

1	2	2	2	2	2	2	2	2	17
2	2	2	2	2	2	2	2	2	17
3	2	2	2	2	2	2	2	2	17
4	2	2	2	2	2	2	2	2	17
5	2	2	2	2	2	2	2	2	17
6	2	2	2	2	2	2	2	2	17
7	2	2	2	2	2	2	2	2	17
8	2	2	2	2	2	2	2	2	17
9	2	2	2	2	2	2	2	2	17
10	2	2	2	2	2	2	2	2	17
11	2	2	2	2	2	2	2	2	17
12	2	2	2	2	2	2	2	2	17
13	2	2	2	2	2	2	2	2	17
14	2	2	2	2	2	2	2	2	17
15	2	2	2	2	2	2	2	2	17
16	2	2	2	2	2	2	2	2	17
17	2	2	2	2	2	2	2	2	17
18	2	2	2	2	2	2	2	2	17
19	2	2	2	2	2	2	2	2	17
20	2	2	2	2	2	2	2	2	17

**Sub Watershed #102 Honey Creek Annual Adoption (treated acres), Cropland BMPs**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	71	71	71	71	71	71	71	71	572
2	71	71	71	71	71	71	71	71	572
3	71	71	71	71	71	71	71	71	572
4	71	71	71	71	71	71	71	71	572
5	71	71	71	71	71	71	71	71	572
6	71	71	71	71	71	71	71	71	572
7	71	71	71	71	71	71	71	71	572
8	71	71	71	71	71	71	71	71	572
9	71	71	71	71	71	71	71	71	572
10	71	71	71	71	71	71	71	71	572
11	71	71	71	71	71	71	71	71	572
12	71	71	71	71	71	71	71	71	572
13	71	71	71	71	71	71	71	71	572
14	71	71	71	71	71	71	71	71	572
15	71	71	71	71	71	71	71	71	572

16	71	71	71	71	71	71	71	71	572
17	71	71	71	71	71	71	71	71	572
18	71	71	71	71	71	71	71	71	572
19	71	71	71	71	71	71	71	71	572
20	71	71	71	71	71	71	71	71	572

**Sub Watershed #103 Honey Creek Annual Adoption (treated acres), Cropland BMPs**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	30	30	30	30	30	30	30	30	241
2	30	30	30	30	30	30	30	30	241
3	30	30	30	30	30	30	30	30	241
4	30	30	30	30	30	30	30	30	241
5	30	30	30	30	30	30	30	30	241
6	30	30	30	30	30	30	30	30	241
7	30	30	30	30	30	30	30	30	241
8	30	30	30	30	30	30	30	30	241
9	30	30	30	30	30	30	30	30	241
10	30	30	30	30	30	30	30	30	241
11	30	30	30	30	30	30	30	30	241
12	30	30	30	30	30	30	30	30	241
13	30	30	30	30	30	30	30	30	241
14	30	30	30	30	30	30	30	30	241
15	30	30	30	30	30	30	30	30	241
16	30	30	30	30	30	30	30	30	241
17	30	30	30	30	30	30	30	30	241
18	30	30	30	30	30	30	30	30	241
19	30	30	30	30	30	30	30	30	241
20	30	30	30	30	30	30	30	30	241

**Sub Watershed #603 Jenkins Creek Annual Adoption (treated acres), Cropland BMPs**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	70	70	70	70	70	70	70	70	562
2	70	70	70	70	70	70	70	70	562
3	70	70	70	70	70	70	70	70	562
4	70	70	70	70	70	70	70	70	562
5	70	70	70	70	70	70	70	70	562

6	70	70	70	70	70	70	70	70	562
7	70	70	70	70	70	70	70	70	562
8	70	70	70	70	70	70	70	70	562
9	70	70	70	70	70	70	70	70	562
10	70	70	70	70	70	70	70	70	562
11	70	70	70	70	70	70	70	70	562
12	70	70	70	70	70	70	70	70	562
13	70	70	70	70	70	70	70	70	562
14	70	70	70	70	70	70	70	70	562
15	70	70	70	70	70	70	70	70	562
16	70	70	70	70	70	70	70	70	562
17	70	70	70	70	70	70	70	70	562
18	70	70	70	70	70	70	70	70	562
19	70	70	70	70	70	70	70	70	562
20	70	70	70	70	70	70	70	70	562

**Sub Watershed #604 Jones Creek Annual Adoption (treated acres), Cropland BMPs**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	7	7	7	7	7	7	7	7	55
2	7	7	7	7	7	7	7	7	55
3	7	7	7	7	7	7	7	7	55
4	7	7	7	7	7	7	7	7	55
5	7	7	7	7	7	7	7	7	55
6	7	7	7	7	7	7	7	7	55
7	7	7	7	7	7	7	7	7	55
8	7	7	7	7	7	7	7	7	55
9	7	7	7	7	7	7	7	7	55
10	7	7	7	7	7	7	7	7	55
11	7	7	7	7	7	7	7	7	55
12	7	7	7	7	7	7	7	7	55
13	7	7	7	7	7	7	7	7	55
14	7	7	7	7	7	7	7	7	55
15	7	7	7	7	7	7	7	7	55
16	7	7	7	7	7	7	7	7	55
17	7	7	7	7	7	7	7	7	55
18	7	7	7	7	7	7	7	7	55
19	7	7	7	7	7	7	7	7	55
20	7	7	7	7	7	7	7	7	55

Sub Watershed #605 Jones Creek Annual Adoption (treated acres), Cropland BMPs									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	11	11	11	11	11	11	11	11	91
2	11	11	11	11	11	11	11	11	91
3	11	11	11	11	11	11	11	11	91
4	11	11	11	11	11	11	11	11	91
5	11	11	11	11	11	11	11	11	91
6	11	11	11	11	11	11	11	11	91
7	11	11	11	11	11	11	11	11	91
8	11	11	11	11	11	11	11	11	91
9	11	11	11	11	11	11	11	11	91
10	11	11	11	11	11	11	11	11	91
11	11	11	11	11	11	11	11	11	91
12	11	11	11	11	11	11	11	11	91
13	11	11	11	11	11	11	11	11	91
14	11	11	11	11	11	11	11	11	91
15	11	11	11	11	11	11	11	11	91
16	11	11	11	11	11	11	11	11	91
17	11	11	11	11	11	11	11	11	91
18	11	11	11	11	11	11	11	11	91
19	11	11	11	11	11	11	11	11	91
20	11	11	11	11	11	11	11	11	91
Sub Watershed #201 North Fork Spring River Annual Adoption (treated acres), Cropland BMPs									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	7	7	7	7	7	7	7	7	56
2	7	7	7	7	7	7	7	7	56
3	7	7	7	7	7	7	7	7	56
4	7	7	7	7	7	7	7	7	56
5	7	7	7	7	7	7	7	7	56
6	7	7	7	7	7	7	7	7	56
7	7	7	7	7	7	7	7	7	56
8	7	7	7	7	7	7	7	7	56
9	7	7	7	7	7	7	7	7	56
10	7	7	7	7	7	7	7	7	56

11	7	7	7	7	7	7	7	7	56
12	7	7	7	7	7	7	7	7	56
13	7	7	7	7	7	7	7	7	56
14	7	7	7	7	7	7	7	7	56
15	7	7	7	7	7	7	7	7	56
16	7	7	7	7	7	7	7	7	56
17	7	7	7	7	7	7	7	7	56
18	7	7	7	7	7	7	7	7	56
19	7	7	7	7	7	7	7	7	56
20	7	7	7	7	7	7	7	7	56
<b>Sub Watershed #202 North Fork Spring River Annual Adoption (treated acres), Cropland BMPs</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	1	1	1	1	1	1	1	1	10
2	1	1	1	1	1	1	1	1	10
3	1	1	1	1	1	1	1	1	10
4	1	1	1	1	1	1	1	1	10
5	1	1	1	1	1	1	1	1	10
6	1	1	1	1	1	1	1	1	10
7	1	1	1	1	1	1	1	1	10
8	1	1	1	1	1	1	1	1	10
9	1	1	1	1	1	1	1	1	10
10	1	1	1	1	1	1	1	1	10
11	1	1	1	1	1	1	1	1	10
12	1	1	1	1	1	1	1	1	10
13	1	1	1	1	1	1	1	1	10
14	1	1	1	1	1	1	1	1	10
15	1	1	1	1	1	1	1	1	10
16	1	1	1	1	1	1	1	1	10
17	1	1	1	1	1	1	1	1	10
18	1	1	1	1	1	1	1	1	10
19	1	1	1	1	1	1	1	1	10
20	1	1	1	1	1	1	1	1	10
<b>Sub Watershed #203 North Fork Spring River Annual Adoption (treated acres), Cropland BMPs</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total

1	3	3	3	3	3	3	3	3	22
2	3	3	3	3	3	3	3	3	22
3	3	3	3	3	3	3	3	3	22
4	3	3	3	3	3	3	3	3	22
5	3	3	3	3	3	3	3	3	22
6	3	3	3	3	3	3	3	3	22
7	3	3	3	3	3	3	3	3	22
8	3	3	3	3	3	3	3	3	22
9	3	3	3	3	3	3	3	3	22
10	3	3	3	3	3	3	3	3	22
11	3	3	3	3	3	3	3	3	22
12	3	3	3	3	3	3	3	3	22
13	3	3	3	3	3	3	3	3	22
14	3	3	3	3	3	3	3	3	22
15	3	3	3	3	3	3	3	3	22
16	3	3	3	3	3	3	3	3	22
17	3	3	3	3	3	3	3	3	22
18	3	3	3	3	3	3	3	3	22
19	3	3	3	3	3	3	3	3	22
20	3	3	3	3	3	3	3	3	22

**Sub Watershed #206 North Fork Spring River Annual Adoption (treated acres), Cropland BMPs**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	3	3	3	3	3	3	3	3	22
2	3	3	3	3	3	3	3	3	22
3	3	3	3	3	3	3	3	3	22
4	3	3	3	3	3	3	3	3	22
5	3	3	3	3	3	3	3	3	22
6	3	3	3	3	3	3	3	3	22
7	3	3	3	3	3	3	3	3	22
8	3	3	3	3	3	3	3	3	22
9	3	3	3	3	3	3	3	3	22
10	3	3	3	3	3	3	3	3	22
11	3	3	3	3	3	3	3	3	22
12	3	3	3	3	3	3	3	3	22
13	3	3	3	3	3	3	3	3	22
14	3	3	3	3	3	3	3	3	22
15	3	3	3	3	3	3	3	3	22

16	3	3	3	3	3	3	3	3	22
17	3	3	3	3	3	3	3	3	22
18	3	3	3	3	3	3	3	3	22
19	3	3	3	3	3	3	3	3	22
20	3	3	3	3	3	3	3	3	22
<b>Sub Watershed #302 North Fork Spring River Annual Adoption (treated acres), Cropland BMPs</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	9	9	9	9	9	9	9	9	70
2	9	9	9	9	9	9	9	9	70
3	9	9	9	9	9	9	9	9	70
4	9	9	9	9	9	9	9	9	70
5	9	9	9	9	9	9	9	9	70
6	9	9	9	9	9	9	9	9	70
7	9	9	9	9	9	9	9	9	70
8	9	9	9	9	9	9	9	9	70
9	9	9	9	9	9	9	9	9	70
10	9	9	9	9	9	9	9	9	70
11	9	9	9	9	9	9	9	9	70
12	9	9	9	9	9	9	9	9	70
13	9	9	9	9	9	9	9	9	70
14	9	9	9	9	9	9	9	9	70
15	9	9	9	9	9	9	9	9	70
16	9	9	9	9	9	9	9	9	70
17	9	9	9	9	9	9	9	9	70
18	9	9	9	9	9	9	9	9	70
19	9	9	9	9	9	9	9	9	70
20	9	9	9	9	9	9	9	9	70
<b>Sub Watershed #306 North Fork Spring River Annual Adoption (treated acres), Cropland BMPs</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	10	10	10	10	10	10	10	10	76
2	10	10	10	10	10	10	10	10	76
3	10	10	10	10	10	10	10	10	76
4	10	10	10	10	10	10	10	10	76
5	10	10	10	10	10	10	10	10	76

6	10	10	10	10	10	10	10	10	76
7	10	10	10	10	10	10	10	10	76
8	10	10	10	10	10	10	10	10	76
9	10	10	10	10	10	10	10	10	76
10	10	10	10	10	10	10	10	10	76
11	10	10	10	10	10	10	10	10	76
12	10	10	10	10	10	10	10	10	76
13	10	10	10	10	10	10	10	10	76
14	10	10	10	10	10	10	10	10	76
15	10	10	10	10	10	10	10	10	76
16	10	10	10	10	10	10	10	10	76
17	10	10	10	10	10	10	10	10	76
18	10	10	10	10	10	10	10	10	76
19	10	10	10	10	10	10	10	10	76
20	10	10	10	10	10	10	10	10	76
<b>Sub Watershed #307 North Fork Spring River Annual Adoption (treated acres), Cropland BMPs</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	11	11	11	11	11	11	11	11	85
2	11	11	11	11	11	11	11	11	85
3	11	11	11	11	11	11	11	11	85
4	11	11	11	11	11	11	11	11	85
5	11	11	11	11	11	11	11	11	85
6	11	11	11	11	11	11	11	11	85
7	11	11	11	11	11	11	11	11	85
8	11	11	11	11	11	11	11	11	85
9	11	11	11	11	11	11	11	11	85
10	11	11	11	11	11	11	11	11	85
11	11	11	11	11	11	11	11	11	85
12	11	11	11	11	11	11	11	11	85
13	11	11	11	11	11	11	11	11	85
14	11	11	11	11	11	11	11	11	85
15	11	11	11	11	11	11	11	11	85
16	11	11	11	11	11	11	11	11	85
17	11	11	11	11	11	11	11	11	85
18	11	11	11	11	11	11	11	11	85
19	11	11	11	11	11	11	11	11	85
20	11	11	11	11	11	11	11	11	85



Sub Watershed #311 North Fork Spring River Annual Adoption (treated acres), Cropland BMPs									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	51	51	51	51	51	51	51	51	404
2	51	51	51	51	51	51	51	51	404
3	51	51	51	51	51	51	51	51	404
4	51	51	51	51	51	51	51	51	404
5	51	51	51	51	51	51	51	51	404
6	51	51	51	51	51	51	51	51	404
7	51	51	51	51	51	51	51	51	404
8	51	51	51	51	51	51	51	51	404
9	51	51	51	51	51	51	51	51	404
10	51	51	51	51	51	51	51	51	404
11	51	51	51	51	51	51	51	51	404
12	51	51	51	51	51	51	51	51	404
13	51	51	51	51	51	51	51	51	404
14	51	51	51	51	51	51	51	51	404
15	51	51	51	51	51	51	51	51	404
16	51	51	51	51	51	51	51	51	404
17	51	51	51	51	51	51	51	51	404
18	51	51	51	51	51	51	51	51	404
19	51	51	51	51	51	51	51	51	404
20	51	51	51	51	51	51	51	51	404
Sub Watershed #706 Shoal, Pogue, and Joyce Creeks Annual Adoption (treated acres), Cropland BMPs									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
8	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
9	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
10	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2

11	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
12	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
13	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
14	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
15	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
16	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
17	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
18	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
19	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
20	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2

**Sub Watershed #801 Shoal, Pogue, and Joyce Creeks Annual Adoption (treated acres), Cropland BMPs**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	7	7	7	7	7	7	7	7	52
2	7	7	7	7	7	7	7	7	52
3	7	7	7	7	7	7	7	7	52
4	7	7	7	7	7	7	7	7	52
5	7	7	7	7	7	7	7	7	52
6	7	7	7	7	7	7	7	7	52
7	7	7	7	7	7	7	7	7	52
8	7	7	7	7	7	7	7	7	52
9	7	7	7	7	7	7	7	7	52
10	7	7	7	7	7	7	7	7	52
11	7	7	7	7	7	7	7	7	52
12	7	7	7	7	7	7	7	7	52
13	7	7	7	7	7	7	7	7	52
14	7	7	7	7	7	7	7	7	52
15	7	7	7	7	7	7	7	7	52
16	7	7	7	7	7	7	7	7	52
17	7	7	7	7	7	7	7	7	52
18	7	7	7	7	7	7	7	7	52
19	7	7	7	7	7	7	7	7	52
20	7	7	7	7	7	7	7	7	52

**Sub Watershed #803 Shoal, Pogue, and Joyce Creeks Annual Adoption (treated acres), Cropland BMPs**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
------	---------	-------------	--------------------	--------------------	-------------------	----------	--------------------	----------------------------	-------

1	41	41	41	41	41	41	41	41	329
2	41	41	41	41	41	41	41	41	329
3	41	41	41	41	41	41	41	41	329
4	41	41	41	41	41	41	41	41	329
5	41	41	41	41	41	41	41	41	329
6	41	41	41	41	41	41	41	41	329
7	41	41	41	41	41	41	41	41	329
8	41	41	41	41	41	41	41	41	329
9	41	41	41	41	41	41	41	41	329
10	41	41	41	41	41	41	41	41	329
11	41	41	41	41	41	41	41	41	329
12	41	41	41	41	41	41	41	41	329
13	41	41	41	41	41	41	41	41	329
14	41	41	41	41	41	41	41	41	329
15	41	41	41	41	41	41	41	41	329
16	41	41	41	41	41	41	41	41	329
17	41	41	41	41	41	41	41	41	329
18	41	41	41	41	41	41	41	41	329
19	41	41	41	41	41	41	41	41	329
20	41	41	41	41	41	41	41	41	329

**Sub Watershed #806 Shoal, Pogue, and Joyce Creeks Annual Adoption (treated acres), Cropland BMPs**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	61	61	61	61	61	61	61	61	491
2	61	61	61	61	61	61	61	61	491
3	61	61	61	61	61	61	61	61	491
4	61	61	61	61	61	61	61	61	491
5	61	61	61	61	61	61	61	61	491
6	61	61	61	61	61	61	61	61	491
7	61	61	61	61	61	61	61	61	491
8	61	61	61	61	61	61	61	61	491
9	61	61	61	61	61	61	61	61	491
10	61	61	61	61	61	61	61	61	491
11	61	61	61	61	61	61	61	61	491
12	61	61	61	61	61	61	61	61	491
13	61	61	61	61	61	61	61	61	491
14	61	61	61	61	61	61	61	61	491
15	61	61	61	61	61	61	61	61	491

16	61	61	61	61	61	61	61	61	491
17	61	61	61	61	61	61	61	61	491
18	61	61	61	61	61	61	61	61	491
19	61	61	61	61	61	61	61	61	491
20	61	61	61	61	61	61	61	61	491
<b>Sub Watershed #101 Spring River Annual Adoption (treated acres), Cropland BMPs</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	71	71	71	71	71	71	71	71	564
2	71	71	71	71	71	71	71	71	564
3	71	71	71	71	71	71	71	71	564
4	71	71	71	71	71	71	71	71	564
5	71	71	71	71	71	71	71	71	564
6	71	71	71	71	71	71	71	71	564
7	71	71	71	71	71	71	71	71	564
8	71	71	71	71	71	71	71	71	564
9	71	71	71	71	71	71	71	71	564
10	71	71	71	71	71	71	71	71	564
11	71	71	71	71	71	71	71	71	564
12	71	71	71	71	71	71	71	71	564
13	71	71	71	71	71	71	71	71	564
14	71	71	71	71	71	71	71	71	564
15	71	71	71	71	71	71	71	71	564
16	71	71	71	71	71	71	71	71	564
17	71	71	71	71	71	71	71	71	564
18	71	71	71	71	71	71	71	71	564
19	71	71	71	71	71	71	71	71	564
20	71	71	71	71	71	71	71	71	564
<b>Sub Watershed #104 Spring River Annual Adoption (treated acres), Cropland BMPs</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	46	46	46	46	46	46	46	46	371
2	46	46	46	46	46	46	46	46	371
3	46	46	46	46	46	46	46	46	371
4	46	46	46	46	46	46	46	46	371
5	46	46	46	46	46	46	46	46	371

6	46	46	46	46	46	46	46	46	371
7	46	46	46	46	46	46	46	46	371
8	46	46	46	46	46	46	46	46	371
9	46	46	46	46	46	46	46	46	371
10	46	46	46	46	46	46	46	46	371
11	46	46	46	46	46	46	46	46	371
12	46	46	46	46	46	46	46	46	371
13	46	46	46	46	46	46	46	46	371
14	46	46	46	46	46	46	46	46	371
15	46	46	46	46	46	46	46	46	371
16	46	46	46	46	46	46	46	46	371
17	46	46	46	46	46	46	46	46	371
18	46	46	46	46	46	46	46	46	371
19	46	46	46	46	46	46	46	46	371
20	46	46	46	46	46	46	46	46	371
<b>Sub Watershed #105 Spring River Annual Adoption (treated acres), Cropland BMPs</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	16	16	16	16	16	16	16	16	132
2	16	16	16	16	16	16	16	16	132
3	16	16	16	16	16	16	16	16	132
4	16	16	16	16	16	16	16	16	132
5	16	16	16	16	16	16	16	16	132
6	16	16	16	16	16	16	16	16	132
7	16	16	16	16	16	16	16	16	132
8	16	16	16	16	16	16	16	16	132
9	16	16	16	16	16	16	16	16	132
10	16	16	16	16	16	16	16	16	132
11	16	16	16	16	16	16	16	16	132
12	16	16	16	16	16	16	16	16	132
13	16	16	16	16	16	16	16	16	132
14	16	16	16	16	16	16	16	16	132
15	16	16	16	16	16	16	16	16	132
16	16	16	16	16	16	16	16	16	132
17	16	16	16	16	16	16	16	16	132
18	16	16	16	16	16	16	16	16	132
19	16	16	16	16	16	16	16	16	132
20	16	16	16	16	16	16	16	16	132

