	0	0	17	0	0	119	0
WASHINGTON	0	173	0	35	0	0	186	0
WEST VIRGINIA	0	0	0	0	0	0	46	0
WISCONSIN	2	0	0	1,585	0	0	70	0
WYOMING	0	0	0	0	0	0	0	0
TOTAL	1,057	223	74	6,269	41	26	6,813	2

Table A1. New Enrollments FY 2020 (Acres) - Water Quality Practices, by State (page 2)

STATE	SATURATED BUFFER RIPARIAN BUFFERS (CP22S)	WETLAND RESTORA- TION (CP23)	WETLAND RESTORATION NON- FLOODPLAIN (CP23A)	MARGINAL PASTURE BUFFERS- WILDLIFE (CP29)	MARGINAL PASTURE BUFFERS- WETLAND (CP30)	BOTTOMLA ND HARDWOOD TREES (CP31)	DUCK NESTING HABITAT (CP37)	PRAIRIE STRIPS (CP43)	ALL WATER QUALITY PRACTICES
ALABAMA	0	0	0	39	0	78	0	0	291
ALASKA	0	0	0	0	0	0	0	0	0
ARKANSAS	0	1,085	4,781	0	0	700	0	0	7,003
CALIFORNIA	0	0	0	0	0	0	0	0	0
COLORADO	0	0	0	0	0	0	0	0	0
CONNECTICUT	0	0	0	0	0	0	0	0	0
DELAWARE	0	0	0	0	0	0	0	0	0
FLORIDA	0	0	0	0	0	0	0	0	0
GEORGIA	0	0	0	0	0	0	0	0	100
HAWAII	0	0	0	0	0	0	0	0	7
IDAHO	0	0	0	6	0	0	0	0	6
ILLINOIS	0	2,826	1,279	16	0	766	0	4,374	10,863
INDIANA	0	196	763	35	0	542	0	279	2,530
IOWA	0	2,241	29	940	25	351	375	2,548	8,130
KANSAS	0	112	173	0	0	0	0	241	885
KENTUCKY	0	5	0	46	0	91	0	0	643
LOUISIANA	0	2,043	11,168	0	0	3,673	0	0	16,930
MAINE	0	0	0	0	0	0	0	0	0
MARYLAND	0	1	6	5	7	0	0	3	50
MICHIGAN	0	59	443	20	0	0	0	12	724
MINNESOTA	0	3,311	23,895	156	621	0	759	692	30,388
MISSISSIPPI	0	484	37	0	0	1,543	0	3	3,613
MISSOURI	0	884	30	8	14	134	0	0	1,340
MONTANA	0	0	104	0	0	0	0	0	110
NEBRASKA	0	625	258	49	9	0	0	240	1,455
NEVADA	0	0	0	0	0	0	0	0	0
NEW JERSEY	0	0	0	0	0	0	0	0	12
NEW MEXICO	0	0	0	0	0	0	0	0	0
NEW YORK	0	0	0	25	34	0	0	0	70
NORTH CAROLINA	0	0	0	0	0	0	0	0	33
NORTH DAKOTA	0	311	2,246	0	0	0	3,183	3	5,824
OHIO	0	135	300	39	0	41	0	56	1,362
OKLAHOMA	0	0	0	0	0	0	0	0	0
OREGON	0	0	0	2,259	5	0	0	0	3,561
PENNSYLVANIA	0	0	0	17	0	0	0	0	286
PUERTO RICO	0	0	0	0	0	0	0	0	0
SOUTH CAROLINA	0	0	0	0	11	0	0	0	32
SOUTH DAKOTA	0	482	3,696	532	1,191	0	10,708	114	17,111
TENNESSEE	0	0	0	0	0	804	0	0	862
TEXAS	0	0	61	291	0	330	0	0	1,109
UTAH	0	0	0	0	0	0	0	0	0
VERMONT	0	0	0	0	0	0	0	0	59
VIRGINIA	0	0	0	20	0	0	0	0	157
WASHINGTON	0	0	0	38	8	0	0	0	439
WEST VIRGINIA	0	0	0	0	0	0	0	0	46
WISCONSIN	0	38	9	3	1	0	0	81	1,789
WYOMING	0	0	0	233	0	0	0	0	233
TOTAL	0	14,839	49,278	4,779	1,925	9,056	15,025	8,645	118,051