Sub Watershed #107 Spring River Annual Adoption (treated acres), Cropland BMPs									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	1	1	1	1	1	1	1	1	10
2	1	1	1	1	1	1	1	1	10
3	1	1	1	1	1	1	1	1	10
4	1	1	1	1	1	1	1	1	10
5	1	1	1	1	1	1	1	1	10
6	1	1	1	1	1	1	1	1	10
7	1	1	1	1	1	1	1	1	10
8	1	1	1	1	1	1	1	1	10
9	1	1	1	1	1	1	1	1	10
10	1	1	1	1	1	1	1	1	10
11	1	1	1	1	1	1	1	1	10
12	1	1	1	1	1	1	1	1	10
13	1	1	1	1	1	1	1	1	10
14	1	1	1	1	1	1	1	1	10
15	1	1	1	1	1	1	1	1	10
16	1	1	1	1	1	1	1	1	10
17	1	1	1	1	1	1	1	1	10
18	1	1	1	1	1	1	1	1	10
19	1	1	1	1	1	1	1	1	10
20	1	1	1	1	1	1	1	1	10
Sub Watershed #501 Spring River Annual Adoption (treated acres), Cropland BMPs									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	5	5	5	5	5	5	5	5	40
2	5	5	5	5	5	5	5	5	40
3	5	5	5	5	5	5	5	5	40
4	5	5	5	5	5	5	5	5	40
5	5	5	5	5	5	5	5	5	40
6	5	5	5	5	5	5	5	5	40
7	5	5	5	5	5	5	5	5	40
8	5	5	5	5	5	5	5	5	40
9	5	5	5	5	5	5	5	5	40
10	5	5	5	5	5	5	5	5	40

11	5	5	5	5	5	5	5	5	40
12	5	5	5	5	5	5	5	5	40
13	5	5	5	5	5	5	5	5	40
14	5	5	5	5	5	5	5	5	40
15	5	5	5	5	5	5	5	5	40
16	5	5	5	5	5	5	5	5	40
17	5	5	5	5	5	5	5	5	40
18	5	5	5	5	5	5	5	5	40
19	5	5	5	5	5	5	5	5	40
20	5	5	5	5	5	5	5	5	40
<b>Sub Watershed #503 Spring River Annual Adoption (treated acres), Cropland BMPs</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	1	1	1	1	1	1	1	1	5
2	1	1	1	1	1	1	1	1	5
3	1	1	1	1	1	1	1	1	5
4	1	1	1	1	1	1	1	1	5
5	1	1	1	1	1	1	1	1	5
6	1	1	1	1	1	1	1	1	5
7	1	1	1	1	1	1	1	1	5
8	1	1	1	1	1	1	1	1	5
9	1	1	1	1	1	1	1	1	5
10	1	1	1	1	1	1	1	1	5
11	1	1	1	1	1	1	1	1	5
12	1	1	1	1	1	1	1	1	5
13	1	1	1	1	1	1	1	1	5
14	1	1	1	1	1	1	1	1	5
15	1	1	1	1	1	1	1	1	5
16	1	1	1	1	1	1	1	1	5
17	1	1	1	1	1	1	1	1	5
18	1	1	1	1	1	1	1	1	5
19	1	1	1	1	1	1	1	1	5
20	1	1	1	1	1	1	1	1	5
<b>Sub Watershed #505 Spring River Annual Adoption (treated acres), Cropland BMPs</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total

1	5	5	5	5	5	5	5	5	39
2	5	5	5	5	5	5	5	5	39
3	5	5	5	5	5	5	5	5	39
4	5	5	5	5	5	5	5	5	39
5	5	5	5	5	5	5	5	5	39
6	5	5	5	5	5	5	5	5	39
7	5	5	5	5	5	5	5	5	39
8	5	5	5	5	5	5	5	5	39
9	5	5	5	5	5	5	5	5	39
10	5	5	5	5	5	5	5	5	39
11	5	5	5	5	5	5	5	5	39
12	5	5	5	5	5	5	5	5	39
13	5	5	5	5	5	5	5	5	39
14	5	5	5	5	5	5	5	5	39
15	5	5	5	5	5	5	5	5	39
16	5	5	5	5	5	5	5	5	39
17	5	5	5	5	5	5	5	5	39
18	5	5	5	5	5	5	5	5	39
19	5	5	5	5	5	5	5	5	39
20	5	5	5	5	5	5	5	5	39

**Sub Watershed #506 Spring River Annual Adoption (treated acres), Cropland BMPs**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	11	11	11	11	11	11	11	11	91
2	11	11	11	11	11	11	11	11	91
3	11	11	11	11	11	11	11	11	91
4	11	11	11	11	11	11	11	11	91
5	11	11	11	11	11	11	11	11	91
6	11	11	11	11	11	11	11	11	91
7	11	11	11	11	11	11	11	11	91
8	11	11	11	11	11	11	11	11	91
9	11	11	11	11	11	11	11	11	91
10	11	11	11	11	11	11	11	11	91
11	11	11	11	11	11	11	11	11	91
12	11	11	11	11	11	11	11	11	91
13	11	11	11	11	11	11	11	11	91
14	11	11	11	11	11	11	11	11	91
15	11	11	11	11	11	11	11	11	91



16	11	11	11	11	11	11	11	11	91
17	11	11	11	11	11	11	11	11	91
18	11	11	11	11	11	11	11	11	91
19	11	11	11	11	11	11	11	11	91
20	11	11	11	11	11	11	11	11	91
<b>Sub Watershed #805 Thurman Creek Annual Adoption (treated acres), Cropland BMPs</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	68	68	68	68	68	68	68	68	543
2	68	68	68	68	68	68	68	68	543
3	68	68	68	68	68	68	68	68	543
4	68	68	68	68	68	68	68	68	543
5	68	68	68	68	68	68	68	68	543
6	68	68	68	68	68	68	68	68	543
7	68	68	68	68	68	68	68	68	543
8	68	68	68	68	68	68	68	68	543
9	68	68	68	68	68	68	68	68	543
10	68	68	68	68	68	68	68	68	543
11	68	68	68	68	68	68	68	68	543
12	68	68	68	68	68	68	68	68	543
13	68	68	68	68	68	68	68	68	543
14	68	68	68	68	68	68	68	68	543
15	68	68	68	68	68	68	68	68	543
16	68	68	68	68	68	68	68	68	543
17	68	68	68	68	68	68	68	68	543
18	68	68	68	68	68	68	68	68	543
19	68	68	68	68	68	68	68	68	543
20	68	68	68	68	68	68	68	68	543
<b>Sub Watershed #901 Turkey Creek Annual Adoption (treated acres), Cropland BMPs</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	5	5	5	5	5	5	5	5	43
2	5	5	5	5	5	5	5	5	43
3	5	5	5	5	5	5	5	5	43
4	5	5	5	5	5	5	5	5	43
5	5	5	5	5	5	5	5	5	43

6	5	5	5	5	5	5	5	5	43
7	5	5	5	5	5	5	5	5	43
8	5	5	5	5	5	5	5	5	43
9	5	5	5	5	5	5	5	5	43
10	5	5	5	5	5	5	5	5	43
11	5	5	5	5	5	5	5	5	43
12	5	5	5	5	5	5	5	5	43
13	5	5	5	5	5	5	5	5	43
14	5	5	5	5	5	5	5	5	43
15	5	5	5	5	5	5	5	5	43
16	5	5	5	5	5	5	5	5	43
17	5	5	5	5	5	5	5	5	43
18	5	5	5	5	5	5	5	5	43
19	5	5	5	5	5	5	5	5	43
20	5	5	5	5	5	5	5	5	43
<b>Sub Watershed #502 White Oak Creek Annual Adoption (treated acres), Cropland BMPs</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	31	31	31	31	31	31	31	31	247
2	31	31	31	31	31	31	31	31	247
3	31	31	31	31	31	31	31	31	247
4	31	31	31	31	31	31	31	31	247
5	31	31	31	31	31	31	31	31	247
6	31	31	31	31	31	31	31	31	247
7	31	31	31	31	31	31	31	31	247
8	31	31	31	31	31	31	31	31	247
9	31	31	31	31	31	31	31	31	247
10	31	31	31	31	31	31	31	31	247
11	31	31	31	31	31	31	31	31	247
12	31	31	31	31	31	31	31	31	247
13	31	31	31	31	31	31	31	31	247
14	31	31	31	31	31	31	31	31	247
15	31	31	31	31	31	31	31	31	247
16	31	31	31	31	31	31	31	31	247
17	31	31	31	31	31	31	31	31	247
18	31	31	31	31	31	31	31	31	247
19	31	31	31	31	31	31	31	31	247
20	31	31	31	31	31	31	31	31	247

## C Cropland Erosion Load Reduction by HUC 12

Table 279. Cropland Erosion Load Reductions by HUC 12.

Sub Watershed #804 Baynham Creek Annual Soil Erosion Reduction (tons)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	5	1	2	2	2	2	3	3	18
2	9	1	3	3	5	4	6	6	37
3	14	2	5	5	7	5	9	9	55
4	18	2	6	6	10	7	12	12	73
5	23	3	8	8	12	9	15	15	92
6	27	4	9	9	14	11	18	18	110
7	32	4	11	11	17	13	21	21	128
8	36	5	12	12	19	14	24	24	147
9	41	5	14	14	22	16	27	27	165
10	45	6	15	15	24	18	30	30	184
11	50	7	17	17	26	20	33	33	202
12	54	7	18	18	29	22	36	36	220
13	59	8	20	20	31	23	39	39	239
14	63	8	21	21	34	25	42	42	257
15	68	9	23	23	36	27	45	45	275
16	72	10	24	24	39	29	48	48	294
17	77	10	26	26	41	31	51	51	312
18	81	11	27	27	43	32	54	54	330
19	86	11	29	29	46	34	57	57	349
20	90	12	30	30	48	36	60	60	367
Sub Watershed #703 Capps Creek Annual Soil Erosion Reduction (tons)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	20	3	7	7	10	8	13	13	80
2	39	5	13	13	21	16	26	26	160
3	59	8	20	20	31	24	39	39	240
4	79	10	26	26	42	31	52	52	320
5	98	13	33	33	52	39	65	65	400
6	118	16	39	39	63	47	79	79	479

7	138	18	46	46	73	55	92	92	559
8	157	21	52	52	84	63	105	105	639
9	177	24	59	59	94	71	118	118	719
10	196	26	65	65	105	79	131	131	799
11	216	29	72	72	115	86	144	144	879
12	236	31	79	79	126	94	157	157	959
13	255	34	85	85	136	102	170	170	1,039
14	275	37	92	92	147	110	183	183	1,119
15	295	39	98	98	157	118	196	196	1,199
16	314	42	105	105	168	126	210	210	1,279
17	334	45	111	111	178	134	223	223	1,358
18	354	47	118	118	189	141	236	236	1,438
19	373	50	124	124	199	149	249	249	1,518
20	393	52	131	131	210	157	262	262	1,598

**Sub Watershed #601 Center Creek Annual Soil Erosion Reduction (tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	34	5	11	11	18	14	23	23	138
2	68	9	23	23	36	27	45	45	276
3	102	14	34	34	54	41	68	68	414
4	136	18	45	45	72	54	90	90	552
5	170	23	57	57	90	68	113	113	690
6	204	27	68	68	109	81	136	136	828
7	238	32	79	79	127	95	158	158	966
8	271	36	90	90	145	109	181	181	1,104
9	305	41	102	102	163	122	204	204	1,242
10	339	45	113	113	181	136	226	226	1,380
11	373	50	124	124	199	149	249	249	1,518
12	407	54	136	136	217	163	271	271	1,656
13	441	59	147	147	235	176	294	294	1,794
14	475	63	158	158	253	190	317	317	1,932
15	509	68	170	170	271	204	339	339	2,070
16	543	72	181	181	290	217	362	362	2,208
17	577	77	192	192	308	231	385	385	2,346
18	611	81	204	204	326	244	407	407	2,484
19	645	86	215	215	344	258	430	430	2,622
20	679	90	226	226	362	271	452	452	2,760

Sub Watershed #704 Clear Creek Annual Soil Erosion Reduction (tons)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	2	0	1	1	1	1	2	2	10
2	5	1	2	2	3	2	3	3	20
3	7	1	2	2	4	3	5	5	30
4	10	1	3	3	5	4	7	7	40
5	12	2	4	4	7	5	8	8	50
6	15	2	5	5	8	6	10	10	60
7	17	2	6	6	9	7	12	12	70
8	20	3	7	7	11	8	13	13	80
9	22	3	7	7	12	9	15	15	90
10	25	3	8	8	13	10	16	16	101
11	27	4	9	9	15	11	18	18	111
12	30	4	10	10	16	12	20	20	121
13	32	4	11	11	17	13	21	21	131
14	35	5	12	12	18	14	23	23	141
15	37	5	12	12	20	15	25	25	151
16	40	5	13	13	21	16	26	26	161
17	42	6	14	14	22	17	28	28	171
18	44	6	15	15	24	18	30	30	181
19	47	6	16	16	25	19	31	31	191
20	49	7	16	16	26	20	33	33	201
Sub Watershed #705 Clear Creek Annual Soil Erosion Reduction (tons)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	3	0	1	1	2	1	2	2	13
2	6	1	2	2	3	2	4	4	25
3	9	1	3	3	5	4	6	6	38
4	12	2	4	4	7	5	8	8	50
5	15	2	5	5	8	6	10	10	63
6	18	2	6	6	10	7	12	12	75
7	22	3	7	7	12	9	14	14	88
8	25	3	8	8	13	10	16	16	100
9	28	4	9	9	15	11	18	18	113
10	31	4	10	10	16	12	21	21	125
11	34	5	11	11	18	14	23	23	138

12	37	5	12	12	20	15	25	25	150
13	40	5	13	13	21	16	27	27	163
14	43	6	14	14	23	17	29	29	176
15	46	6	15	15	25	18	31	31	188
16	49	7	16	16	26	20	33	33	201
17	52	7	17	17	28	21	35	35	213
18	55	7	18	18	30	22	37	37	226
19	59	8	20	20	31	23	39	39	238
20	62	8	21	21	33	25	41	41	251

**Sub Watershed #304 Dry Fork Annual Soil Erosion Reduction(tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	38	5	13	13	20	15	25	25	153
2	75	10	25	25	40	30	50	50	307
3	113	15	38	38	60	45	75	75	460
4	151	20	50	50	80	60	101	101	614
5	189	25	63	63	101	75	126	126	767
6	226	30	75	75	121	91	151	151	920
7	264	35	88	88	141	106	176	176	1,074
8	302	40	101	101	161	121	201	201	1,227
9	339	45	113	113	181	136	226	226	1,380
10	377	50	126	126	201	151	251	251	1,534
11	415	55	138	138	221	166	277	277	1,687
12	453	60	151	151	241	181	302	302	1,841
13	490	65	163	163	261	196	327	327	1,994
14	528	70	176	176	282	211	352	352	2,147
15	566	75	189	189	302	226	377	377	2,301
16	603	80	201	201	322	241	402	402	2,454
17	641	85	214	214	342	256	427	427	2,607
18	679	91	226	226	362	272	453	453	2,761
19	717	96	239	239	382	287	478	478	2,914
20	754	101	251	251	402	302	503	503	3,068

**Sub Watershed #305 Dry Fork Annual Soil Erosion Reduction(tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	51	7	17	17	27	21	34	34	209

2	103	14	34	34	55	41	69	69	419
3	154	21	51	51	82	62	103	103	628
4	206	27	69	69	110	82	137	137	837
5	257	34	86	86	137	103	172	172	1,047
6	309	41	103	103	165	124	206	206	1,256
7	360	48	120	120	192	144	240	240	1,465
8	412	55	137	137	220	165	274	274	1,674
9	463	62	154	154	247	185	309	309	1,884
10	515	69	172	172	274	206	343	343	2,093
11	566	75	189	189	302	226	377	377	2,302
12	618	82	206	206	329	247	412	412	2,512
13	669	89	223	223	357	268	446	446	2,721
14	721	96	240	240	384	288	480	480	2,930
15	772	103	257	257	412	309	515	515	3,140
16	823	110	274	274	439	329	549	549	3,349
17	875	117	292	292	467	350	583	583	3,558
18	926	124	309	309	494	371	618	618	3,767
19	978	130	326	326	522	391	652	652	3,977
20	1,029	137	343	343	549	412	686	686	4,186

**Sub Watershed #802 Hickory Creek Annual Soil Erosion Reduction (tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	1	0	0	0	0	0	0	0	3
2	1	0	0	0	1	1	1	1	6
3	2	0	1	1	1	1	1	1	9
4	3	0	1	1	1	1	2	2	11
5	3	0	1	1	2	1	2	2	14
6	4	1	1	1	2	2	3	3	17
7	5	1	2	2	3	2	3	3	20
8	6	1	2	2	3	2	4	4	23
9	6	1	2	2	3	3	4	4	26
10	7	1	2	2	4	3	5	5	28
11	8	1	3	3	4	3	5	5	31
12	8	1	3	3	4	3	6	6	34
13	9	1	3	3	5	4	6	6	37
14	10	1	3	3	5	4	7	7	40
15	10	1	3	3	6	4	7	7	43
16	11	1	4	4	6	4	7	7	45

17	12	2	4	4	6	5	8	8	48
18	13	2	4	4	7	5	8	8	51
19	13	2	4	4	7	5	9	9	54
20	14	2	5	5	7	6	9	9	57
<b>Sub Watershed #102 Honey Creek Annual Soil Erosion Reduction (tons)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	33	4	11	11	18	13	22	22	135
2	66	9	22	22	35	27	44	44	269
3	99	13	33	33	53	40	66	66	404
4	133	18	44	44	71	53	88	88	539
5	166	22	55	55	88	66	110	110	674
6	199	27	66	66	106	80	133	133	808
7	232	31	77	77	124	93	155	155	943
8	265	35	88	88	141	106	177	177	1,078
9	298	40	99	99	159	119	199	199	1,212
10	331	44	110	110	177	133	221	221	1,347
11	364	49	121	121	194	146	243	243	1,482
12	398	53	133	133	212	159	265	265	1,617
13	431	57	144	144	230	172	287	287	1,751
14	464	62	155	155	247	186	309	309	1,886
15	497	66	166	166	265	199	331	331	2,021
16	530	71	177	177	283	212	353	353	2,155
17	563	75	188	188	300	225	375	375	2,290
18	596	80	199	199	318	239	398	398	2,425
19	629	84	210	210	336	252	420	420	2,560
20	663	88	221	221	353	265	442	442	2,694
<b>Sub Watershed #103 Honey Creek Annual Soil Erosion Reduction (tons)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	7	1	2	2	4	3	5	5	29
2	14	2	5	5	8	6	10	10	58
3	21	3	7	7	11	9	14	14	87
4	29	4	10	10	15	11	19	19	116
5	36	5	12	12	19	14	24	24	145
6	43	6	14	14	23	17	29	29	174



7	50	7	17	17	27	20	33	33	203
8	57	8	19	19	30	23	38	38	232
9	64	9	21	21	34	26	43	43	261
10	71	10	24	24	38	29	48	48	290
11	78	10	26	26	42	31	52	52	319
12	86	11	29	29	46	34	57	57	348
13	93	12	31	31	49	37	62	62	377
14	100	13	33	33	53	40	67	67	406
15	107	14	36	36	57	43	71	71	435
16	114	15	38	38	61	46	76	76	464
17	121	16	40	40	65	49	81	81	493
18	128	17	43	43	69	51	86	86	522
19	136	18	45	45	72	54	90	90	551
20	143	19	48	48	76	57	95	95	580

**Sub Watershed #603 Jenkins Creek Annual Soil Erosion Reduction (tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	28	4	9	9	15	11	19	19	114
2	56	7	19	19	30	22	37	37	227
3	84	11	28	28	45	34	56	56	341
4	112	15	37	37	60	45	74	74	454
5	140	19	47	47	74	56	93	93	568
6	168	22	56	56	89	67	112	112	681
7	196	26	65	65	104	78	130	130	795
8	223	30	74	74	119	89	149	149	909
9	251	34	84	84	134	101	168	168	1,022
10	279	37	93	93	149	112	186	186	1,136
11	307	41	102	102	164	123	205	205	1,249
12	335	45	112	112	179	134	223	223	1,363
13	363	48	121	121	194	145	242	242	1,477
14	391	52	130	130	209	156	261	261	1,590
15	419	56	140	140	223	168	279	279	1,704
16	447	60	149	149	238	179	298	298	1,817
17	475	63	158	158	253	190	317	317	1,931
18	503	67	168	168	268	201	335	335	2,044
19	531	71	177	177	283	212	354	354	2,158
20	559	74	186	186	298	223	372	372	2,272

Sub Watershed #604 Jones Creek Annual Soil Erosion Reduction (tons)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	3	0	1	1	2	1	2	2	12
2	6	1	2	2	3	2	4	4	23
3	9	1	3	3	5	3	6	6	35
4	12	2	4	4	6	5	8	8	47
5	14	2	5	5	8	6	10	10	58
6	17	2	6	6	9	7	12	12	70
7	20	3	7	7	11	8	13	13	82
8	23	3	8	8	12	9	15	15	94
9	26	3	9	9	14	10	17	17	105
10	29	4	10	10	15	12	19	19	117
11	32	4	11	11	17	13	21	21	129
12	35	5	12	12	18	14	23	23	140
13	37	5	12	12	20	15	25	25	152
14	40	5	13	13	21	16	27	27	164
15	43	6	14	14	23	17	29	29	175
16	46	6	15	15	25	18	31	31	187
17	49	7	16	16	26	20	33	33	199
18	52	7	17	17	28	21	35	35	210
19	55	7	18	18	29	22	36	36	222
20	58	8	19	19	31	23	38	38	234
Sub Watershed #605 Jones Creek Annual Soil Erosion Reduction (tons)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	3	0	1	1	1	1	2	2	11
2	5	1	2	2	3	2	4	4	22
3	8	1	3	3	4	3	5	5	33
4	11	1	4	4	6	4	7	7	44
5	14	2	5	5	7	5	9	9	55
6	16	2	5	5	9	7	11	11	66
7	19	3	6	6	10	8	13	13	77
8	22	3	7	7	12	9	15	15	89
9	24	3	8	8	13	10	16	16	100
10	27	4	9	9	15	11	18	18	111
11	30	4	10	10	16	12	20	20	122

12	33	4	11	11	17	13	22	22	133
13	35	5	12	12	19	14	24	24	144
14	38	5	13	13	20	15	25	25	155
15	41	5	14	14	22	16	27	27	166
16	44	6	15	15	23	17	29	29	177
17	46	6	15	15	25	19	31	31	188
18	49	7	16	16	26	20	33	33	199
19	52	7	17	17	28	21	34	34	210
20	54	7	18	18	29	22	36	36	221

**Sub Watershed #201 North Fork Spring River Annual Soil Erosion Reduction (tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	16	2	5	5	9	6	11	11	65
2	32	4	11	11	17	13	21	21	130
3	48	6	16	16	26	19	32	32	194
4	64	9	21	21	34	26	43	43	259
5	80	11	27	27	43	32	53	53	324
6	96	13	32	32	51	38	64	64	389
7	112	15	37	37	60	45	74	74	454
8	128	17	43	43	68	51	85	85	519
9	143	19	48	48	77	57	96	96	583
10	159	21	53	53	85	64	106	106	648
11	175	23	58	58	94	70	117	117	713
12	191	26	64	64	102	77	128	128	778
13	207	28	69	69	111	83	138	138	843
14	223	30	74	74	119	89	149	149	908
15	239	32	80	80	128	96	159	159	972
16	255	34	85	85	136	102	170	170	1,037
17	271	36	90	90	145	108	181	181	1,102
18	287	38	96	96	153	115	191	191	1,167
19	303	40	101	101	162	121	202	202	1,232
20	319	43	106	106	170	128	213	213	1,296

**Sub Watershed #202 North Fork Spring River Annual Soil Erosion Reduction (tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	2	0	1	1	1	1	1	1	7

2	3	0	1	1	2	1	2	2	13
3	5	1	2	2	3	2	3	3	20
4	6	1	2	2	3	3	4	4	26
5	8	1	3	3	4	3	5	5	33
6	10	1	3	3	5	4	6	6	40
7	11	2	4	4	6	5	8	8	46
8	13	2	4	4	7	5	9	9	53
9	15	2	5	5	8	6	10	10	59
10	16	2	5	5	9	6	11	11	66
11	18	2	6	6	10	7	12	12	72
12	19	3	6	6	10	8	13	13	79
13	21	3	7	7	11	8	14	14	86
14	23	3	8	8	12	9	15	15	92
15	24	3	8	8	13	10	16	16	99
16	26	3	9	9	14	10	17	17	105
17	28	4	9	9	15	11	18	18	112
18	29	4	10	10	16	12	19	19	119
19	31	4	10	10	16	12	21	21	125
20	32	4	11	11	17	13	22	22	132

**Sub Watershed #203 North Fork Spring River Annual Soil Erosion Reduction (tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	6	1	2	2	3	2	4	4	23
2	11	1	4	4	6	4	7	7	45
3	17	2	6	6	9	7	11	11	68
4	22	3	7	7	12	9	15	15	91
5	28	4	9	9	15	11	19	19	113
6	33	4	11	11	18	13	22	22	136
7	39	5	13	13	21	16	26	26	159
8	45	6	15	15	24	18	30	30	181
9	50	7	17	17	27	20	33	33	204
10	56	7	19	19	30	22	37	37	227
11	61	8	20	20	33	25	41	41	249
12	67	9	22	22	36	27	45	45	272
13	72	10	24	24	39	29	48	48	294
14	78	10	26	26	42	31	52	52	317
15	84	11	28	28	45	33	56	56	340
16	89	12	30	30	48	36	59	59	362

17	95	13	32	32	51	38	63	63	385
18	100	13	33	33	53	40	67	67	408
19	106	14	35	35	56	42	71	71	430
20	111	15	37	37	59	45	74	74	453
<b>Sub Watershed #206 North Fork Spring River Annual Soil Erosion Reduction (tons)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	6	1	2	2	3	2	4	4	23
2	11	1	4	4	6	4	7	7	45
3	17	2	6	6	9	7	11	11	68
4	22	3	7	7	12	9	15	15	91
5	28	4	9	9	15	11	19	19	113
6	33	4	11	11	18	13	22	22	136
7	39	5	13	13	21	16	26	26	159
8	45	6	15	15	24	18	30	30	181
9	50	7	17	17	27	20	33	33	204
10	56	7	19	19	30	22	37	37	227
11	61	8	20	20	33	25	41	41	249
12	67	9	22	22	36	27	45	45	272
13	72	10	24	24	39	29	48	48	295
14	78	10	26	26	42	31	52	52	317
15	84	11	28	28	45	33	56	56	340
16	89	12	30	30	48	36	59	59	363
17	95	13	32	32	51	38	63	63	385
18	100	13	33	33	54	40	67	67	408
19	106	14	35	35	56	42	71	71	431
20	111	15	37	37	59	45	74	74	453
<b>Sub Watershed #302 North Fork Spring River Annual Soil Erosion Reduction (tons)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	16	2	5	5	8	6	10	10	64
2	31	4	10	10	17	13	21	21	127
3	47	6	16	16	25	19	31	31	191
4	63	8	21	21	33	25	42	42	255
5	78	10	26	26	42	31	52	52	318
6	94	13	31	31	50	38	63	63	382

7	110	15	37	37	58	44	73	73	446
8	125	17	42	42	67	50	83	83	509
9	141	19	47	47	75	56	94	94	573
10	157	21	52	52	83	63	104	104	636
11	172	23	57	57	92	69	115	115	700
12	188	25	63	63	100	75	125	125	764
13	203	27	68	68	109	81	136	136	827
14	219	29	73	73	117	88	146	146	891
15	235	31	78	78	125	94	157	157	955
16	250	33	83	83	134	100	167	167	1,018
17	266	35	89	89	142	106	177	177	1,082
18	282	38	94	94	150	113	188	188	1,146
19	297	40	99	99	159	119	198	198	1,209
20	313	42	104	104	167	125	209	209	1,273

**Sub Watershed #306 North Fork Spring River Annual Soil Erosion Reduction (tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	14	2	5	5	7	6	9	9	57
2	28	4	9	9	15	11	19	19	113
3	42	6	14	14	22	17	28	28	170
4	56	7	19	19	30	22	37	37	226
5	70	9	23	23	37	28	46	46	283
6	83	11	28	28	44	33	56	56	339
7	97	13	32	32	52	39	65	65	396
8	111	15	37	37	59	44	74	74	452
9	125	17	42	42	67	50	83	83	509
10	139	19	46	46	74	56	93	93	566
11	153	20	51	51	82	61	102	102	622
12	167	22	56	56	89	67	111	111	679
13	181	24	60	60	96	72	121	121	735
14	195	26	65	65	104	78	130	130	792
15	209	28	70	70	111	83	139	139	848
16	222	30	74	74	119	89	148	148	905
17	236	32	79	79	126	95	158	158	961
18	250	33	83	83	133	100	167	167	1,018
19	264	35	88	88	141	106	176	176	1,074
20	278	37	93	93	148	111	185	185	1,131

Sub Watershed #307 North Fork Spring River Annual Soil Erosion Reduction(tons)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	12	2	4	4	7	5	8	8	51
2	25	3	8	8	13	10	17	17	101
3	37	5	12	12	20	15	25	25	152
4	50	7	17	17	27	20	33	33	203
5	62	8	21	21	33	25	42	42	254
6	75	10	25	25	40	30	50	50	304
7	87	12	29	29	47	35	58	58	355
8	100	13	33	33	53	40	67	67	406
9	112	15	37	37	60	45	75	75	457
10	125	17	42	42	67	50	83	83	507
11	137	18	46	46	73	55	91	91	558
12	150	20	50	50	80	60	100	100	609
13	162	22	54	54	86	65	108	108	660
14	175	23	58	58	93	70	116	116	710
15	187	25	62	62	100	75	125	125	761
16	200	27	67	67	106	80	133	133	812
17	212	28	71	71	113	85	141	141	862
18	225	30	75	75	120	90	150	150	913
19	237	32	79	79	126	95	158	158	964
20	249	33	83	83	133	100	166	166	1,015
Sub Watershed #311 North Fork Spring River Annual Soil Erosion Reduction (tons)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	41	5	14	14	22	16	27	27	167
2	82	11	27	27	44	33	55	55	333
3	123	16	41	41	66	49	82	82	500
4	164	22	55	55	87	66	109	109	666
5	205	27	68	68	109	82	137	137	833
6	246	33	82	82	131	98	164	164	999
7	287	38	96	96	153	115	191	191	1,166
8	328	44	109	109	175	131	218	218	1,332
9	369	49	123	123	197	147	246	246	1,499
10	410	55	137	137	218	164	273	273	1,665
11	450	60	150	150	240	180	300	300	1,832

12	491	66	164	164	262	197	328	328	1,998
13	532	71	177	177	284	213	355	355	2,165
14	573	76	191	191	306	229	382	382	2,331
15	614	82	205	205	328	246	410	410	2,498
16	655	87	218	218	349	262	437	437	2,665
17	696	93	232	232	371	278	464	464	2,831
18	737	98	246	246	393	295	491	491	2,998
19	778	104	259	259	415	311	519	519	3,164
20	819	109	273	273	437	328	546	546	3,331

**Sub Watershed #706 Shoal, Pogue, and Joyce Creeks Annual Soil Erosion Reduction (tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	1
3	0	0	0	0	0	0	0	0	1
4	0	0	0	0	0	0	0	0	1
5	0	0	0	0	0	0	0	0	1
6	0	0	0	0	0	0	0	0	2
7	1	0	0	0	0	0	0	0	2
8	1	0	0	0	0	0	0	0	2
9	1	0	0	0	0	0	0	0	3
10	1	0	0	0	0	0	0	0	3
11	1	0	0	0	0	0	1	1	3
12	1	0	0	0	0	0	1	1	3
13	1	0	0	0	0	0	1	1	4
14	1	0	0	0	1	0	1	1	4
15	1	0	0	0	1	0	1	1	4
16	1	0	0	0	1	0	1	1	5
17	1	0	0	0	1	0	1	1	5
18	1	0	0	0	1	1	1	1	5
19	1	0	0	0	1	1	1	1	6
20	1	0	0	0	1	1	1	1	6

**Sub Watershed #801 Shoal, Pogue, and Joyce Creeks Annual Soil Erosion Reductions (tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	2	0	1	1	1	1	1	1	9



2	4	1	1	1	2	2	3	3	17
3	6	1	2	2	3	3	4	4	26
4	9	1	3	3	5	3	6	6	35
5	11	1	4	4	6	4	7	7	44
6	13	2	4	4	7	5	9	9	52
7	15	2	5	5	8	6	10	10	61
8	17	2	6	6	9	7	11	11	70
9	19	3	6	6	10	8	13	13	78
10	21	3	7	7	11	9	14	14	87
11	24	3	8	8	13	9	16	16	96
12	26	3	9	9	14	10	17	17	104
13	28	4	9	9	15	11	19	19	113
14	30	4	10	10	16	12	20	20	122
15	32	4	11	11	17	13	21	21	131
16	34	5	11	11	18	14	23	23	139
17	36	5	12	12	19	15	24	24	148
18	39	5	13	13	21	15	26	26	157
19	41	5	14	14	22	16	27	27	165
20	43	6	14	14	23	17	29	29	174

**Sub Watershed #803 Shoal, Pogue, and Joyce Creeks Annual Soil Erosion Reduction (tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	14	2	5	5	7	6	9	9	56
2	28	4	9	9	15	11	18	18	112
3	41	6	14	14	22	17	28	28	168
4	55	7	18	18	29	22	37	37	224
5	69	9	23	23	37	28	46	46	280
6	83	11	28	28	44	33	55	55	336
7	96	13	32	32	51	39	64	64	391
8	110	15	37	37	59	44	73	73	447
9	124	17	41	41	66	50	83	83	503
10	138	18	46	46	73	55	92	92	559
11	151	20	50	50	81	61	101	101	615
12	165	22	55	55	88	66	110	110	671
13	179	24	60	60	95	72	119	119	727
14	193	26	64	64	103	77	128	128	783
15	206	28	69	69	110	83	138	138	839
16	220	29	73	73	117	88	147	147	895

17	234	31	78	78	125	94	156	156	951
18	248	33	83	83	132	99	165	165	1,007
19	261	35	87	87	139	105	174	174	1,063
20	275	37	92	92	147	110	183	183	1,119
<b>Sub Watershed #806 Shoal, Pogue, and Joyce Creeks Annual Soil Erosion Reduction (tons)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	35	5	12	12	19	14	23	23	143
2	70	9	23	23	38	28	47	47	286
3	106	14	35	35	56	42	70	70	429
4	141	19	47	47	75	56	94	94	572
5	176	23	59	59	94	70	117	117	715
6	211	28	70	70	113	84	141	141	858
7	246	33	82	82	131	99	164	164	1,002
8	281	38	94	94	150	113	188	188	1,145
9	317	42	106	106	169	127	211	211	1,288
10	352	47	117	117	188	141	235	235	1,431
11	387	52	129	129	206	155	258	258	1,574
12	422	56	141	141	225	169	281	281	1,717
13	457	61	152	152	244	183	305	305	1,860
14	493	66	164	164	263	197	328	328	2,003
15	528	70	176	176	281	211	352	352	2,146
16	563	75	188	188	300	225	375	375	2,289
17	598	80	199	199	319	239	399	399	2,432
18	633	84	211	211	338	253	422	422	2,575
19	668	89	223	223	357	267	446	446	2,718
20	704	94	235	235	375	281	469	469	2,861
<b>Sub Watershed #101 Spring River Annual Soil Erosion Reduction (tons)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	27	4	9	9	14	11	18	18	109
2	53	7	18	18	28	21	36	36	217
3	80	11	27	27	43	32	53	53	326
4	107	14	36	36	57	43	71	71	434
5	133	18	44	44	71	53	89	89	543
6	160	21	53	53	85	64	107	107	651

7	187	25	62	62	100	75	125	125	760
8	214	28	71	71	114	85	142	142	868
9	240	32	80	80	128	96	160	160	977
10	267	36	89	89	142	107	178	178	1,085
11	294	39	98	98	157	117	196	196	1,194
12	320	43	107	107	171	128	214	214	1,303
13	347	46	116	116	185	139	231	231	1,411
14	374	50	125	125	199	149	249	249	1,520
15	400	53	133	133	214	160	267	267	1,628
16	427	57	142	142	228	171	285	285	1,737
17	454	61	151	151	242	182	303	303	1,845
18	480	64	160	160	256	192	320	320	1,954
19	507	68	169	169	270	203	338	338	2,062
20	534	71	178	178	285	214	356	356	2,171

**Sub Watershed #104 Spring River Annual Soil Erosion Reduction (tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	22	3	7	7	12	9	14	14	88
2	43	6	14	14	23	17	29	29	176
3	65	9	22	22	35	26	43	43	264
4	86	12	29	29	46	35	58	58	351
5	108	14	36	36	58	43	72	72	439
6	130	17	43	43	69	52	86	86	527
7	151	20	50	50	81	60	101	101	615
8	173	23	58	58	92	69	115	115	703
9	194	26	65	65	104	78	130	130	791
10	216	29	72	72	115	86	144	144	878
11	238	32	79	79	127	95	158	158	966
12	259	35	86	86	138	104	173	173	1,054
13	281	37	94	94	150	112	187	187	1,142
14	302	40	101	101	161	121	202	202	1,230
15	324	43	108	108	173	130	216	216	1,318
16	346	46	115	115	184	138	230	230	1,405
17	367	49	122	122	196	147	245	245	1,493
18	389	52	130	130	207	156	259	259	1,581
19	410	55	137	137	219	164	274	274	1,669
20	432	58	144	144	230	173	288	288	1,757

Sub Watershed #105 Spring River Annual Soil Erosion Reduction (tons)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	6	1	2	2	3	2	4	4	24
2	12	2	4	4	6	5	8	8	48
3	18	2	6	6	9	7	12	12	72
4	24	3	8	8	13	9	16	16	96
5	30	4	10	10	16	12	20	20	121
6	36	5	12	12	19	14	24	24	145
7	42	6	14	14	22	17	28	28	169
8	47	6	16	16	25	19	32	32	193
9	53	7	18	18	28	21	36	36	217
10	59	8	20	20	32	24	40	40	241
11	65	9	22	22	35	26	43	43	265
12	71	9	24	24	38	28	47	47	289
13	77	10	26	26	41	31	51	51	313
14	83	11	28	28	44	33	55	55	338
15	89	12	30	30	47	36	59	59	362
16	95	13	32	32	51	38	63	63	386
17	101	13	34	34	54	40	67	67	410
18	107	14	36	36	57	43	71	71	434
19	113	15	38	38	60	45	75	75	458
20	119	16	40	40	63	47	79	79	482
Sub Watershed #107 Spring River Annual Soil Erosion Reduction (tons)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	1	0	0	0	0	0	0	0	3
2	1	0	0	0	1	1	1	1	6
3	2	0	1	1	1	1	1	1	9
4	3	0	1	1	1	1	2	2	11
5	3	0	1	1	2	1	2	2	14
6	4	1	1	1	2	2	3	3	17
7	5	1	2	2	3	2	3	3	20
8	6	1	2	2	3	2	4	4	23
9	6	1	2	2	3	3	4	4	26
10	7	1	2	2	4	3	5	5	28
11	8	1	3	3	4	3	5	5	31

12	8	1	3	3	4	3	6	6	34
13	9	1	3	3	5	4	6	6	37
14	10	1	3	3	5	4	7	7	40
15	10	1	3	3	6	4	7	7	43
16	11	1	4	4	6	4	7	7	45
17	12	2	4	4	6	5	8	8	48
18	13	2	4	4	7	5	8	8	51
19	13	2	4	4	7	5	9	9	54
20	14	2	5	5	7	6	9	9	57

**Sub Watershed #501 Spring River Annual Soil Erosion Reduction (tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	4	1	1	1	2	2	3	3	17
2	8	1	3	3	5	3	6	6	34
3	13	2	4	4	7	5	8	8	52
4	17	2	6	6	9	7	11	11	69
5	21	3	7	7	11	8	14	14	86
6	25	3	8	8	14	10	17	17	103
7	30	4	10	10	16	12	20	20	120
8	34	5	11	11	18	14	23	23	138
9	38	5	13	13	20	15	25	25	155
10	42	6	14	14	23	17	28	28	172
11	47	6	16	16	25	19	31	31	189
12	51	7	17	17	27	20	34	34	206
13	55	7	18	18	29	22	37	37	224
14	59	8	20	20	32	24	39	39	241
15	63	8	21	21	34	25	42	42	258
16	68	9	23	23	36	27	45	45	275
17	72	10	24	24	38	29	48	48	293
18	76	10	25	25	41	30	51	51	310
19	80	11	27	27	43	32	54	54	327
20	85	11	28	28	45	34	56	56	344

**Sub Watershed #503 Spring River Annual Soil Erosion Reduction (tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	0	0	0	0	0	0	0	0	1

2	1	0	0	0	0	0	0	0	2
3	1	0	0	0	0	0	1	1	3
4	1	0	0	0	1	0	1	1	4
5	1	0	0	0	1	1	1	1	5
6	2	0	1	1	1	1	1	1	6
7	2	0	1	1	1	1	1	1	7
8	2	0	1	1	1	1	1	1	8
9	2	0	1	1	1	1	2	2	9
10	3	0	1	1	1	1	2	2	10
11	3	0	1	1	1	1	2	2	11
12	3	0	1	1	2	1	2	2	12
13	3	0	1	1	2	1	2	2	13
14	4	0	1	1	2	1	2	2	14
15	4	1	1	1	2	2	3	3	15
16	4	1	1	1	2	2	3	3	17
17	4	1	1	1	2	2	3	3	18
18	5	1	2	2	2	2	3	3	19
19	5	1	2	2	3	2	3	3	20
20	5	1	2	2	3	2	3	3	21

**Sub Watershed #505 Spring River Annual Soil Erosion Reduction(tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	2	0	1	1	1	1	1	1	8
2	4	1	1	1	2	2	3	3	16
3	6	1	2	2	3	2	4	4	25
4	8	1	3	3	4	3	5	5	33
5	10	1	3	3	5	4	7	7	41
6	12	2	4	4	6	5	8	8	49
7	14	2	5	5	8	6	9	9	58
8	16	2	5	5	9	6	11	11	66
9	18	2	6	6	10	7	12	12	74
10	20	3	7	7	11	8	13	13	82
11	22	3	7	7	12	9	15	15	90
12	24	3	8	8	13	10	16	16	99
13	26	4	9	9	14	11	18	18	107
14	28	4	9	9	15	11	19	19	115
15	30	4	10	10	16	12	20	20	123
16	32	4	11	11	17	13	22	22	131

17	34	5	11	11	18	14	23	23	140
18	36	5	12	12	19	15	24	24	148
19	38	5	13	13	20	15	26	26	156
20	40	5	13	13	22	16	27	27	164
<b>Sub Watershed #506 Spring River Annual Soil Erosion Reduction (tons)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	5	1	2	2	3	2	3	3	21
2	10	1	3	3	5	4	7	7	42
3	15	2	5	5	8	6	10	10	63
4	21	3	7	7	11	8	14	14	83
5	26	3	9	9	14	10	17	17	104
6	31	4	10	10	16	12	21	21	125
7	36	5	12	12	19	14	24	24	146
8	41	5	14	14	22	16	27	27	167
9	46	6	15	15	25	18	31	31	188
10	51	7	17	17	27	21	34	34	208
11	56	8	19	19	30	23	38	38	229
12	62	8	21	21	33	25	41	41	250
13	67	9	22	22	36	27	44	44	271
14	72	10	24	24	38	29	48	48	292
15	77	10	26	26	41	31	51	51	313
16	82	11	27	27	44	33	55	55	333
17	87	12	29	29	46	35	58	58	354
18	92	12	31	31	49	37	62	62	375
19	97	13	32	32	52	39	65	65	396
20	103	14	34	34	55	41	68	68	417
<b>Sub Watershed #805 Thurman Creek Annual Soil Erosion Reduction(tons)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	13	2	4	4	7	5	9	9	53
2	26	3	9	9	14	10	17	17	106
3	39	5	13	13	21	16	26	26	159
4	52	7	17	17	28	21	35	35	212
5	65	9	22	22	35	26	44	44	266
6	78	10	26	26	42	31	52	52	319

7	91	12	30	30	49	37	61	61	372
8	105	14	35	35	56	42	70	70	425
9	118	16	39	39	63	47	78	78	478
10	131	17	44	44	70	52	87	87	531
11	144	19	48	48	77	57	96	96	584
12	157	21	52	52	84	63	105	105	637
13	170	23	57	57	91	68	113	113	691
14	183	24	61	61	98	73	122	122	744
15	196	26	65	65	105	78	131	131	797
16	209	28	70	70	111	84	139	139	850
17	222	30	74	74	118	89	148	148	903
18	235	31	78	78	125	94	157	157	956
19	248	33	83	83	132	99	165	165	1,009
20	261	35	87	87	139	105	174	174	1,062

**Sub Watershed #901 Turkey Creek Annual Soil Erosion Reduction(tons)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	2	0	1	1	1	1	2	2	10
2	5	1	2	2	3	2	3	3	20
3	7	1	2	2	4	3	5	5	30
4	10	1	3	3	5	4	6	6	39
5	12	2	4	4	6	5	8	8	49
6	15	2	5	5	8	6	10	10	59
7	17	2	6	6	9	7	11	11	69
8	19	3	6	6	10	8	13	13	79
9	22	3	7	7	12	9	15	15	89
10	24	3	8	8	13	10	16	16	99
11	27	4	9	9	14	11	18	18	109
12	29	4	10	10	16	12	19	19	118
13	32	4	11	11	17	13	21	21	128
14	34	5	11	11	18	14	23	23	138
15	36	5	12	12	19	15	24	24	148
16	39	5	13	13	21	16	26	26	158
17	41	6	14	14	22	17	28	28	168
18	44	6	15	15	23	17	29	29	178
19	46	6	15	15	25	18	31	31	188
20	49	6	16	16	26	19	32	32	197



Sub Watershed #502 White Oak Creek Annual Soil Erosion Reduction (tons)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	25	3	8	8	13	10	16	16	100
2	49	7	16	16	26	20	33	33	200
3	74	10	25	25	39	29	49	49	300
4	98	13	33	33	52	39	66	66	400
5	123	16	41	41	66	49	82	82	500
6	147	20	49	49	79	59	98	98	600
7	172	23	57	57	92	69	115	115	700
8	197	26	66	66	105	79	131	131	800
9	221	29	74	74	118	88	147	147	900
10	246	33	82	82	131	98	164	164	999
11	270	36	90	90	144	108	180	180	1,099
12	295	39	98	98	157	118	197	197	1,199
13	320	43	107	107	170	128	213	213	1,299
14	344	46	115	115	184	138	229	229	1,399
15	369	49	123	123	197	147	246	246	1,499
16	393	52	131	131	210	157	262	262	1,599
17	418	56	139	139	223	167	279	279	1,699
18	442	59	147	147	236	177	295	295	1,799
19	467	62	156	156	249	187	311	311	1,899
20	492	66	164	164	262	197	328	328	1,999

## D Cropland Phosphorus Load Reductions by HUC 12

Table 280. Cropland Phosphorus Load Reductions by HUC 12.