Table A2. Net Expirations FY 2020 (Acres) - Water Quality Practices, by State

STATE	CP8	CP15A	CP15B	CP21	CP22	CP23	CP23A	CP29	CP30	CP31	CP37	ALL WATER QUALITY PRACTICES
ALABAMA	0	0	0	14	1,482	5	0	176	0	85	0	1,761
ALASKA	0	0	0	0	0	0	0	0	6	0	0	6
ARKANSAS	0	0	0	167	3,178	480	0	4	140	725	0	4,694
CALIFORNIA	0	0	0	0	45	0	0	0	0	0	0	45
COLORADO	84	0	0	18	51	0	0	58	0	0	0	211
DELAWARE	0	0	0	12	0	0	0	0	0	0	0	12
GEORGIA	8	0	0	46	84	0	0	0	0	0	0	137
IDAHO	0	0	0	3	257	0	0	2	9	0	0	271
ILLINOIS	1,317	57	0	3,132	1,088	221	57	48	11	44	0	5,975
INDIANA	764	2	0	2,109	141	27	88	44	13	96	0	3,284
IOWA	1,222	900	12	6,252	1,291	6,870	1,678	889	187	10	12	19,322
KANSAS	884	28	524	1,904	157	1,129	647	0	0	0	0	5,272
KENTUCKY	174	30	0	1,570	802	0	0	108	0	0	0	2,684
LOUISIANA	0	0	0	13	342	1,012	245	0	0	1,664	0	3,276
MAINE	5	0	0	39	1	0	0	0	0	0	0	46
MARYLAND	2	0	0	1,153	117	54	15	97	0	0	0	1,438
MICHIGAN	41	0	0	2,406	163	329	1,081	0	134	0	0	4,154
MINNESOTA	168	126	2	4,074	1,194	659	1,416	4	355	3	269	8,268
MISSISSIPPI	0	0	0	181	2,789	10	0	0	10	324	0	3,313
MISSOURI	116	55	6	1,154	1,010	683	15	171	681	27	0	3,918
MONTANA	24	0	0	12	75	3	0	0	0	0	0	114
NEBRASKA	43	2	0	1,531	53	28	110	206	57	0	0	2,029
NEW HAMPSHIRE	0	0	0	0	4	0	0	0	0	0	0	4
NEW JERSEY	22	0	0	50	5	0	0	0	0	0	0	77
NEW MEXICO	0	0	0	0	139	0	0	0	0	0	0	139
NEW YORK	0	0	0	36	985	0	1	400	194	0	0	1,617
NORTH CAROLINA	13	0	0	130	1,546	364	0	3	0	0	0	2,055
NORTH DAKOTA	1	0	0	487	17	149	1,743	0	0	0	9,402	11,798
OHIO	320	0	0	3,843	215	102	235	243	0	1	0	4,959
OKLAHOMA	14	0	0	24	56	137	0	0	0	0	0	231
OREGON	0	0	0	107	3,059	0	0	1,785	0	0	0	4,951
PENNSYLVANIA	10	0	0	10	1,837	78	0	90	49	0	0	2,075
SOUTH CAROLINA	1	0	0	73	348	0	0	27	0	0	0	449
SOUTH DAKOTA	27	0	0	409	489	659	2,688	932	2,525	0	5,057	12,787
TENNESSEE	5	0	0	320	148	0	0	0	0	874	0	1,347
TEXAS	129	0	0	213	2,510	0	95	792	2	0	0	3,742
UTAH	0	0	0	0	5	0	0	0	0	0	0	5
VERMONT	0	0	0	5	77	0	0	0	0	0	0	82
VIRGINIA	15	2	0	75	736	0	0	54	0	0	0	882
WASHINGTON	55	2,880	106	972	876	0	0	83	1	0	0	4,973
WEST VIRGINIA	0	0	0	212	344	0	0	0	0	0	0	556
WISCONSIN	78	48	1	479	315	133	0	164	5	0	0	1,223
WYOMING	0	0	0	0	481	0	0	34	0	0	0	515
TOTAL	5,540	4,130	650	33,234	28,510	13,130	10,114	6,415	4,379	3,854	14,739	124,695