Sub Watershed #804 Baynahm Creek Annual Phosphorus Reduction (lbs)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	31	11	19	19	31	23	38	38	210
2	61	23	38	38	61	46	76	76	420
3	92	34	57	57	92	69	115	115	630
4	122	46	76	76	122	92	153	153	840
5	153	57	96	96	153	115	191	191	1,051
6	183	69	115	115	183	138	229	229	1,261
7	214	80	134	134	214	160	267	267	1,471
8	245	92	153	153	245	183	306	306	1,681

9	275	103	172	172	275	206	344	344	1,891
10	306	115	191	191	306	229	382	382	2,101
11	336	126	210	210	336	252	420	420	2,311
12	367	138	229	229	367	275	458	458	2,521
13	397	149	248	248	397	298	497	497	2,732
14	428	160	267	267	428	321	535	535	2,942
15	458	172	287	287	458	344	573	573	3,152
16	489	183	306	306	489	367	611	611	3,362
17	520	195	325	325	520	390	649	649	3,572
18	550	206	344	344	550	413	688	688	3,782
19	581	218	363	363	581	436	726	726	3,992
20	611	229	382	382	611	458	764	764	4,202
<b>Sub Watershed #703 Capps Creek Annual Phosphorus Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	44	17	28	28	44	33	55	55	305
2	89	33	55	55	89	67	111	111	610
3	133	50	83	83	133	100	166	166	914
4	177	67	111	111	177	133	222	222	1,219
5	222	83	139	139	222	166	277	277	1,524
6	266	100	166	166	266	200	333	333	1,829
7	310	116	194	194	310	233	388	388	2,134
8	355	133	222	222	355	266	443	443	2,438
9	399	150	249	249	399	299	499	499	2,743
10	443	166	277	277	443	333	554	554	3,048
11	488	183	305	305	488	366	610	610	3,353
12	532	200	333	333	532	399	665	665	3,658
13	576	216	360	360	576	432	720	720	3,962
14	621	233	388	388	621	466	776	776	4,267
15	665	249	416	416	665	499	831	831	4,572
16	709	266	443	443	709	532	887	887	4,877
17	754	283	471	471	754	565	942	942	5,182
18	798	299	499	499	798	599	998	998	5,486
19	842	316	526	526	842	632	1,053	1,053	5,791
20	887	333	554	554	887	665	1,108	1,108	6,096
<b>Sub Watershed #601 Center Creek Annual Phosphorus Reduction (lbs)</b>									

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	90	34	56	56	90	67	112	112	616
2	179	67	112	112	179	134	224	224	1,233
3	269	101	168	168	269	202	336	336	1,849
4	359	134	224	224	359	269	448	448	2,466
5	448	168	280	280	448	336	560	560	3,082
6	538	202	336	336	538	403	672	672	3,698
7	628	235	392	392	628	471	784	784	4,315
8	717	269	448	448	717	538	897	897	4,931
9	807	303	504	504	807	605	1,009	1,009	5,548
10	897	336	560	560	897	672	1,121	1,121	6,164
11	986	370	616	616	986	740	1,233	1,233	6,780
12	1,076	403	672	672	1,076	807	1,345	1,345	7,397
13	1,166	437	728	728	1,166	874	1,457	1,457	8,013
14	1,255	471	784	784	1,255	941	1,569	1,569	8,629
15	1,345	504	841	841	1,345	1,009	1,681	1,681	9,246
16	1,435	538	897	897	1,435	1,076	1,793	1,793	9,862
17	1,524	572	953	953	1,524	1,143	1,905	1,905	10,479
18	1,614	605	1,009	1,009	1,614	1,210	2,017	2,017	11,095
19	1,703	639	1,065	1,065	1,703	1,278	2,129	2,129	11,711
20	1,793	672	1,121	1,121	1,793	1,345	2,241	2,241	12,328
Sub Watershed #704 Clear Creek Annual Phosphorus Reduction (lbs)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	10	4	6	6	10	7	12	12	66
2	19	7	12	12	19	14	24	24	133
3	29	11	18	18	29	22	36	36	199
4	39	14	24	24	39	29	48	48	266
5	48	18	30	30	48	36	60	60	332
6	58	22	36	36	58	43	72	72	399
7	68	25	42	42	68	51	85	85	465
8	77	29	48	48	77	58	97	97	531
9	87	33	54	54	87	65	109	109	598
10	97	36	60	60	97	72	121	121	664
11	106	40	66	66	106	80	133	133	731
12	116	43	72	72	116	87	145	145	797

13	126	47	78	78	126	94	157	157	863
14	135	51	85	85	135	101	169	169	930
15	145	54	91	91	145	109	181	181	996
16	155	58	97	97	155	116	193	193	1,063
17	164	62	103	103	164	123	205	205	1,129
18	174	65	109	109	174	130	217	217	1,196
19	184	69	115	115	184	138	229	229	1,262
20	193	72	121	121	193	145	242	242	1,328

**Sub Watershed #705 Clear Creek Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	11	4	7	7	11	8	14	14	77
2	22	8	14	14	22	17	28	28	154
3	34	13	21	21	34	25	42	42	231
4	45	17	28	28	45	34	56	56	308
5	56	21	35	35	56	42	70	70	385
6	67	25	42	42	67	50	84	84	462
7	78	29	49	49	78	59	98	98	539
8	90	34	56	56	90	67	112	112	616
9	101	38	63	63	101	76	126	126	693
10	112	42	70	70	112	84	140	140	769
11	123	46	77	77	123	92	154	154	846
12	134	50	84	84	134	101	168	168	923
13	145	55	91	91	145	109	182	182	1,000
14	157	59	98	98	157	118	196	196	1,077
15	168	63	105	105	168	126	210	210	1,154
16	179	67	112	112	179	134	224	224	1,231
17	190	71	119	119	190	143	238	238	1,308
18	201	76	126	126	201	151	252	252	1,385
19	213	80	133	133	213	159	266	266	1,462
20	224	84	140	140	224	168	280	280	1,539

**Sub Watershed #304 Dry Fork Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	85	32	53	53	85	64	106	106	585
2	170	64	106	106	170	128	213	213	1,169

3	255	96	159	159	255	191	319	319	1,754
4	340	128	213	213	340	255	425	425	2,339
5	425	159	266	266	425	319	532	532	2,924
6	510	191	319	319	510	383	638	638	3,508
7	595	223	372	372	595	447	744	744	4,093
8	680	255	425	425	680	510	851	851	4,678
9	765	287	478	478	765	574	957	957	5,263
10	851	319	532	532	851	638	1,063	1,063	5,847
11	936	351	585	585	936	702	1,169	1,169	6,432
12	1,021	383	638	638	1,021	765	1,276	1,276	7,017
13	1,106	415	691	691	1,106	829	1,382	1,382	7,602
14	1,191	447	744	744	1,191	893	1,488	1,488	8,186
15	1,276	478	797	797	1,276	957	1,595	1,595	8,771
16	1,361	510	851	851	1,361	1,021	1,701	1,701	9,356
17	1,446	542	904	904	1,446	1,084	1,807	1,807	9,941
18	1,531	574	957	957	1,531	1,148	1,914	1,914	10,525
19	1,616	606	1,010	1,010	1,616	1,212	2,020	2,020	11,110
20	1,701	638	1,063	1,063	1,701	1,276	2,126	2,126	11,695

**Sub Watershed #305 Dry Fork Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	76	28	47	47	76	57	95	95	522
2	152	57	95	95	152	114	190	190	1,043
3	228	85	142	142	228	171	285	285	1,565
4	304	114	190	190	304	228	379	379	2,087
5	379	142	237	237	379	285	474	474	2,609
6	455	171	285	285	455	341	569	569	3,130
7	531	199	332	332	531	398	664	664	3,652
8	607	228	379	379	607	455	759	759	4,174
9	683	256	427	427	683	512	854	854	4,696
10	759	285	474	474	759	569	949	949	5,217
11	835	313	522	522	835	626	1,043	1,043	5,739
12	911	341	569	569	911	683	1,138	1,138	6,261
13	987	370	617	617	987	740	1,233	1,233	6,783
14	1,062	398	664	664	1,062	797	1,328	1,328	7,304
15	1,138	427	711	711	1,138	854	1,423	1,423	7,826
16	1,214	455	759	759	1,214	911	1,518	1,518	8,348
17	1,290	484	806	806	1,290	968	1,613	1,613	8,870

<b>18</b>	1,366	512	854	854	1,366	1,024	1,707	1,707	9,391
<b>19</b>	1,442	541	901	901	1,442	1,081	1,802	1,802	9,913
<b>20</b>	1,518	569	949	949	1,518	1,138	1,897	1,897	10,435
<b>Sub Watershed #802 Hickory Creek Annual Phosphorus Reduction (lbs)</b>									
<b>Year</b>	<b>No-Till</b>	<b>Cover Crops</b>	<b>Nutrient Mgmt Plan</b>	<b>Cons Crop Rotation</b>	<b>Grassed Waterways</b>	<b>Terraces</b>	<b>Vegetative Buffers</b>	<b>Water Retention Structures</b>	<b>Total</b>
<b>1</b>	3	1	2	2	3	2	3	3	17
<b>2</b>	5	2	3	3	5	4	6	6	35
<b>3</b>	8	3	5	5	8	6	10	10	52
<b>4</b>	10	4	6	6	10	8	13	13	70
<b>5</b>	13	5	8	8	13	10	16	16	87
<b>6</b>	15	6	10	10	15	11	19	19	105
<b>7</b>	18	7	11	11	18	13	22	22	122
<b>8</b>	20	8	13	13	20	15	25	25	140
<b>9</b>	23	9	14	14	23	17	29	29	157
<b>10</b>	25	10	16	16	25	19	32	32	175
<b>11</b>	28	10	17	17	28	21	35	35	192
<b>12</b>	30	11	19	19	30	23	38	38	209
<b>13</b>	33	12	21	21	33	25	41	41	227
<b>14</b>	36	13	22	22	36	27	44	44	244
<b>15</b>	38	14	24	24	38	29	48	48	262
<b>16</b>	41	15	25	25	41	30	51	51	279
<b>17</b>	43	16	27	27	43	32	54	54	297
<b>18</b>	46	17	29	29	46	34	57	57	314
<b>19</b>	48	18	30	30	48	36	60	60	332
<b>20</b>	51	19	32	32	51	38	63	63	349
<b>Sub Watershed #102 Honey Creek Annual Phosphorus Reduction (lbs)</b>									
<b>Year</b>	<b>No-Till</b>	<b>Cover Crops</b>	<b>Nutrient Mgmt Plan</b>	<b>Cons Crop Rotation</b>	<b>Grassed Waterways</b>	<b>Terraces</b>	<b>Vegetative Buffers</b>	<b>Water Retention Structures</b>	<b>Total</b>
<b>1</b>	128	48	80	80	128	96	160	160	881
<b>2</b>	256	96	160	160	256	192	320	320	1,762
<b>3</b>	385	144	240	240	385	288	481	481	2,644
<b>4</b>	513	192	320	320	513	385	641	641	3,525
<b>5</b>	641	240	401	401	641	481	801	801	4,406
<b>6</b>	769	288	481	481	769	577	961	961	5,287
<b>7</b>	897	336	561	561	897	673	1,122	1,122	6,168

8	1,025	385	641	641	1,025	769	1,282	1,282	7,050
9	1,154	433	721	721	1,154	865	1,442	1,442	7,931
10	1,282	481	801	801	1,282	961	1,602	1,602	8,812
11	1,410	529	881	881	1,410	1,057	1,762	1,762	9,693
12	1,538	577	961	961	1,538	1,154	1,923	1,923	10,574
13	1,666	625	1,041	1,041	1,666	1,250	2,083	2,083	11,455
14	1,794	673	1,122	1,122	1,794	1,346	2,243	2,243	12,337
15	1,923	721	1,202	1,202	1,923	1,442	2,403	2,403	13,218
16	2,051	769	1,282	1,282	2,051	1,538	2,563	2,563	14,099
17	2,179	817	1,362	1,362	2,179	1,634	2,724	2,724	14,980
18	2,307	865	1,442	1,442	2,307	1,730	2,884	2,884	15,861
19	2,435	913	1,522	1,522	2,435	1,826	3,044	3,044	16,743
20	2,563	961	1,602	1,602	2,563	1,923	3,204	3,204	17,624

**Sub Watershed #103 Honey Creek Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	39	15	24	24	39	29	49	49	269
2	78	29	49	49	78	59	98	98	539
3	118	44	73	73	118	88	147	147	808
4	157	59	98	98	157	118	196	196	1,078
5	196	73	122	122	196	147	245	245	1,347
6	235	88	147	147	235	176	294	294	1,617
7	274	103	171	171	274	206	343	343	1,886
8	314	118	196	196	314	235	392	392	2,156
9	353	132	220	220	353	265	441	441	2,425
10	392	147	245	245	392	294	490	490	2,694
11	431	162	269	269	431	323	539	539	2,964
12	470	176	294	294	470	353	588	588	3,233
13	509	191	318	318	509	382	637	637	3,503
14	549	206	343	343	549	412	686	686	3,772
15	588	220	367	367	588	441	735	735	4,042
16	627	235	392	392	627	470	784	784	4,311
17	666	250	416	416	666	500	833	833	4,581
18	705	265	441	441	705	529	882	882	4,850
19	745	279	465	465	745	558	931	931	5,119
20	784	294	490	490	784	588	980	980	5,389

**Sub Watershed #603 Jenkins Creek Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	122	46	76	76	122	91	152	152	836
2	243	91	152	152	243	182	304	304	1,671
3	365	137	228	228	365	273	456	456	2,507
4	486	182	304	304	486	365	608	608	3,343
5	608	228	380	380	608	456	760	760	4,178
6	729	273	456	456	729	547	912	912	5,014
7	851	319	532	532	851	638	1,064	1,064	5,849
8	972	365	608	608	972	729	1,215	1,215	6,685
9	1,094	410	684	684	1,094	820	1,367	1,367	7,521
10	1,215	456	760	760	1,215	912	1,519	1,519	8,356
11	1,337	501	836	836	1,337	1,003	1,671	1,671	9,192
12	1,459	547	912	912	1,459	1,094	1,823	1,823	10,028
13	1,580	593	988	988	1,580	1,185	1,975	1,975	10,863
14	1,702	638	1,064	1,064	1,702	1,276	2,127	2,127	11,699
15	1,823	684	1,140	1,140	1,823	1,367	2,279	2,279	12,535
16	1,945	729	1,215	1,215	1,945	1,459	2,431	2,431	13,370
17	2,066	775	1,291	1,291	2,066	1,550	2,583	2,583	14,206
18	2,188	820	1,367	1,367	2,188	1,641	2,735	2,735	15,041
19	2,309	866	1,443	1,443	2,309	1,732	2,887	2,887	15,877
20	2,431	912	1,519	1,519	2,431	1,823	3,039	3,039	16,713
<b>Sub Watershed #604 Jones Creek Annual Phosphorus Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	10	4	6	6	10	8	13	13	69
2	20	8	13	13	20	15	25	25	139
3	30	11	19	19	30	23	38	38	208
4	40	15	25	25	40	30	51	51	278
5	51	19	32	32	51	38	63	63	347
6	61	23	38	38	61	45	76	76	417
7	71	27	44	44	71	53	88	88	486
8	81	30	51	51	81	61	101	101	556
9	91	34	57	57	91	68	114	114	625
10	101	38	63	63	101	76	126	126	695
11	111	42	69	69	111	83	139	139	764
12	121	45	76	76	121	91	152	152	834



13	131	49	82	82	131	99	164	164	903
14	142	53	88	88	142	106	177	177	973
15	152	57	95	95	152	114	190	190	1,042
16	162	61	101	101	162	121	202	202	1,112
17	172	64	107	107	172	129	215	215	1,181
18	182	68	114	114	182	136	227	227	1,251
19	192	72	120	120	192	144	240	240	1,320
20	202	76	126	126	202	152	253	253	1,390

**Sub Watershed #605 Jones Creek Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	18	7	11	11	18	14	23	23	124
2	36	14	23	23	36	27	45	45	248
3	54	20	34	34	54	41	68	68	372
4	72	27	45	45	72	54	90	90	496
5	90	34	56	56	90	68	113	113	620
6	108	41	68	68	108	81	135	135	743
7	126	47	79	79	126	95	158	158	867
8	144	54	90	90	144	108	180	180	991
9	162	61	101	101	162	122	203	203	1,115
10	180	68	113	113	180	135	225	225	1,239
11	198	74	124	124	198	149	248	248	1,363
12	216	81	135	135	216	162	270	270	1,487
13	234	88	146	146	234	176	293	293	1,611
14	252	95	158	158	252	189	315	315	1,735
15	270	101	169	169	270	203	338	338	1,859
16	288	108	180	180	288	216	360	360	1,982
17	306	115	191	191	306	230	383	383	2,106
18	324	122	203	203	324	243	405	405	2,230
19	342	128	214	214	342	257	428	428	2,354
20	360	135	225	225	360	270	451	451	2,478

**Sub Watershed #201 North Fork Spring River Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	15	6	10	10	15	12	19	19	106
2	31	12	19	19	31	23	39	39	213

3	46	17	29	29	46	35	58	58	319
4	62	23	39	39	62	46	77	77	425
5	77	29	48	48	77	58	97	97	531
6	93	35	58	58	93	70	116	116	638
7	108	41	68	68	108	81	135	135	744
8	124	46	77	77	124	93	155	155	850
9	139	52	87	87	139	104	174	174	956
10	155	58	97	97	155	116	193	193	1,063
11	170	64	106	106	170	128	213	213	1,169
12	185	70	116	116	185	139	232	232	1,275
13	201	75	126	126	201	151	251	251	1,382
14	216	81	135	135	216	162	271	271	1,488
15	232	87	145	145	232	174	290	290	1,594
16	247	93	155	155	247	185	309	309	1,700
17	263	99	164	164	263	197	328	328	1,807
18	278	104	174	174	278	209	348	348	1,913
19	294	110	184	184	294	220	367	367	2,019
20	309	116	193	193	309	232	386	386	2,125

**Sub Watershed #202 North Fork Spring River Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	3	1	2	2	3	2	3	3	19
2	5	2	3	3	5	4	7	7	37
3	8	3	5	5	8	6	10	10	56
4	11	4	7	7	11	8	14	14	74
5	14	5	8	8	14	10	17	17	93
6	16	6	10	10	16	12	20	20	112
7	19	7	12	12	19	14	24	24	130
8	22	8	14	14	22	16	27	27	149
9	24	9	15	15	24	18	30	30	167
10	27	10	17	17	27	20	34	34	186
11	30	11	19	19	30	22	37	37	205
12	32	12	20	20	32	24	41	41	223
13	35	13	22	22	35	26	44	44	242
14	38	14	24	24	38	28	47	47	260
15	41	15	25	25	41	30	51	51	279
16	43	16	27	27	43	32	54	54	298
17	46	17	29	29	46	34	57	57	316

18	49	18	30	30	49	37	61	61	335
19	51	19	32	32	51	39	64	64	353
20	54	20	34	34	54	41	68	68	372
Sub Watershed #203 North Fork Spring River Annual Phosphorus Reduction (lbs)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	5	2	3	3	5	4	7	7	37
2	11	4	7	7	11	8	14	14	75
3	16	6	10	10	16	12	20	20	112
4	22	8	14	14	22	16	27	27	150
5	27	10	17	17	27	20	34	34	187
6	33	12	20	20	33	24	41	41	224
7	38	14	24	24	38	29	48	48	262
8	44	16	27	27	44	33	54	54	299
9	49	18	31	31	49	37	61	61	337
10	54	20	34	34	54	41	68	68	374
11	60	22	37	37	60	45	75	75	411
12	65	24	41	41	65	49	82	82	449
13	71	27	44	44	71	53	88	88	486
14	76	29	48	48	76	57	95	95	524
15	82	31	51	51	82	61	102	102	561
16	87	33	54	54	87	65	109	109	598
17	92	35	58	58	92	69	116	116	636
18	98	37	61	61	98	73	122	122	673
19	103	39	65	65	103	78	129	129	711
20	109	41	68	68	109	82	136	136	748
Sub Watershed #206 North Fork Spring River Annual Phosphorus Reduction (lbs)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	4	1	2	2	4	3	5	5	26
2	8	3	5	5	8	6	10	10	52
3	11	4	7	7	11	9	14	14	78
4	15	6	10	10	15	11	19	19	105
5	19	7	12	12	19	14	24	24	131
6	23	9	14	14	23	17	29	29	157
7	27	10	17	17	27	20	33	33	183

8	30	11	19	19	30	23	38	38	209
9	34	13	21	21	34	26	43	43	235
10	38	14	24	24	38	29	48	48	261
11	42	16	26	26	42	31	52	52	287
12	46	17	29	29	46	34	57	57	314
13	49	19	31	31	49	37	62	62	340
14	53	20	33	33	53	40	67	67	366
15	57	21	36	36	57	43	71	71	392
16	61	23	38	38	61	46	76	76	418
17	65	24	40	40	65	48	81	81	444
18	68	26	43	43	68	51	86	86	470
19	72	27	45	45	72	54	90	90	497
20	76	29	48	48	76	57	95	95	523

**Sub Watershed #302 North Fork Spring River Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	16	6	10	10	16	12	20	20	110
2	32	12	20	20	32	24	40	40	220
3	48	18	30	30	48	36	60	60	330
4	64	24	40	40	64	48	80	80	440
5	80	30	50	50	80	60	100	100	549
6	96	36	60	60	96	72	120	120	659
7	112	42	70	70	112	84	140	140	769
8	128	48	80	80	128	96	160	160	879
9	144	54	90	90	144	108	180	180	989
10	160	60	100	100	160	120	200	200	1,099
11	176	66	110	110	176	132	220	220	1,209
12	192	72	120	120	192	144	240	240	1,319
13	208	78	130	130	208	156	260	260	1,429
14	224	84	140	140	224	168	280	280	1,539
15	240	90	150	150	240	180	300	300	1,648
16	256	96	160	160	256	192	320	320	1,758
17	272	102	170	170	272	204	340	340	1,868
18	288	108	180	180	288	216	360	360	1,978
19	304	114	190	190	304	228	380	380	2,088
20	320	120	200	200	320	240	400	400	2,198

**Sub Watershed #306 North Fork Spring River Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	18	7	11	11	18	14	23	23	124
2	36	14	23	23	36	27	45	45	249
3	54	20	34	34	54	41	68	68	373
4	72	27	45	45	72	54	90	90	497
5	90	34	56	56	90	68	113	113	621
6	108	41	68	68	108	81	136	136	746
7	127	47	79	79	127	95	158	158	870
8	145	54	90	90	145	108	181	181	994
9	163	61	102	102	163	122	203	203	1,118
10	181	68	113	113	181	136	226	226	1,243
11	199	75	124	124	199	149	249	249	1,367
12	217	81	136	136	217	163	271	271	1,491
13	235	88	147	147	235	176	294	294	1,615
14	253	95	158	158	253	190	316	316	1,740
15	271	102	169	169	271	203	339	339	1,864
16	289	108	181	181	289	217	362	362	1,988
17	307	115	192	192	307	230	384	384	2,113
18	325	122	203	203	325	244	407	407	2,237
19	343	129	215	215	343	258	429	429	2,361
20	362	136	226	226	362	271	452	452	2,485
Sub Watershed #307 North Fork Spring River Annual Phosphorus Reduction (lbs)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	18	7	11	11	18	13	22	22	122
2	36	13	22	22	36	27	44	44	245
3	53	20	33	33	53	40	67	67	367
4	71	27	44	44	71	53	89	89	489
5	89	33	56	56	89	67	111	111	611
6	107	40	67	67	107	80	133	133	734
7	124	47	78	78	124	93	156	156	856
8	142	53	89	89	142	107	178	178	978
9	160	60	100	100	160	120	200	200	1,100
10	178	67	111	111	178	133	222	222	1,223
11	196	73	122	122	196	147	245	245	1,345
12	213	80	133	133	213	160	267	267	1,467

13	231	87	145	145	231	173	289	289	1,590
14	249	93	156	156	249	187	311	311	1,712
15	267	100	167	167	267	200	333	333	1,834
16	285	107	178	178	285	213	356	356	1,956
17	302	113	189	189	302	227	378	378	2,079
18	320	120	200	200	320	240	400	400	2,201
19	338	127	211	211	338	253	422	422	2,323
20	356	133	222	222	356	267	445	445	2,445
<b>Sub Watershed #311 North Fork Spring River Annual Phosphorus Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	80	30	50	50	80	60	100	100	549
2	160	60	100	100	160	120	200	200	1,099
3	240	90	150	150	240	180	300	300	1,648
4	320	120	200	200	320	240	400	400	2,198
5	400	150	250	250	400	300	499	499	2,747
6	480	180	300	300	480	360	599	599	3,297
7	559	210	350	350	559	420	699	699	3,846
8	639	240	400	400	639	480	799	799	4,396
9	719	270	450	450	719	539	899	899	4,945
10	799	300	499	499	799	599	999	999	5,494
11	879	330	549	549	879	659	1,099	1,099	6,044
12	959	360	599	599	959	719	1,199	1,199	6,593
13	1,039	390	649	649	1,039	779	1,299	1,299	7,143
14	1,119	420	699	699	1,119	839	1,399	1,399	7,692
15	1,199	450	749	749	1,199	899	1,498	1,498	8,242
16	1,279	480	799	799	1,279	959	1,598	1,598	8,791
17	1,359	509	849	849	1,359	1,019	1,698	1,698	9,341
18	1,439	539	899	899	1,439	1,079	1,798	1,798	9,890
19	1,518	569	949	949	1,518	1,139	1,898	1,898	10,439
20	1,598	599	999	999	1,598	1,199	1,998	1,998	10,989
<b>Sub Watershed #706 Shoal, Pogue, and Joyce Creeks Annual Phosphorus Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	0	0	0	0	0	0	1	1	3
2	1	0	1	1	1	1	1	1	7

3	1	1	1	1	1	1	2	2	10
4	2	1	1	1	2	1	2	2	13
5	2	1	2	2	2	2	3	3	17
6	3	1	2	2	3	2	4	4	20
7	3	1	2	2	3	3	4	4	24
8	4	1	2	2	4	3	5	5	27
9	4	2	3	3	4	3	6	6	30
10	5	2	3	3	5	4	6	6	34
11	5	2	3	3	5	4	7	7	37
12	6	2	4	4	6	4	7	7	40
13	6	2	4	4	6	5	8	8	44
14	7	3	4	4	7	5	9	9	47
15	7	3	5	5	7	6	9	9	51
16	8	3	5	5	8	6	10	10	54
17	8	3	5	5	8	6	10	10	57
18	9	3	6	6	9	7	11	11	61
19	9	3	6	6	9	7	12	12	64
20	10	4	6	6	10	7	12	12	67

**Sub Watershed #801 Shoal, Pogue, and Joyce Creeks Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	7	3	5	5	7	5	9	9	50
2	15	5	9	9	15	11	18	18	101
3	22	8	14	14	22	16	27	27	151
4	29	11	18	18	29	22	37	37	201
5	37	14	23	23	37	27	46	46	252
6	44	16	27	27	44	33	55	55	302
7	51	19	32	32	51	38	64	64	352
8	59	22	37	37	59	44	73	73	403
9	66	25	41	41	66	49	82	82	453
10	73	27	46	46	73	55	92	92	503
11	81	30	50	50	81	60	101	101	554
12	88	33	55	55	88	66	110	110	604
13	95	36	60	60	95	71	119	119	655
14	103	38	64	64	103	77	128	128	705
15	110	41	69	69	110	82	137	137	755
16	117	44	73	73	117	88	146	146	806
17	124	47	78	78	124	93	156	156	856

18	132	49	82	82	132	99	165	165	906
19	139	52	87	87	139	104	174	174	957
20	146	55	92	92	146	110	183	183	1,007
Sub Watershed #803 Shoal, Pogue, and Joyce Creeks Annual Phosphorus Reduction (lbs)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	53	20	33	33	53	40	67	67	368
2	107	40	67	67	107	80	134	134	735
3	160	60	100	100	160	120	201	201	1,103
4	214	80	134	134	214	160	267	267	1,471
5	267	100	167	167	267	201	334	334	1,839
6	321	120	201	201	321	241	401	401	2,206
7	374	140	234	234	374	281	468	468	2,574
8	428	160	267	267	428	321	535	535	2,942
9	481	181	301	301	481	361	602	602	3,309
10	535	201	334	334	535	401	669	669	3,677
11	588	221	368	368	588	441	735	735	4,045
12	642	241	401	401	642	481	802	802	4,412
13	695	261	435	435	695	521	869	869	4,780
14	749	281	468	468	749	562	936	936	5,148
15	802	301	501	501	802	602	1,003	1,003	5,516
16	856	321	535	535	856	642	1,070	1,070	5,883
17	909	341	568	568	909	682	1,137	1,137	6,251
18	963	361	602	602	963	722	1,203	1,203	6,619
19	1,016	381	635	635	1,016	762	1,270	1,270	6,986
20	1,070	401	669	669	1,070	802	1,337	1,337	7,354
Sub Watershed #806 Shoal, Pogue, and Joyce Creeks Annual Phosphorus Reduction (lbs)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	40	15	25	25	40	30	50	50	274
2	80	30	50	50	80	60	100	100	549
3	120	45	75	75	120	90	150	150	823
4	160	60	100	100	160	120	200	200	1,098
5	200	75	125	125	200	150	250	250	1,372
6	240	90	150	150	240	180	299	299	1,647
7	279	105	175	175	279	210	349	349	1,921



8	319	120	200	200	319	240	399	399	2,196
9	359	135	225	225	359	269	449	449	2,470
10	399	150	250	250	399	299	499	499	2,745
11	439	165	274	274	439	329	549	549	3,019
12	479	180	299	299	479	359	599	599	3,294
13	519	195	324	324	519	389	649	649	3,568
14	559	210	349	349	559	419	699	699	3,843
15	599	225	374	374	599	449	749	749	4,117
16	639	240	399	399	639	479	798	798	4,391
17	679	255	424	424	679	509	848	848	4,666
18	719	269	449	449	719	539	898	898	4,940
19	759	284	474	474	759	569	948	948	5,215
20	798	299	499	499	798	599	998	998	5,489

**Sub Watershed #101 Spring River Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	137	51	86	86	137	103	171	171	942
2	274	103	171	171	274	206	343	343	1,884
3	411	154	257	257	411	308	514	514	2,826
4	548	206	343	343	548	411	685	685	3,768
5	685	257	428	428	685	514	856	856	4,711
6	822	308	514	514	822	617	1,028	1,028	5,653
7	959	360	600	600	959	719	1,199	1,199	6,595
8	1,096	411	685	685	1,096	822	1,370	1,370	7,537
9	1,233	462	771	771	1,233	925	1,542	1,542	8,479
10	1,370	514	856	856	1,370	1,028	1,713	1,713	9,421
11	1,507	565	942	942	1,507	1,131	1,884	1,884	10,363
12	1,644	617	1,028	1,028	1,644	1,233	2,056	2,056	11,305
13	1,781	668	1,113	1,113	1,781	1,336	2,227	2,227	12,248
14	1,919	719	1,199	1,199	1,919	1,439	2,398	2,398	13,190
15	2,056	771	1,285	1,285	2,056	1,542	2,569	2,569	14,132
16	2,193	822	1,370	1,370	2,193	1,644	2,741	2,741	15,074
17	2,330	874	1,456	1,456	2,330	1,747	2,912	2,912	16,016
18	2,467	925	1,542	1,542	2,467	1,850	3,083	3,083	16,958
19	2,604	976	1,627	1,627	2,604	1,953	3,255	3,255	17,900
20	2,741	1,028	1,713	1,713	2,741	2,056	3,426	3,426	18,842

**Sub Watershed #104 Spring River Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	75	28	47	47	75	56	94	94	517
2	150	56	94	94	150	113	188	188	1,034
3	226	85	141	141	226	169	282	282	1,551
4	301	113	188	188	301	226	376	376	2,068
5	376	141	235	235	376	282	470	470	2,584
6	451	169	282	282	451	338	564	564	3,101
7	526	197	329	329	526	395	658	658	3,618
8	601	226	376	376	601	451	752	752	4,135
9	677	254	423	423	677	507	846	846	4,652
10	752	282	470	470	752	564	940	940	5,169
11	827	310	517	517	827	620	1,034	1,034	5,686
12	902	338	564	564	902	677	1,128	1,128	6,203
13	977	367	611	611	977	733	1,222	1,222	6,720
14	1,053	395	658	658	1,053	789	1,316	1,316	7,237
15	1,128	423	705	705	1,128	846	1,410	1,410	7,753
16	1,203	451	752	752	1,203	902	1,504	1,504	8,270
17	1,278	479	799	799	1,278	959	1,598	1,598	8,787
18	1,353	507	846	846	1,353	1,015	1,692	1,692	9,304
19	1,429	536	893	893	1,429	1,071	1,786	1,786	9,821
20	1,504	564	940	940	1,504	1,128	1,880	1,880	10,338
Sub Watershed #105 Spring River Annual Phosphorus Reduction (lbs)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	29	11	18	18	29	22	36	36	200
2	58	22	36	36	58	44	73	73	400
3	87	33	54	54	87	65	109	109	599
4	116	44	73	73	116	87	145	145	799
5	145	54	91	91	145	109	182	182	999
6	174	65	109	109	174	131	218	218	1,199
7	203	76	127	127	203	153	254	254	1,399
8	232	87	145	145	232	174	291	291	1,598
9	262	98	163	163	262	196	327	327	1,798
10	291	109	182	182	291	218	363	363	1,998
11	320	120	200	200	320	240	400	400	2,198
12	349	131	218	218	349	262	436	436	2,398

13	378	142	236	236	378	283	472	472	2,597
14	407	153	254	254	407	305	509	509	2,797
15	436	163	272	272	436	327	545	545	2,997
16	465	174	291	291	465	349	581	581	3,197
17	494	185	309	309	494	371	618	618	3,397
18	523	196	327	327	523	392	654	654	3,596
19	552	207	345	345	552	414	690	690	3,796
20	581	218	363	363	581	436	727	727	3,996

**Sub Watershed #107 Spring River Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	2	1	1	1	2	2	3	3	16
2	5	2	3	3	5	3	6	6	32
3	7	3	4	4	7	5	9	9	48
4	9	3	6	6	9	7	12	12	63
5	12	4	7	7	12	9	14	14	79
6	14	5	9	9	14	10	17	17	95
7	16	6	10	10	16	12	20	20	111
8	18	7	12	12	18	14	23	23	127
9	21	8	13	13	21	16	26	26	143
10	23	9	14	14	23	17	29	29	159
11	25	10	16	16	25	19	32	32	174
12	28	10	17	17	28	21	35	35	190
13	30	11	19	19	30	22	37	37	206
14	32	12	20	20	32	24	40	40	222
15	35	13	22	22	35	26	43	43	238
16	37	14	23	23	37	28	46	46	254
17	39	15	25	25	39	29	49	49	270
18	42	16	26	26	42	31	52	52	286
19	44	16	27	27	44	33	55	55	301
20	46	17	29	29	46	35	58	58	317

**Sub Watershed #501 Spring River Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	9	3	6	6	9	7	11	11	61
2	18	7	11	11	18	13	22	22	122

3	27	10	17	17	27	20	33	33	183
4	36	13	22	22	36	27	44	44	244
5	44	17	28	28	44	33	56	56	305
6	53	20	33	33	53	40	67	67	367
7	62	23	39	39	62	47	78	78	428
8	71	27	44	44	71	53	89	89	489
9	80	30	50	50	80	60	100	100	550
10	89	33	56	56	89	67	111	111	611
11	98	37	61	61	98	73	122	122	672
12	107	40	67	67	107	80	133	133	733
13	116	43	72	72	116	87	144	144	794
14	124	47	78	78	124	93	155	155	855
15	133	50	83	83	133	100	167	167	916
16	142	53	89	89	142	107	178	178	977
17	151	57	94	94	151	113	189	189	1,038
18	160	60	100	100	160	120	200	200	1,100
19	169	63	106	106	169	127	211	211	1,161
20	178	67	111	111	178	133	222	222	1,222

**Sub Watershed #503 Spring River Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	1	0	1	1	1	1	1	1	7
2	2	1	1	1	2	2	3	3	15
3	3	1	2	2	3	2	4	4	22
4	4	2	3	3	4	3	5	5	29
5	5	2	3	3	5	4	7	7	37
6	6	2	4	4	6	5	8	8	44
7	8	3	5	5	8	6	9	9	52
8	9	3	5	5	9	6	11	11	59
9	10	4	6	6	10	7	12	12	66
10	11	4	7	7	11	8	13	13	74
11	12	4	7	7	12	9	15	15	81
12	13	5	8	8	13	10	16	16	88
13	14	5	9	9	14	10	17	17	96
14	15	6	9	9	15	11	19	19	103
15	16	6	10	10	16	12	20	20	111
16	17	6	11	11	17	13	21	21	118
17	18	7	11	11	18	14	23	23	125

18	19	7	12	12	19	14	24	24	133
19	20	8	13	13	20	15	25	25	140
20	21	8	13	13	21	16	27	27	147
Sub Watershed #505 Spring River Annual Phosphorus Reduction (lbs)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	6	2	4	4	6	4	7	7	40
2	0	0	0	0	0	0	0	0	0
3	6	2	4	4	6	4	7	7	40
4	12	4	7	7	12	9	15	15	80
5	17	7	11	11	17	13	22	22	120
6	23	9	15	15	23	17	29	29	160
7	29	11	18	18	29	22	36	36	199
8	35	13	22	22	35	26	44	44	239
9	41	15	25	25	41	30	51	51	279
10	46	17	29	29	46	35	58	58	319
11	52	20	33	33	52	39	65	65	359
12	58	22	36	36	58	44	73	73	399
13	64	24	40	40	64	48	80	80	439
14	70	26	44	44	70	52	87	87	479
15	75	28	47	47	75	57	94	94	519
16	81	30	51	51	81	61	102	102	559
17	87	33	54	54	87	65	109	109	598
18	93	35	58	58	93	70	116	116	638
19	99	37	62	62	99	74	123	123	678
20	104	39	65	65	104	78	131	131	718
	110	41	69	69	110	83	138	138	
Sub Watershed #506 Spring River Annual Phosphorus Reduction (lbs)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	13	5	8	8	13	10	16	16	91
2	26	10	16	16	26	20	33	33	181
3	40	15	25	25	40	30	49	49	272
4	53	20	33	33	53	40	66	66	362
5	66	25	41	41	66	49	82	82	453
6	79	30	49	49	79	59	99	99	543
7	92	35	58	58	92	69	115	115	634

8	105	40	66	66	105	79	132	132	725
9	119	44	74	74	119	89	148	148	815
10	132	49	82	82	132	99	165	165	906
11	145	54	91	91	145	109	181	181	996
12	158	59	99	99	158	119	198	198	1,087
13	171	64	107	107	171	128	214	214	1,177
14	184	69	115	115	184	138	231	231	1,268
15	198	74	124	124	198	148	247	247	1,359
16	211	79	132	132	211	158	263	263	1,449
17	224	84	140	140	224	168	280	280	1,540
18	237	89	148	148	237	178	296	296	1,630
19	250	94	156	156	250	188	313	313	1,721
20	263	99	165	165	263	198	329	329	1,811

**Sub Watershed #805 Thurman Creek Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	53	20	33	33	53	40	67	67	366
2	107	40	67	67	107	80	133	133	733
3	160	60	100	100	160	120	200	200	1,099
4	213	80	133	133	213	160	266	266	1,465
5	266	100	166	166	266	200	333	333	1,831
6	320	120	200	200	320	240	400	400	2,198
7	373	140	233	233	373	280	466	466	2,564
8	426	160	266	266	426	320	533	533	2,930
9	479	180	300	300	479	360	599	599	3,296
10	533	200	333	333	533	400	666	666	3,663
11	586	220	366	366	586	440	733	733	4,029
12	639	240	400	400	639	479	799	799	4,395
13	693	260	433	433	693	519	866	866	4,761
14	746	280	466	466	746	559	932	932	5,128
15	799	300	499	499	799	599	999	999	5,494
16	852	320	533	533	852	639	1,065	1,065	5,860
17	906	340	566	566	906	679	1,132	1,132	6,226
18	959	360	599	599	959	719	1,199	1,199	6,593
19	1,012	380	633	633	1,012	759	1,265	1,265	6,959
20	1,065	400	666	666	1,065	799	1,332	1,332	7,325

**Sub Watershed #901 Turkey Creek Annual Phosphorus Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	6	2	3	3	6	4	7	7	38
2	11	4	7	7	11	8	14	14	77
3	17	6	10	10	17	13	21	21	115
4	22	8	14	14	22	17	28	28	154
5	28	10	17	17	28	21	35	35	192
6	34	13	21	21	34	25	42	42	231
7	39	15	24	24	39	29	49	49	269
8	45	17	28	28	45	34	56	56	307
9	50	19	31	31	50	38	63	63	346
10	56	21	35	35	56	42	70	70	384
11	61	23	38	38	61	46	77	77	423
12	67	25	42	42	67	50	84	84	461
13	73	27	45	45	73	54	91	91	499
14	78	29	49	49	78	59	98	98	538
15	84	31	52	52	84	63	105	105	576
16	89	34	56	56	89	67	112	112	615
17	95	36	59	59	95	71	119	119	653
18	101	38	63	63	101	75	126	126	692
19	106	40	66	66	106	80	133	133	730
20	112	42	70	70	112	84	140	140	768
<b>Sub Watershed #502 White Oak Creek Annual Phosphorus Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	54	20	34	34	54	41	68	68	374
2	109	41	68	68	109	82	136	136	748
3	163	61	102	102	163	122	204	204	1,122
4	218	82	136	136	218	163	272	272	1,496
5	272	102	170	170	272	204	340	340	1,870
6	326	122	204	204	326	245	408	408	2,244
7	381	143	238	238	381	286	476	476	2,618
8	435	163	272	272	435	326	544	544	2,992
9	490	184	306	306	490	367	612	612	3,366
10	544	204	340	340	544	408	680	680	3,740
11	598	224	374	374	598	449	748	748	4,114
12	653	245	408	408	653	490	816	816	4,488

13	707	265	442	442	707	530	884	884	4,862
14	762	286	476	476	762	571	952	952	5,236
15	816	306	510	510	816	612	1,020	1,020	5,610
16	870	326	544	544	870	653	1,088	1,088	5,984
17	925	347	578	578	925	694	1,156	1,156	6,358
18	979	367	612	612	979	734	1,224	1,224	6,732
19	1,034	388	646	646	1,034	775	1,292	1,292	7,106
20	1,088	408	680	680	1,088	816	1,360	1,360	7,480

## E Cropland Nitrogen Load Reduction Rates by HUC 12

Table 281. Cropland Nitrogen Load Reduction Rates by HUC 12.

Sub Watershed #804 Baynham Creek Annual Nitrogen Reduction (lbs)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	49	29	49	49	78	58	49	97	457
2	97	58	97	97	156	117	97	195	915
3	146	88	146	146	233	175	146	292	1,372
4	195	117	195	195	311	233	195	389	1,829
5	243	146	243	243	389	292	243	486	2,286
6	292	175	292	292	467	350	292	584	2,744
7	341	204	341	341	545	409	341	681	3,201
8	389	233	389	389	623	467	389	778	3,658
9	438	263	438	438	700	525	438	876	4,115
10	486	292	486	486	778	584	486	973	4,573
11	535	321	535	535	856	642	535	1,070	5,030
12	584	350	584	584	934	700	584	1,167	5,487
13	632	379	632	632	1,012	759	632	1,265	5,944
14	681	409	681	681	1,090	817	681	1,362	6,402
15	730	438	730	730	1,167	876	730	1,459	6,859
16	778	467	778	778	1,245	934	778	1,557	7,316
17	827	496	827	827	1,323	992	827	1,654	7,774
18	876	525	876	876	1,401	1,051	876	1,751	8,231
19	924	555	924	924	1,479	1,109	924	1,849	8,688
20	973	584	973	973	1,557	1,167	973	1,946	9,145
Sub Watershed #703 Capps Creek Annual Nitrogen Reduction (lbs)									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total



1	78	47	78	78	125	93	78	156	732
2	156	93	156	156	249	187	156	312	1,464
3	234	140	234	234	374	280	234	467	2,196
4	312	187	312	312	498	374	312	623	2,928
5	389	234	389	389	623	467	389	779	3,660
6	467	280	467	467	748	561	467	935	4,393
7	545	327	545	545	872	654	545	1,090	5,125
8	623	374	623	623	997	748	623	1,246	5,857
9	701	421	701	701	1,122	841	701	1,402	6,589
10	779	467	779	779	1,246	935	779	1,558	7,321
11	857	514	857	857	1,371	1,028	857	1,713	8,053
12	935	561	935	935	1,495	1,122	935	1,869	8,785
13	1,012	607	1,012	1,012	1,620	1,215	1,012	2,025	9,517
14	1,090	654	1,090	1,090	1,745	1,308	1,090	2,181	10,249
15	1,168	701	1,168	1,168	1,869	1,402	1,168	2,336	10,981
16	1,246	748	1,246	1,246	1,994	1,495	1,246	2,492	11,713
17	1,324	794	1,324	1,324	2,118	1,589	1,324	2,648	12,446
18	1,402	841	1,402	1,402	2,243	1,682	1,402	2,804	13,178
19	1,480	888	1,480	1,480	2,368	1,776	1,480	2,960	13,910
20	1,558	935	1,558	1,558	2,492	1,869	1,558	3,115	14,642

**Sub Watershed #601 Center Creek Annual Nitrogen Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	157	94	157	157	252	189	157	315	1,480
2	315	189	315	315	504	378	315	630	2,961
3	472	283	472	472	756	567	472	945	4,441
4	630	378	630	630	1,008	756	630	1,260	5,922
5	787	472	787	787	1,260	945	787	1,575	7,402
6	945	567	945	945	1,512	1,134	945	1,890	8,883
7	1,102	661	1,102	1,102	1,764	1,323	1,102	2,205	10,363
8	1,260	756	1,260	1,260	2,016	1,512	1,260	2,520	11,843
9	1,417	850	1,417	1,417	2,268	1,701	1,417	2,835	13,324
10	1,575	945	1,575	1,575	2,520	1,890	1,575	3,150	14,804
11	1,732	1,039	1,732	1,732	2,772	2,079	1,732	3,465	16,285
12	1,890	1,134	1,890	1,890	3,024	2,268	1,890	3,780	17,765
13	2,047	1,228	2,047	2,047	3,276	2,457	2,047	4,095	19,246
14	2,205	1,323	2,205	2,205	3,528	2,646	2,205	4,410	20,726
15	2,362	1,417	2,362	2,362	3,780	2,835	2,362	4,725	22,206
16	2,520	1,512	2,520	2,520	4,032	3,024	2,520	5,040	23,687

<b>17</b>	2,677	1,606	2,677	2,677	4,284	3,213	2,677	5,355	25,167
<b>18</b>	2,835	1,701	2,835	2,835	4,536	3,402	2,835	5,670	26,648
<b>19</b>	2,992	1,795	2,992	2,992	4,788	3,591	2,992	5,985	28,128
<b>20</b>	3,150	1,890	3,150	3,150	5,040	3,780	3,150	6,300	29,609
<b>Sub Watershed #704 Clear Creek Annual Nitrogen Reduction (lbs)</b>									
<b>Year</b>	<b>No-Till</b>	<b>Cover Crops</b>	<b>Nutrient Mgmt Plan</b>	<b>Cons Crop Rotation</b>	<b>Grassed Waterways</b>	<b>Terraces</b>	<b>Vegetative Buffers</b>	<b>Water Retention Structures</b>	<b>Total</b>
<b>1</b>	17	10	17	17	28	21	17	35	164
<b>2</b>	35	21	35	35	56	42	35	70	327
<b>3</b>	52	31	52	52	84	63	52	104	491
<b>4</b>	70	42	70	70	111	84	70	139	655
<b>5</b>	87	52	87	87	139	104	87	174	818
<b>6</b>	104	63	104	104	167	125	104	209	982
<b>7</b>	122	73	122	122	195	146	122	244	1,146
<b>8</b>	139	84	139	139	223	167	139	279	1,309
<b>9</b>	157	94	157	157	251	188	157	313	1,473
<b>10</b>	174	104	174	174	279	209	174	348	1,637
<b>11</b>	192	115	192	192	306	230	192	383	1,800
<b>12</b>	209	125	209	209	334	251	209	418	1,964
<b>13</b>	226	136	226	226	362	272	226	453	2,128
<b>14</b>	244	146	244	244	390	293	244	488	2,292
<b>15</b>	261	157	261	261	418	313	261	522	2,455
<b>16</b>	279	167	279	279	446	334	279	557	2,619
<b>17</b>	296	178	296	296	474	355	296	592	2,783
<b>18</b>	313	188	313	313	501	376	313	627	2,946
<b>19</b>	331	199	331	331	529	397	331	662	3,110
<b>20</b>	348	209	348	348	557	418	348	697	3,274
<b>Sub Watershed #705 Clear Creek Annual Nitrogen Reduction (lbs)</b>									
<b>Year</b>	<b>No-Till</b>	<b>Cover Crops</b>	<b>Nutrient Mgmt Plan</b>	<b>Cons Crop Rotation</b>	<b>Grassed Waterways</b>	<b>Terraces</b>	<b>Vegetative Buffers</b>	<b>Water Retention Structures</b>	<b>Total</b>
<b>1</b>	19	11	19	19	30	22	19	37	175
<b>2</b>	37	22	37	37	60	45	37	75	350
<b>3</b>	56	34	56	56	89	67	56	112	526
<b>4</b>	75	45	75	75	119	89	75	149	701
<b>5</b>	93	56	93	93	149	112	93	186	876
<b>6</b>	112	67	112	112	179	134	112	224	1,051
<b>7</b>	130	78	130	130	209	157	130	261	1,226
<b>8</b>	149	89	149	149	239	179	149	298	1,401

9	168	101	168	168	268	201	168	335	1,577
10	186	112	186	186	298	224	186	373	1,752
11	205	123	205	205	328	246	205	410	1,927
12	224	134	224	224	358	268	224	447	2,102
13	242	145	242	242	388	291	242	485	2,277
14	261	157	261	261	417	313	261	522	2,453
15	280	168	280	280	447	335	280	559	2,628
16	298	179	298	298	477	358	298	596	2,803
17	317	190	317	317	507	380	317	634	2,978
18	335	201	335	335	537	403	335	671	3,153
19	354	212	354	354	567	425	354	708	3,329
20	373	224	373	373	596	447	373	745	3,504
<b>Sub Watershed #304 Dry Fork Annual Nitrogen Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	182	109	182	182	292	219	182	365	1,714
2	365	219	365	365	584	438	365	730	3,429
3	547	328	547	547	875	657	547	1,094	5,143
4	730	438	730	730	1,167	875	730	1,459	6,858
5	912	547	912	912	1,459	1,094	912	1,824	8,572
6	1,094	657	1,094	1,094	1,751	1,313	1,094	2,189	10,286
7	1,277	766	1,277	1,277	2,043	1,532	1,277	2,553	12,001
8	1,459	875	1,459	1,459	2,335	1,751	1,459	2,918	13,715
9	1,641	985	1,641	1,641	2,626	1,970	1,641	3,283	15,430
10	1,824	1,094	1,824	1,824	2,918	2,189	1,824	3,648	17,144
11	2,006	1,204	2,006	2,006	3,210	2,407	2,006	4,012	18,859
12	2,189	1,313	2,189	2,189	3,502	2,626	2,189	4,377	20,573
13	2,371	1,423	2,371	2,371	3,794	2,845	2,371	4,742	22,287
14	2,553	1,532	2,553	2,553	4,085	3,064	2,553	5,107	24,002
15	2,736	1,641	2,736	2,736	4,377	3,283	2,736	5,472	25,716
16	2,918	1,751	2,918	2,918	4,669	3,502	2,918	5,836	27,431
17	3,101	1,860	3,101	3,101	4,961	3,721	3,101	6,201	29,145
18	3,283	1,970	3,283	3,283	5,253	3,940	3,283	6,566	30,859
19	3,465	2,079	3,465	3,465	5,544	4,158	3,465	6,931	32,574
20	3,648	2,189	3,648	3,648	5,836	4,377	3,648	7,295	34,288
<b>Sub Watershed #305 Dry Fork Annual Nitrogen Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total

1	154	92	154	154	246	185	154	308	1,448
2	308	185	308	308	493	370	308	616	2,895
3	462	277	462	462	739	554	462	924	4,343
4	616	370	616	616	986	739	616	1,232	5,791
5	770	462	770	770	1,232	924	770	1,540	7,238
6	924	554	924	924	1,478	1,109	924	1,848	8,686
7	1,078	647	1,078	1,078	1,725	1,294	1,078	2,156	10,133
8	1,232	739	1,232	1,232	1,971	1,478	1,232	2,464	11,581
9	1,386	832	1,386	1,386	2,218	1,663	1,386	2,772	13,029
10	1,540	924	1,540	1,540	2,464	1,848	1,540	3,080	14,476
11	1,694	1,016	1,694	1,694	2,710	2,033	1,694	3,388	15,924
12	1,848	1,109	1,848	1,848	2,957	2,218	1,848	3,696	17,372
13	2,002	1,201	2,002	2,002	3,203	2,402	2,002	4,004	18,819
14	2,156	1,294	2,156	2,156	3,450	2,587	2,156	4,312	20,267
15	2,310	1,386	2,310	2,310	3,696	2,772	2,310	4,620	21,714
16	2,464	1,478	2,464	2,464	3,942	2,957	2,464	4,928	23,162
17	2,618	1,571	2,618	2,618	4,189	3,142	2,618	5,236	24,610
18	2,772	1,663	2,772	2,772	4,435	3,326	2,772	5,544	26,057
19	2,926	1,756	2,926	2,926	4,682	3,511	2,926	5,852	27,505
20	3,080	1,848	3,080	3,080	4,928	3,696	3,080	6,160	28,953

**Sub Watershed #802 Hickory Creek Annual Nitrogen Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	5	3	5	5	8	6	5	10	46
2	10	6	10	10	16	12	10	19	91
3	15	9	15	15	23	18	15	29	137
4	19	12	19	19	31	23	19	39	183
5	24	15	24	24	39	29	24	49	229
6	29	18	29	29	47	35	29	58	274
7	34	20	34	34	54	41	34	68	320
8	39	23	39	39	62	47	39	78	366
9	44	26	44	44	70	53	44	88	411
10	49	29	49	49	78	58	49	97	457
11	53	32	53	53	86	64	53	107	503
12	58	35	58	58	93	70	58	117	549
13	63	38	63	63	101	76	63	126	594
14	68	41	68	68	109	82	68	136	640
15	73	44	73	73	117	88	73	146	686
16	78	47	78	78	124	93	78	156	731

17	83	50	83	83	132	99	83	165	777
18	88	53	88	88	140	105	88	175	823
19	92	55	92	92	148	111	92	185	869
20	97	58	97	97	156	117	97	195	914
<b>Sub Watershed #102 Honey Creek Annual Nitrogen Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	207	124	207	207	332	249	207	414	1,948
2	414	249	414	414	663	497	414	829	3,895
3	622	373	622	622	995	746	622	1,243	5,843
4	829	497	829	829	1,326	995	829	1,658	7,791
5	1,036	622	1,036	1,036	1,658	1,243	1,036	2,072	9,738
6	1,243	746	1,243	1,243	1,989	1,492	1,243	2,486	11,686
7	1,450	870	1,450	1,450	2,321	1,740	1,450	2,901	13,634
8	1,658	995	1,658	1,658	2,652	1,989	1,658	3,315	15,581
9	1,865	1,119	1,865	1,865	2,984	2,238	1,865	3,730	17,529
10	2,072	1,243	2,072	2,072	3,315	2,486	2,072	4,144	19,477
11	2,279	1,368	2,279	2,279	3,647	2,735	2,279	4,558	21,424
12	2,486	1,492	2,486	2,486	3,978	2,984	2,486	4,973	23,372
13	2,694	1,616	2,694	2,694	4,310	3,232	2,694	5,387	25,320
14	2,901	1,740	2,901	2,901	4,641	3,481	2,901	5,802	27,267
15	3,108	1,865	3,108	3,108	4,973	3,730	3,108	6,216	29,215
16	3,315	1,989	3,315	3,315	5,304	3,978	3,315	6,630	31,162
17	3,522	2,113	3,522	3,522	5,636	4,227	3,522	7,045	33,110
18	3,730	2,238	3,730	3,730	5,967	4,475	3,730	7,459	35,058
19	3,937	2,362	3,937	3,937	6,299	4,724	3,937	7,874	37,005
20	4,144	2,486	4,144	4,144	6,630	4,973	4,144	8,288	38,953
<b>Sub Watershed #103 Honey Creek Annual Nitrogen Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	59	35	59	59	94	71	59	118	554
2	118	71	118	118	189	141	118	236	1,108
3	177	106	177	177	283	212	177	354	1,662
4	236	141	236	236	377	283	236	471	2,215
5	295	177	295	295	471	354	295	589	2,769
6	354	212	354	354	566	424	354	707	3,323
7	412	247	412	412	660	495	412	825	3,877
8	471	283	471	471	754	566	471	943	4,431

9	530	318	530	530	848	636	530	1,061	4,985
10	589	354	589	589	943	707	589	1,178	5,539
11	648	389	648	648	1,037	778	648	1,296	6,092
12	707	424	707	707	1,131	848	707	1,414	6,646
13	766	460	766	766	1,226	919	766	1,532	7,200
14	825	495	825	825	1,320	990	825	1,650	7,754
15	884	530	884	884	1,414	1,061	884	1,768	8,308
16	943	566	943	943	1,508	1,131	943	1,885	8,862
17	1,002	601	1,002	1,002	1,603	1,202	1,002	2,003	9,415
18	1,061	636	1,061	1,061	1,697	1,273	1,061	2,121	9,969
19	1,119	672	1,119	1,119	1,791	1,343	1,119	2,239	10,523
20	1,178	707	1,178	1,178	1,885	1,414	1,178	2,357	11,077

**Sub Watershed #603 Jenkins Creek Annual Nitrogen Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	200	120	200	200	319	240	200	399	1,877
2	399	240	399	399	639	479	399	799	3,753
3	599	359	599	599	958	719	599	1,198	5,630
4	799	479	799	799	1,278	958	799	1,597	7,507
5	998	599	998	998	1,597	1,198	998	1,996	9,383
6	1,198	719	1,198	1,198	1,917	1,437	1,198	2,396	11,260
7	1,398	839	1,398	1,398	2,236	1,677	1,398	2,795	13,137
8	1,597	958	1,597	1,597	2,555	1,917	1,597	3,194	15,013
9	1,797	1,078	1,797	1,797	2,875	2,156	1,797	3,594	16,890
10	1,996	1,198	1,996	1,996	3,194	2,396	1,996	3,993	18,767
11	2,196	1,318	2,196	2,196	3,514	2,635	2,196	4,392	20,643
12	2,396	1,437	2,396	2,396	3,833	2,875	2,396	4,791	22,520
13	2,595	1,557	2,595	2,595	4,153	3,114	2,595	5,191	24,397
14	2,795	1,677	2,795	2,795	4,472	3,354	2,795	5,590	26,273
15	2,995	1,797	2,995	2,995	4,791	3,594	2,995	5,989	28,150
16	3,194	1,917	3,194	3,194	5,111	3,833	3,194	6,389	30,027
17	3,394	2,036	3,394	3,394	5,430	4,073	3,394	6,788	31,903
18	3,594	2,156	3,594	3,594	5,750	4,312	3,594	7,187	33,780
19	3,793	2,276	3,793	3,793	6,069	4,552	3,793	7,587	35,657
20	3,993	2,396	3,993	3,993	6,389	4,791	3,993	7,986	37,533

**Sub Watershed #604 Jones Creek Annual Nitrogen Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
------	---------	-------------	--------------------	--------------------	-------------------	----------	--------------------	----------------------------	-------

1	16	9	16	16	25	19	16	31	146
2	31	19	31	31	50	37	31	62	293
3	47	28	47	47	75	56	47	93	439
4	62	37	62	62	100	75	62	125	585
5	78	47	78	78	125	93	78	156	732
6	93	56	93	93	149	112	93	187	878
7	109	65	109	109	174	131	109	218	1,024
8	125	75	125	125	199	149	125	249	1,170
9	140	84	140	140	224	168	140	280	1,317
10	156	93	156	156	249	187	156	311	1,463
11	171	103	171	171	274	205	171	342	1,609
12	187	112	187	187	299	224	187	374	1,756
13	202	121	202	202	324	243	202	405	1,902
14	218	131	218	218	349	261	218	436	2,048
15	233	140	233	233	374	280	233	467	2,195
16	249	149	249	249	398	299	249	498	2,341
17	265	159	265	265	423	318	265	529	2,487
18	280	168	280	280	448	336	280	560	2,634
19	296	177	296	296	473	355	296	591	2,780
20	311	187	311	311	498	374	311	623	2,926

**Sub Watershed #605 Jones Creek Annual Nitrogen Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	30	18	30	30	49	36	30	61	285
2	61	36	61	61	97	73	61	121	571
3	91	55	91	91	146	109	91	182	856
4	121	73	121	121	194	146	121	243	1,141
5	152	91	152	152	243	182	152	304	1,427
6	182	109	182	182	291	219	182	364	1,712
7	212	127	212	212	340	255	212	425	1,997
8	243	146	243	243	389	291	243	486	2,283
9	273	164	273	273	437	328	273	546	2,568
10	304	182	304	304	486	364	304	607	2,853
11	334	200	334	334	534	401	334	668	3,139
12	364	219	364	364	583	437	364	729	3,424
13	395	237	395	395	631	474	395	789	3,709
14	425	255	425	425	680	510	425	850	3,995
15	455	273	455	455	729	546	455	911	4,280
16	486	291	486	486	777	583	486	971	4,566

17	516	310	516	516	826	619	516	1,032	4,851
18	546	328	546	546	874	656	546	1,093	5,136
19	577	346	577	577	923	692	577	1,154	5,422
20	607	364	607	607	971	729	607	1,214	5,707
<b>Sub Watershed #201 North Fork Spring River Annual Nitrogen Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	40	24	40	40	64	48	40	80	376
2	80	48	80	80	128	96	80	160	753
3	120	72	120	120	192	144	120	240	1,129
4	160	96	160	160	256	192	160	320	1,505
5	200	120	200	200	320	240	200	400	1,882
6	240	144	240	240	384	288	240	480	2,258
7	280	168	280	280	448	336	280	561	2,634
8	320	192	320	320	512	384	320	641	3,011
9	360	216	360	360	577	432	360	721	3,387
10	400	240	400	400	641	480	400	801	3,763
11	440	264	440	440	705	528	440	881	4,140
12	480	288	480	480	769	577	480	961	4,516
13	520	312	520	520	833	625	520	1,041	4,893
14	561	336	561	561	897	673	561	1,121	5,269
15	601	360	601	601	961	721	601	1,201	5,645
16	641	384	641	641	1,025	769	641	1,281	6,022
17	681	408	681	681	1,089	817	681	1,361	6,398
18	721	432	721	721	1,153	865	721	1,441	6,774
19	761	456	761	761	1,217	913	761	1,521	7,151
20	801	480	801	801	1,281	961	801	1,601	7,527
<b>Sub Watershed #202 North Fork Spring River Annual Nitrogen Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	7	4	7	7	11	8	7	14	64
2	14	8	14	14	22	16	14	27	127
3	20	12	20	20	32	24	20	41	191
4	27	16	27	27	43	32	27	54	254
5	34	20	34	34	54	41	34	68	318
6	41	24	41	41	65	49	41	81	382
7	47	28	47	47	76	57	47	95	445
8	54	32	54	54	87	65	54	108	509



9	61	37	61	61	97	73	61	122	573
10	68	41	68	68	108	81	68	135	636
11	74	45	74	74	119	89	74	149	700
12	81	49	81	81	130	97	81	162	763
13	88	53	88	88	141	106	88	176	827
14	95	57	95	95	152	114	95	189	891
15	102	61	102	102	162	122	102	203	954
16	108	65	108	108	173	130	108	217	1,018
17	115	69	115	115	184	138	115	230	1,081
18	122	73	122	122	195	146	122	244	1,145
19	129	77	129	129	206	154	129	257	1,209
20	135	81	135	135	217	162	135	271	1,272

**Sub Watershed #203 North Fork Spring River Annual Nitrogen Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	12	7	12	12	19	14	12	23	110
2	23	14	23	23	37	28	23	47	220
3	35	21	35	35	56	42	35	70	329
4	47	28	47	47	75	56	47	93	439
5	58	35	58	58	93	70	58	117	549
6	70	42	70	70	112	84	70	140	659
7	82	49	82	82	131	98	82	163	768
8	93	56	93	93	149	112	93	187	878
9	105	63	105	105	168	126	105	210	988
10	117	70	117	117	187	140	117	234	1,098
11	128	77	128	128	206	154	128	257	1,207
12	140	84	140	140	224	168	140	280	1,317
13	152	91	152	152	243	182	152	304	1,427
14	163	98	163	163	262	196	163	327	1,537
15	175	105	175	175	280	210	175	350	1,646
16	187	112	187	187	299	224	187	374	1,756
17	199	119	199	199	318	238	199	397	1,866
18	210	126	210	210	336	252	210	420	1,976
19	222	133	222	222	355	266	222	444	2,085
20	234	140	234	234	374	280	234	467	2,195

**Sub Watershed #206 North Fork Spring River Annual Nitrogen Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
------	---------	-------------	--------------------	--------------------	-------------------	----------	--------------------	----------------------------	-------

1	7	4	7	7	12	9	7	14	68
2	14	9	14	14	23	17	14	29	136
3	22	13	22	22	35	26	22	43	204
4	29	17	29	29	46	35	29	58	272
5	36	22	36	36	58	43	36	72	340
6	43	26	43	43	69	52	43	87	408
7	51	30	51	51	81	61	51	101	476
8	58	35	58	58	93	69	58	116	543
9	65	39	65	65	104	78	65	130	611
10	72	43	72	72	116	87	72	145	679
11	79	48	79	79	127	95	79	159	747
12	87	52	87	87	139	104	87	173	815
13	94	56	94	94	150	113	94	188	883
14	101	61	101	101	162	121	101	202	951
15	108	65	108	108	173	130	108	217	1,019
16	116	69	116	116	185	139	116	231	1,087
17	123	74	123	123	197	147	123	246	1,155
18	130	78	130	130	208	156	130	260	1,223
19	137	82	137	137	220	165	137	275	1,291
20	145	87	145	145	231	173	145	289	1,359

**Sub Watershed #302 North Fork Spring River Annual Nitrogen Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	32	19	32	32	51	38	32	63	298
2	63	38	63	63	101	76	63	127	595
3	95	57	95	95	152	114	95	190	893
4	127	76	127	127	203	152	127	253	1,191
5	158	95	158	158	253	190	158	317	1,488
6	190	114	190	190	304	228	190	380	1,786
7	222	133	222	222	355	266	222	443	2,083
8	253	152	253	253	405	304	253	507	2,381
9	285	171	285	285	456	342	285	570	2,679
10	317	190	317	317	507	380	317	633	2,976
11	348	209	348	348	557	418	348	697	3,274
12	380	228	380	380	608	456	380	760	3,572
13	412	247	412	412	659	494	412	823	3,869
14	443	266	443	443	709	532	443	887	4,167
15	475	285	475	475	760	570	475	950	4,464
16	507	304	507	507	811	608	507	1,013	4,762

17	538	323	538	538	861	646	538	1,077	5,060
18	570	342	570	570	912	684	570	1,140	5,357
19	602	361	602	602	963	722	602	1,203	5,655
20	633	380	633	633	1,013	760	633	1,267	5,953
<b>Sub Watershed #306 North Fork Spring River Annual Nitrogen Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	39	23	39	39	63	47	39	78	367
2	78	47	78	78	125	94	78	156	735
3	117	70	117	117	188	141	117	234	1,102
4	156	94	156	156	250	188	156	313	1,469
5	195	117	195	195	313	234	195	391	1,837
6	234	141	234	234	375	281	234	469	2,204
7	274	164	274	274	438	328	274	547	2,572
8	313	188	313	313	500	375	313	625	2,939
9	352	211	352	352	563	422	352	703	3,306
10	391	234	391	391	625	469	391	782	3,674
11	430	258	430	430	688	516	430	860	4,041
12	469	281	469	469	750	563	469	938	4,408
13	508	305	508	508	813	610	508	1,016	4,776
14	547	328	547	547	875	657	547	1,094	5,143
15	586	352	586	586	938	703	586	1,172	5,511
16	625	375	625	625	1,000	750	625	1,251	5,878
17	664	399	664	664	1,063	797	664	1,329	6,245
18	703	422	703	703	1,126	844	703	1,407	6,613
19	743	446	743	743	1,188	891	743	1,485	6,980
20	782	469	782	782	1,251	938	782	1,563	7,347
<b>Sub Watershed #307 North Fork Spring River Annual Nitrogen Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	35	21	35	35	56	42	35	70	331
2	70	42	70	70	113	85	70	141	662
3	106	63	106	106	169	127	106	211	994
4	141	85	141	141	226	169	141	282	1,325
5	176	106	176	176	282	211	176	352	1,656
6	211	127	211	211	338	254	211	423	1,987
7	247	148	247	247	395	296	247	493	2,319
8	282	169	282	282	451	338	282	564	2,650

9	317	190	317	317	507	381	317	634	2,981
10	352	211	352	352	564	423	352	705	3,312
11	388	233	388	388	620	465	388	775	3,644
12	423	254	423	423	677	507	423	846	3,975
13	458	275	458	458	733	550	458	916	4,306
14	493	296	493	493	789	592	493	987	4,637
15	529	317	529	529	846	634	529	1,057	4,969
16	564	338	564	564	902	677	564	1,128	5,300
17	599	359	599	599	958	719	599	1,198	5,631
18	634	381	634	634	1,015	761	634	1,269	5,962
19	670	402	670	670	1,071	803	670	1,339	6,293
20	705	423	705	705	1,128	846	705	1,410	6,625
<b>Sub Watershed #311 North Fork Spring River Annual Nitrogen Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	163	98	163	163	261	196	163	327	1,536
2	327	196	327	327	523	392	327	653	3,071
3	490	294	490	490	784	588	490	980	4,607
4	653	392	653	653	1,045	784	653	1,307	6,142
5	817	490	817	817	1,307	980	817	1,634	7,678
6	980	588	980	980	1,568	1,176	980	1,960	9,213
7	1,143	686	1,143	1,143	1,830	1,372	1,143	2,287	10,749
8	1,307	784	1,307	1,307	2,091	1,568	1,307	2,614	12,284
9	1,470	882	1,470	1,470	2,352	1,764	1,470	2,940	13,820
10	1,634	980	1,634	1,634	2,614	1,960	1,634	3,267	15,355
11	1,797	1,078	1,797	1,797	2,875	2,156	1,797	3,594	16,891
12	1,960	1,176	1,960	1,960	3,136	2,352	1,960	3,921	18,427
13	2,124	1,274	2,124	2,124	3,398	2,548	2,124	4,247	19,962
14	2,287	1,372	2,287	2,287	3,659	2,744	2,287	4,574	21,498
15	2,450	1,470	2,450	2,450	3,921	2,940	2,450	4,901	23,033
16	2,614	1,568	2,614	2,614	4,182	3,136	2,614	5,227	24,569
17	2,777	1,666	2,777	2,777	4,443	3,332	2,777	5,554	26,104
18	2,940	1,764	2,940	2,940	4,705	3,528	2,940	5,881	27,640
19	3,104	1,862	3,104	3,104	4,966	3,725	3,104	6,208	29,175
20	3,267	1,960	3,267	3,267	5,227	3,921	3,267	6,534	30,711
<b>Sub Watershed #706 Shoal, Pogue, and Joyce Creeks Annual Nitrogen Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total

1	1	0	1	1	1	1	1	2	8
2	2	1	2	2	3	2	2	3	15
3	2	1	2	2	4	3	2	5	23
4	3	2	3	3	5	4	3	7	31
5	4	2	4	4	7	5	4	8	38
6	5	3	5	5	8	6	5	10	46
7	6	3	6	6	9	7	6	11	54
8	7	4	7	7	10	8	7	13	61
9	7	4	7	7	12	9	7	15	69
10	8	5	8	8	13	10	8	16	76
11	9	5	9	9	14	11	9	18	84
12	10	6	10	10	16	12	10	20	92
13	11	6	11	11	17	13	11	21	99
14	11	7	11	11	18	14	11	23	107
15	12	7	12	12	20	15	12	24	115
16	13	8	13	13	21	16	13	26	122
17	14	8	14	14	22	17	14	28	130
18	15	9	15	15	23	18	15	29	138
19	15	9	15	15	25	19	15	31	145
20	16	10	16	16	26	20	16	33	153

**Sub Watershed #801 Shoal, Pogue, and Joyce Creek Annual Nitrogen Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	12	7	12	12	20	15	12	25	117
2	25	15	25	25	40	30	25	50	235
3	37	22	37	37	60	45	37	75	352
4	50	30	50	50	80	60	50	100	469
5	62	37	62	62	100	75	62	125	586
6	75	45	75	75	120	90	75	150	704
7	87	52	87	87	140	105	87	175	821
8	100	60	100	100	160	120	100	200	938
9	112	67	112	112	180	135	112	225	1,055
10	125	75	125	125	200	150	125	250	1,173
11	137	82	137	137	220	165	137	274	1,290
12	150	90	150	150	240	180	150	299	1,407
13	162	97	162	162	259	195	162	324	1,524
14	175	105	175	175	279	210	175	349	1,642
15	187	112	187	187	299	225	187	374	1,759
16	200	120	200	200	319	240	200	399	1,876

17	212	127	212	212	339	254	212	424	1,994
18	225	135	225	225	359	269	225	449	2,111
19	237	142	237	237	379	284	237	474	2,228
20	250	150	250	250	399	299	250	499	2,345
<b>Sub Watershed #803 Shoal, Pogue, and Joyce Creek Annual Nitrogen Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	91	55	91	91	145	109	91	182	854
2	182	109	182	182	291	218	182	364	1,709
3	273	164	273	273	436	327	273	545	2,563
4	364	218	364	364	582	436	364	727	3,418
5	454	273	454	454	727	545	454	909	4,272
6	545	327	545	545	873	654	545	1,091	5,126
7	636	382	636	636	1,018	763	636	1,272	5,981
8	727	436	727	727	1,163	873	727	1,454	6,835
9	818	491	818	818	1,309	982	818	1,636	7,690
10	909	545	909	909	1,454	1,091	909	1,818	8,544
11	1,000	600	1,000	1,000	1,600	1,200	1,000	2,000	9,398
12	1,091	654	1,091	1,091	1,745	1,309	1,091	2,181	10,253
13	1,182	709	1,182	1,182	1,891	1,418	1,182	2,363	11,107
14	1,272	763	1,272	1,272	2,036	1,527	1,272	2,545	11,961
15	1,363	818	1,363	1,363	2,181	1,636	1,363	2,727	12,816
16	1,454	873	1,454	1,454	2,327	1,745	1,454	2,909	13,670
17	1,545	927	1,545	1,545	2,472	1,854	1,545	3,090	14,525
18	1,636	982	1,636	1,636	2,618	1,963	1,636	3,272	15,379
19	1,727	1,036	1,727	1,727	2,763	2,072	1,727	3,454	16,233
20	1,818	1,091	1,818	1,818	2,909	2,181	1,818	3,636	17,088
<b>Sub Watershed #806 Shoal, Pogue, and Joyce Creeks Annual Nitrogen Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	95	57	95	95	152	114	95	190	894
2	190	114	190	190	304	228	190	381	1,789
3	285	171	285	285	457	343	285	571	2,683
4	381	228	381	381	609	457	381	761	3,577
5	476	285	476	476	761	571	476	951	4,472
6	571	343	571	571	913	685	571	1,142	5,366
7	666	400	666	666	1,066	799	666	1,332	6,260
8	761	457	761	761	1,218	913	761	1,522	7,155

9	856	514	856	856	1,370	1,028	856	1,713	8,049
10	951	571	951	951	1,522	1,142	951	1,903	8,943
11	1,047	628	1,047	1,047	1,674	1,256	1,047	2,093	9,838
12	1,142	685	1,142	1,142	1,827	1,370	1,142	2,283	10,732
13	1,237	742	1,237	1,237	1,979	1,484	1,237	2,474	11,626
14	1,332	799	1,332	1,332	2,131	1,598	1,332	2,664	12,521
15	1,427	856	1,427	1,427	2,283	1,713	1,427	2,854	13,415
16	1,522	913	1,522	1,522	2,436	1,827	1,522	3,045	14,309
17	1,617	970	1,617	1,617	2,588	1,941	1,617	3,235	15,204
18	1,713	1,028	1,713	1,713	2,740	2,055	1,713	3,425	16,098
19	1,808	1,085	1,808	1,808	2,892	2,169	1,808	3,615	16,992
20	1,903	1,142	1,903	1,903	3,045	2,283	1,903	3,806	17,887
<b>Sub Watershed #101 Spring River Annual Nitrogen Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	233	140	233	233	373	280	233	467	2,193
2	467	280	467	467	747	560	467	933	4,387
3	700	420	700	700	1,120	840	700	1,400	6,580
4	933	560	933	933	1,493	1,120	933	1,867	8,773
5	1,167	700	1,167	1,167	1,867	1,400	1,167	2,333	10,967
6	1,400	840	1,400	1,400	2,240	1,680	1,400	2,800	13,160
7	1,633	980	1,633	1,633	2,613	1,960	1,633	3,267	15,353
8	1,867	1,120	1,867	1,867	2,987	2,240	1,867	3,733	17,547
9	2,100	1,260	2,100	2,100	3,360	2,520	2,100	4,200	19,740
10	2,333	1,400	2,333	2,333	3,733	2,800	2,333	4,667	21,933
11	2,567	1,540	2,567	2,567	4,107	3,080	2,567	5,133	24,127
12	2,800	1,680	2,800	2,800	4,480	3,360	2,800	5,600	26,320
13	3,033	1,820	3,033	3,033	4,853	3,640	3,033	6,067	28,513
14	3,267	1,960	3,267	3,267	5,227	3,920	3,267	6,533	30,707
15	3,500	2,100	3,500	3,500	5,600	4,200	3,500	7,000	32,900
16	3,733	2,240	3,733	3,733	5,973	4,480	3,733	7,467	35,093
17	3,967	2,380	3,967	3,967	6,347	4,760	3,967	7,933	37,286
18	4,200	2,520	4,200	4,200	6,720	5,040	4,200	8,400	39,480
19	4,433	2,660	4,433	4,433	7,093	5,320	4,433	8,867	41,673
20	4,667	2,800	4,667	4,667	7,467	5,600	4,667	9,333	43,866
<b>Sub Watershed #104 Spring River Annual Nitrogen Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total

1	117	70	117	117	187	140	117	234	1,100
2	234	140	234	234	375	281	234	468	2,200
3	351	211	351	351	562	421	351	702	3,300
4	468	281	468	468	749	562	468	936	4,401
5	585	351	585	585	936	702	585	1,170	5,501
6	702	421	702	702	1,124	843	702	1,404	6,601
7	819	492	819	819	1,311	983	819	1,639	7,701
8	936	562	936	936	1,498	1,124	936	1,873	8,801
9	1,053	632	1,053	1,053	1,685	1,264	1,053	2,107	9,901
10	1,170	702	1,170	1,170	1,873	1,404	1,170	2,341	11,001
11	1,287	772	1,287	1,287	2,060	1,545	1,287	2,575	12,102
12	1,404	843	1,404	1,404	2,247	1,685	1,404	2,809	13,202
13	1,521	913	1,521	1,521	2,434	1,826	1,521	3,043	14,302
14	1,639	983	1,639	1,639	2,622	1,966	1,639	3,277	15,402
15	1,756	1,053	1,756	1,756	2,809	2,107	1,756	3,511	16,502
16	1,873	1,124	1,873	1,873	2,996	2,247	1,873	3,745	17,602
17	1,990	1,194	1,990	1,990	3,183	2,388	1,990	3,979	18,702
18	2,107	1,264	2,107	2,107	3,371	2,528	2,107	4,213	19,803
19	2,224	1,334	2,224	2,224	3,558	2,668	2,224	4,447	20,903
20	2,341	1,404	2,341	2,341	3,745	2,809	2,341	4,681	22,003

**Sub Watershed #105 Spring River Annual Nitrogen Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	46	28	46	46	74	55	46	92	433
2	92	55	92	92	147	111	92	184	866
3	138	83	138	138	221	166	138	276	1,299
4	184	111	184	184	295	221	184	368	1,732
5	230	138	230	230	368	276	230	461	2,164
6	276	166	276	276	442	332	276	553	2,597
7	322	193	322	322	516	387	322	645	3,030
8	368	221	368	368	589	442	368	737	3,463
9	414	249	414	414	663	497	414	829	3,896
10	461	276	461	461	737	553	461	921	4,329
11	507	304	507	507	810	608	507	1,013	4,762
12	553	332	553	553	884	663	553	1,105	5,195
13	599	359	599	599	958	718	599	1,197	5,627
14	645	387	645	645	1,032	774	645	1,289	6,060
15	691	414	691	691	1,105	829	691	1,382	6,493
16	737	442	737	737	1,179	884	737	1,474	6,926



<b>17</b>	783	470	783	783	1,253	939	783	1,566	7,359
<b>18</b>	829	497	829	829	1,326	995	829	1,658	7,792
<b>19</b>	875	525	875	875	1,400	1,050	875	1,750	8,225
<b>20</b>	921	553	921	921	1,474	1,105	921	1,842	8,658
<b>Sub Watershed #107 Spring River Annual Nitrogen Reduction (lbs)</b>									
<b>Year</b>	<b>No-Till</b>	<b>Cover Crops</b>	<b>Nutrient Mgmt Plan</b>	<b>Cons Crop Rotation</b>	<b>Grassed Waterways</b>	<b>Terraces</b>	<b>Vegetative Buffers</b>	<b>Water Retention Structures</b>	<b>Total</b>
<b>1</b>	4	2	4	4	7	5	4	8	39
<b>2</b>	8	5	8	8	13	10	8	16	77
<b>3</b>	12	7	12	12	20	15	12	25	116
<b>4</b>	16	10	16	16	26	20	16	33	154
<b>5</b>	21	12	21	21	33	25	21	41	193
<b>6</b>	25	15	25	25	39	30	25	49	232
<b>7</b>	29	17	29	29	46	35	29	58	270
<b>8</b>	33	20	33	33	53	39	33	66	309
<b>9</b>	37	22	37	37	59	44	37	74	347
<b>10</b>	41	25	41	41	66	49	41	82	386
<b>11</b>	45	27	45	45	72	54	45	90	425
<b>12</b>	49	30	49	49	79	59	49	99	463
<b>13</b>	53	32	53	53	85	64	53	107	502
<b>14</b>	58	35	58	58	92	69	58	115	541
<b>15</b>	62	37	62	62	99	74	62	123	579
<b>16</b>	66	39	66	66	105	79	66	131	618
<b>17</b>	70	42	70	70	112	84	70	140	656
<b>18</b>	74	44	74	74	118	89	74	148	695
<b>19</b>	78	47	78	78	125	94	78	156	734
<b>20</b>	82	49	82	82	131	99	82	164	772
<b>Sub Watershed #501 Spring River Annual Nitrogen Reduction (lbs)</b>									
<b>Year</b>	<b>No-Till</b>	<b>Cover Crops</b>	<b>Nutrient Mgmt Plan</b>	<b>Cons Crop Rotation</b>	<b>Grassed Waterways</b>	<b>Terraces</b>	<b>Vegetative Buffers</b>	<b>Water Retention Structures</b>	<b>Total</b>
<b>1</b>	15	9	15	15	24	18	15	31	144
<b>2</b>	31	18	31	31	49	37	31	61	287
<b>3</b>	46	27	46	46	73	55	46	92	431
<b>4</b>	61	37	61	61	98	73	61	122	574
<b>5</b>	76	46	76	76	122	92	76	153	718
<b>6</b>	92	55	92	92	147	110	92	183	862
<b>7</b>	107	64	107	107	171	128	107	214	1,005
<b>8</b>	122	73	122	122	196	147	122	244	1,149

9	137	82	137	137	220	165	137	275	1,292
10	153	92	153	153	244	183	153	306	1,436
11	168	101	168	168	269	202	168	336	1,580
12	183	110	183	183	293	220	183	367	1,723
13	199	119	199	199	318	238	199	397	1,867
14	214	128	214	214	342	257	214	428	2,010
15	229	137	229	229	367	275	229	458	2,154
16	244	147	244	244	391	293	244	489	2,298
17	260	156	260	260	416	312	260	519	2,441
18	275	165	275	275	440	330	275	550	2,585
19	290	174	290	290	464	348	290	580	2,728
20	306	183	306	306	489	367	306	611	2,872

**Sub Watershed #503 Spring River Annual Nitrogen Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	2	1	2	2	3	2	2	4	17
2	4	2	4	4	6	4	4	7	34
3	5	3	5	5	9	7	5	11	51
4	7	4	7	7	12	9	7	14	68
5	9	5	9	9	14	11	9	18	85
6	11	7	11	11	17	13	11	22	102
7	13	8	13	13	20	15	13	25	119
8	14	9	14	14	23	17	14	29	136
9	16	10	16	16	26	20	16	33	153
10	18	11	18	18	29	22	18	36	170
11	20	12	20	20	32	24	20	40	187
12	22	13	22	22	35	26	22	43	204
13	24	14	24	24	38	28	24	47	221
14	25	15	25	25	41	30	25	51	238
15	27	16	27	27	43	33	27	54	255
16	29	17	29	29	46	35	29	58	272
17	31	18	31	31	49	37	31	62	290
18	33	20	33	33	52	39	33	65	307
19	34	21	34	34	55	41	34	69	324
20	36	22	36	36	58	43	36	72	341

**Sub Watershed #505 Spring River Annual Nitrogen Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
------	---------	-------------	--------------------	--------------------	-------------------	----------	--------------------	----------------------------	-------

1	12	7	12	12	18	14	12	23	109
2	12	7	12	12	18	14	12	23	109
3	23	14	23	23	37	28	23	46	217
4	35	21	35	35	55	42	35	69	326
5	46	28	46	46	74	55	46	92	435
6	58	35	58	58	92	69	58	116	543
7	69	42	69	69	111	83	69	139	652
8	81	49	81	81	129	97	81	162	761
9	92	55	92	92	148	111	92	185	869
10	104	62	104	104	166	125	104	208	978
11	116	69	116	116	185	139	116	231	1,087
12	127	76	127	127	203	153	127	254	1,195
13	139	83	139	139	222	166	139	277	1,304
14	150	90	150	150	240	180	150	301	1,413
15	162	97	162	162	259	194	162	324	1,522
16	173	104	173	173	277	208	173	347	1,630
17	185	111	185	185	296	222	185	370	1,739
18	197	118	197	197	314	236	197	393	1,848
19	208	125	208	208	333	250	208	416	1,956
20	220	132	220	220	351	264	220	439	

**Sub Watershed #506 Spring River Annual Nitrogen Reduction (lbs)**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	27	16	27	27	43	32	27	53	250
2	53	32	53	53	85	64	53	106	500
3	80	48	80	80	128	96	80	159	750
4	106	64	106	106	170	128	106	213	999
5	133	80	133	133	213	159	133	266	1,249
6	159	96	159	159	255	191	159	319	1,499
7	186	112	186	186	298	223	186	372	1,749
8	213	128	213	213	340	255	213	425	1,999
9	239	144	239	239	383	287	239	478	2,249
10	266	159	266	266	425	319	266	532	2,499
11	292	175	292	292	468	351	292	585	2,749
12	319	191	319	319	510	383	319	638	2,998
13	346	207	346	346	553	415	346	691	3,248
14	372	223	372	372	595	447	372	744	3,498
15	399	239	399	399	638	478	399	797	3,748
16	425	255	425	425	680	510	425	851	3,998

17	452	271	452	452	723	542	452	904	4,248
18	478	287	478	478	766	574	478	957	4,498
19	505	303	505	505	808	606	505	1,010	4,747
20	532	319	532	532	851	638	532	1,063	4,997
<b>Sub Watershed #805 Thurman Creek Annual Nitrogen Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	104	62	104	104	166	125	104	208	976
2	208	125	208	208	332	249	208	415	1,953
3	312	187	312	312	499	374	312	623	2,929
4	415	249	415	415	665	499	415	831	3,906
5	519	312	519	519	831	623	519	1,039	4,882
6	623	374	623	623	997	748	623	1,246	5,858
7	727	436	727	727	1,163	873	727	1,454	6,835
8	831	499	831	831	1,330	997	831	1,662	7,811
9	935	561	935	935	1,496	1,122	935	1,870	8,788
10	1,039	623	1,039	1,039	1,662	1,246	1,039	2,077	9,764
11	1,143	686	1,143	1,143	1,828	1,371	1,143	2,285	10,740
12	1,246	748	1,246	1,246	1,994	1,496	1,246	2,493	11,717
13	1,350	810	1,350	1,350	2,161	1,620	1,350	2,701	12,693
14	1,454	873	1,454	1,454	2,327	1,745	1,454	2,908	13,670
15	1,558	935	1,558	1,558	2,493	1,870	1,558	3,116	14,646
16	1,662	997	1,662	1,662	2,659	1,994	1,662	3,324	15,622
17	1,766	1,059	1,766	1,766	2,825	2,119	1,766	3,532	16,599
18	1,870	1,122	1,870	1,870	2,992	2,244	1,870	3,739	17,575
19	1,974	1,184	1,974	1,974	3,158	2,368	1,974	3,947	18,552
20	2,077	1,246	2,077	2,077	3,324	2,493	2,077	4,155	19,528
<b>Sub Watershed #901 Turkey Creek Annual Nitrogen Reduction (lbs)</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	13	8	13	13	21	16	13	27	126
2	27	16	27	27	43	32	27	54	252
3	40	24	40	40	64	48	40	80	378
4	54	32	54	54	86	64	54	107	504
5	67	40	67	67	107	80	67	134	630
6	80	48	80	80	129	96	80	161	755
7	94	56	94	94	150	113	94	188	881
8	107	64	107	107	171	129	107	214	1,007

<b>9</b>	121	72	121	121	193	145	121	241	1,133
<b>10</b>	134	80	134	134	214	161	134	268	1,259
<b>11</b>	147	88	147	147	236	177	147	295	1,385
<b>12</b>	161	96	161	161	257	193	161	321	1,511
<b>13</b>	174	104	174	174	279	209	174	348	1,637
<b>14</b>	188	113	188	188	300	225	188	375	1,763
<b>15</b>	201	121	201	201	321	241	201	402	1,889
<b>16</b>	214	129	214	214	343	257	214	429	2,015
<b>17</b>	228	137	228	228	364	273	228	455	2,141
<b>18</b>	241	145	241	241	386	289	241	482	2,266
<b>19</b>	255	153	255	255	407	305	255	509	2,392
<b>20</b>	268	161	268	268	429	321	268	536	2,518
<b>Sub Watershed #502 White Oak Creek Annual Nitrogen Reduction (lbs)</b>									
<b>Year</b>	<b>No-Till</b>	<b>Cover Crops</b>	<b>Nutrient Mgmt Plan</b>	<b>Cons Crop Rotation</b>	<b>Grassed Waterways</b>	<b>Terraces</b>	<b>Vegetative Buffers</b>	<b>Water Retention Structures</b>	<b>Total</b>
<b>1</b>	106	64	106	106	170	127	106	212	996
<b>2</b>	212	127	212	212	339	254	212	424	1,993
<b>3</b>	318	191	318	318	509	382	318	636	2,989
<b>4</b>	424	254	424	424	678	509	424	848	3,986
<b>5</b>	530	318	530	530	848	636	530	1,060	4,982
<b>6</b>	636	382	636	636	1,018	763	636	1,272	5,978
<b>7</b>	742	445	742	742	1,187	890	742	1,484	6,975
<b>8</b>	848	509	848	848	1,357	1,018	848	1,696	7,971
<b>9</b>	954	572	954	954	1,526	1,145	954	1,908	8,968
<b>10</b>	1,060	636	1,060	1,060	1,696	1,272	1,060	2,120	9,964
<b>11</b>	1,166	700	1,166	1,166	1,866	1,399	1,166	2,332	10,960
<b>12</b>	1,272	763	1,272	1,272	2,035	1,526	1,272	2,544	11,957
<b>13</b>	1,378	827	1,378	1,378	2,205	1,654	1,378	2,756	12,953
<b>14</b>	1,484	890	1,484	1,484	2,374	1,781	1,484	2,968	13,950
<b>15</b>	1,590	954	1,590	1,590	2,544	1,908	1,590	3,180	14,946
<b>16</b>	1,696	1,018	1,696	1,696	2,714	2,035	1,696	3,392	15,943
<b>17</b>	1,802	1,081	1,802	1,802	2,883	2,162	1,802	3,604	16,939
<b>18</b>	1,908	1,145	1,908	1,908	3,053	2,290	1,908	3,816	17,935
<b>19</b>	2,014	1,208	2,014	2,014	3,222	2,417	2,014	4,028	18,932
<b>20</b>	2,120	1,272	2,120	2,120	3,392	2,544	2,120	4,240	19,928

## F Cropland BMP Costs by HUC 12

Table 282. Cropland BMP Costs by HUC 12.

Sub Watershed #804 Baynham Creek Total Annual Cost of Cropland BMPs, 3% Inflation									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$1,951	\$979	\$1,959	\$979	\$4,018	\$3,139	\$1,674	\$3,139	\$17,840
2	\$2,010	\$1,009	\$2,018	\$1,009	\$4,139	\$3,234	\$1,725	\$3,234	\$18,376
3	\$2,070	\$1,039	\$2,078	\$1,039	\$4,263	\$3,331	\$1,776	\$3,331	\$18,927
4	\$2,132	\$1,070	\$2,141	\$1,070	\$4,391	\$3,430	\$1,830	\$3,430	\$19,495
5	\$2,196	\$1,102	\$2,205	\$1,102	\$4,523	\$3,533	\$1,884	\$3,533	\$20,080
6	\$2,262	\$1,135	\$2,271	\$1,135	\$4,658	\$3,639	\$1,941	\$3,639	\$20,682
7	\$2,330	\$1,170	\$2,339	\$1,170	\$4,798	\$3,749	\$1,999	\$3,749	\$21,302
8	\$2,400	\$1,205	\$2,409	\$1,205	\$4,942	\$3,861	\$2,059	\$3,861	\$21,942
9	\$2,472	\$1,241	\$2,482	\$1,241	\$5,090	\$3,977	\$2,121	\$3,977	\$22,600
10	\$2,546	\$1,278	\$2,556	\$1,278	\$5,243	\$4,096	\$2,185	\$4,096	\$23,278
11	\$2,622	\$1,316	\$2,633	\$1,316	\$5,400	\$4,219	\$2,250	\$4,219	\$23,976
12	\$2,701	\$1,356	\$2,712	\$1,356	\$5,562	\$4,346	\$2,318	\$4,346	\$24,695
13	\$2,782	\$1,396	\$2,793	\$1,396	\$5,729	\$4,476	\$2,387	\$4,476	\$25,436
14	\$2,865	\$1,438	\$2,877	\$1,438	\$5,901	\$4,610	\$2,459	\$4,610	\$26,199
15	\$2,951	\$1,482	\$2,963	\$1,482	\$6,078	\$4,749	\$2,533	\$4,749	\$26,985
16	\$3,040	\$1,526	\$3,052	\$1,526	\$6,260	\$4,891	\$2,609	\$4,891	\$27,795
17	\$3,131	\$1,572	\$3,144	\$1,572	\$6,448	\$5,038	\$2,687	\$5,038	\$28,629
18	\$3,225	\$1,619	\$3,238	\$1,619	\$6,642	\$5,189	\$2,767	\$5,189	\$29,488
19	\$3,322	\$1,667	\$3,335	\$1,667	\$6,841	\$5,345	\$2,850	\$5,345	\$30,372
20	\$3,421	\$1,718	\$3,435	\$1,718	\$7,046	\$5,505	\$2,936	\$5,505	\$31,283
Sub Watershed #703 Capps Creek Total Annual Cost of Cropland BMPs, 3% Inflation									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$1,619	\$813	\$1,626	\$813	\$3,335	\$2,605	\$1,390	\$2,605	\$14,807
2	\$1,668	\$837	\$1,675	\$837	\$3,435	\$2,684	\$1,431	\$2,684	\$15,251
3	\$1,718	\$862	\$1,725	\$862	\$3,538	\$2,764	\$1,474	\$2,764	\$15,708
4	\$1,770	\$888	\$1,777	\$888	\$3,644	\$2,847	\$1,518	\$2,847	\$16,180
5	\$1,823	\$915	\$1,830	\$915	\$3,754	\$2,933	\$1,564	\$2,933	\$16,665
6	\$1,877	\$942	\$1,885	\$942	\$3,866	\$3,020	\$1,611	\$3,020	\$17,165
7	\$1,934	\$971	\$1,941	\$971	\$3,982	\$3,111	\$1,659	\$3,111	\$17,680
8	\$1,992	\$1,000	\$2,000	\$1,000	\$4,102	\$3,204	\$1,709	\$3,204	\$18,210
9	\$2,051	\$1,030	\$2,060	\$1,030	\$4,225	\$3,301	\$1,760	\$3,301	\$18,757
10	\$2,113	\$1,061	\$2,121	\$1,061	\$4,351	\$3,400	\$1,813	\$3,400	\$19,319
11	\$2,176	\$1,092	\$2,185	\$1,092	\$4,482	\$3,502	\$1,868	\$3,502	\$19,899
12	\$2,242	\$1,125	\$2,251	\$1,125	\$4,616	\$3,607	\$1,924	\$3,607	\$20,496
13	\$2,309	\$1,159	\$2,318	\$1,159	\$4,755	\$3,715	\$1,981	\$3,715	\$21,111

14	\$2,378	\$1,194	\$2,388	\$1,194	\$4,898	\$3,826	\$2,041	\$3,826	\$21,744
15	\$2,449	\$1,230	\$2,459	\$1,230	\$5,045	\$3,941	\$2,102	\$3,941	\$22,396
16	\$2,523	\$1,266	\$2,533	\$1,266	\$5,196	\$4,059	\$2,165	\$4,059	\$23,068
17	\$2,599	\$1,304	\$2,609	\$1,304	\$5,352	\$4,181	\$2,230	\$4,181	\$23,760
18	\$2,677	\$1,344	\$2,687	\$1,344	\$5,512	\$4,306	\$2,297	\$4,306	\$24,473
19	\$2,757	\$1,384	\$2,768	\$1,384	\$5,678	\$4,436	\$2,366	\$4,436	\$25,207
20	\$2,840	\$1,425	\$2,851	\$1,425	\$5,848	\$4,569	\$2,437	\$4,569	\$25,964
<b>Sub Watershed #601 Center Creek Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$3,600	\$1,807	\$3,614	\$1,807	\$7,414	\$5,792	\$3,089	\$5,792	\$32,915
2	\$3,708	\$1,861	\$3,723	\$1,861	\$7,636	\$5,966	\$3,182	\$5,966	\$33,902
3	\$3,819	\$1,917	\$3,834	\$1,917	\$7,865	\$6,145	\$3,277	\$6,145	\$34,919
4	\$3,934	\$1,975	\$3,949	\$1,975	\$8,101	\$6,329	\$3,375	\$6,329	\$35,967
5	\$4,052	\$2,034	\$4,068	\$2,034	\$8,344	\$6,519	\$3,477	\$6,519	\$37,046
6	\$4,173	\$2,095	\$4,190	\$2,095	\$8,594	\$6,714	\$3,581	\$6,714	\$38,157
7	\$4,298	\$2,158	\$4,315	\$2,158	\$8,852	\$6,916	\$3,688	\$6,916	\$39,302
8	\$4,427	\$2,222	\$4,445	\$2,222	\$9,118	\$7,123	\$3,799	\$7,123	\$40,481
9	\$4,560	\$2,289	\$4,578	\$2,289	\$9,391	\$7,337	\$3,913	\$7,337	\$41,695
10	\$4,697	\$2,358	\$4,716	\$2,358	\$9,673	\$7,557	\$4,030	\$7,557	\$42,946
11	\$4,838	\$2,429	\$4,857	\$2,429	\$9,963	\$7,784	\$4,151	\$7,784	\$44,234
12	\$4,983	\$2,501	\$5,003	\$2,501	\$10,262	\$8,017	\$4,276	\$8,017	\$45,561
13	\$5,132	\$2,576	\$5,153	\$2,576	\$10,570	\$8,258	\$4,404	\$8,258	\$46,928
14	\$5,286	\$2,654	\$5,308	\$2,654	\$10,887	\$8,506	\$4,536	\$8,506	\$48,336
15	\$5,445	\$2,733	\$5,467	\$2,733	\$11,214	\$8,761	\$4,672	\$8,761	\$49,786
16	\$5,608	\$2,815	\$5,631	\$2,815	\$11,550	\$9,024	\$4,813	\$9,024	\$51,280
17	\$5,777	\$2,900	\$5,800	\$2,900	\$11,897	\$9,294	\$4,957	\$9,294	\$52,818
18	\$5,950	\$2,987	\$5,974	\$2,987	\$12,254	\$9,573	\$5,106	\$9,573	\$54,403
19	\$6,128	\$3,076	\$6,153	\$3,076	\$12,621	\$9,860	\$5,259	\$9,860	\$56,035
20	\$6,312	\$3,169	\$6,337	\$3,169	\$13,000	\$10,156	\$5,417	\$10,156	\$57,716
<b>Sub Watershed #704 Clear Creek Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$390	\$196	\$392	\$196	\$803	\$628	\$335	\$628	\$3,567
2	\$402	\$202	\$403	\$202	\$828	\$647	\$345	\$647	\$3,674
3	\$414	\$208	\$416	\$208	\$852	\$666	\$355	\$666	\$3,784
4	\$426	\$214	\$428	\$214	\$878	\$686	\$366	\$686	\$3,898
5	\$439	\$220	\$441	\$220	\$904	\$706	\$377	\$706	\$4,015
6	\$452	\$227	\$454	\$227	\$931	\$728	\$388	\$728	\$4,135

7	\$466	\$234	\$468	\$234	\$959	\$749	\$400	\$749	\$4,259
8	\$480	\$241	\$482	\$241	\$988	\$772	\$412	\$772	\$4,387
9	\$494	\$248	\$496	\$248	\$1,018	\$795	\$424	\$795	\$4,519
10	\$509	\$256	\$511	\$256	\$1,048	\$819	\$437	\$819	\$4,654
11	\$524	\$263	\$526	\$263	\$1,080	\$844	\$450	\$844	\$4,794
12	\$540	\$271	\$542	\$271	\$1,112	\$869	\$463	\$869	\$4,938
13	\$556	\$279	\$558	\$279	\$1,145	\$895	\$477	\$895	\$5,086
14	\$573	\$288	\$575	\$288	\$1,180	\$922	\$492	\$922	\$5,238
15	\$590	\$296	\$592	\$296	\$1,215	\$949	\$506	\$949	\$5,395
16	\$608	\$305	\$610	\$305	\$1,252	\$978	\$522	\$978	\$5,557
17	\$626	\$314	\$629	\$314	\$1,289	\$1,007	\$537	\$1,007	\$5,724
18	\$645	\$324	\$647	\$324	\$1,328	\$1,037	\$553	\$1,037	\$5,896
19	\$664	\$333	\$667	\$333	\$1,368	\$1,069	\$570	\$1,069	\$6,073
20	\$684	\$343	\$687	\$343	\$1,409	\$1,101	\$587	\$1,101	\$6,255
<b>Sub Watershed #705 Clear Creek Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$438	\$220	\$440	\$220	\$902	\$705	\$376	\$705	\$4,006
2	\$451	\$227	\$453	\$227	\$929	\$726	\$387	\$726	\$4,126
3	\$465	\$233	\$467	\$233	\$957	\$748	\$399	\$748	\$4,250
4	\$479	\$240	\$481	\$240	\$986	\$770	\$411	\$770	\$4,378
5	\$493	\$248	\$495	\$248	\$1,016	\$793	\$423	\$793	\$4,509
6	\$508	\$255	\$510	\$255	\$1,046	\$817	\$436	\$817	\$4,644
7	\$523	\$263	\$525	\$263	\$1,077	\$842	\$449	\$842	\$4,783
8	\$539	\$271	\$541	\$271	\$1,110	\$867	\$462	\$867	\$4,927
9	\$555	\$279	\$557	\$279	\$1,143	\$893	\$476	\$893	\$5,075
10	\$572	\$287	\$574	\$287	\$1,177	\$920	\$491	\$920	\$5,227
11	\$589	\$296	\$591	\$296	\$1,213	\$947	\$505	\$947	\$5,384
12	\$606	\$304	\$609	\$304	\$1,249	\$976	\$520	\$976	\$5,545
13	\$625	\$314	\$627	\$314	\$1,287	\$1,005	\$536	\$1,005	\$5,712
14	\$643	\$323	\$646	\$323	\$1,325	\$1,035	\$552	\$1,035	\$5,883
15	\$663	\$333	\$665	\$333	\$1,365	\$1,066	\$569	\$1,066	\$6,060
16	\$683	\$343	\$685	\$343	\$1,406	\$1,098	\$586	\$1,098	\$6,241
17	\$703	\$353	\$706	\$353	\$1,448	\$1,131	\$603	\$1,131	\$6,429
18	\$724	\$364	\$727	\$364	\$1,491	\$1,165	\$621	\$1,165	\$6,621
19	\$746	\$374	\$749	\$374	\$1,536	\$1,200	\$640	\$1,200	\$6,820
20	\$768	\$386	\$771	\$386	\$1,582	\$1,236	\$659	\$1,236	\$7,025
<b>Sub Watershed #304 Dry Fork Total Annual Cost of Cropland BMPs, 3% Inflation</b>									



Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$3,356	\$1,684	\$3,369	\$1,684	\$6,911	\$5,399	\$2,879	\$5,399	\$30,681
2	\$3,456	\$1,735	\$3,470	\$1,735	\$7,118	\$5,561	\$2,966	\$5,561	\$31,602
3	\$3,560	\$1,787	\$3,574	\$1,787	\$7,332	\$5,728	\$3,055	\$5,728	\$32,550
4	\$3,667	\$1,841	\$3,681	\$1,841	\$7,551	\$5,900	\$3,146	\$5,900	\$33,526
5	\$3,777	\$1,896	\$3,792	\$1,896	\$7,778	\$6,077	\$3,241	\$6,077	\$34,532
6	\$3,890	\$1,953	\$3,906	\$1,953	\$8,011	\$6,259	\$3,338	\$6,259	\$35,568
7	\$4,007	\$2,011	\$4,023	\$2,011	\$8,252	\$6,447	\$3,438	\$6,447	\$36,635
8	\$4,127	\$2,072	\$4,143	\$2,072	\$8,499	\$6,640	\$3,541	\$6,640	\$37,734
9	\$4,251	\$2,134	\$4,268	\$2,134	\$8,754	\$6,839	\$3,648	\$6,839	\$38,866
10	\$4,378	\$2,198	\$4,396	\$2,198	\$9,017	\$7,044	\$3,757	\$7,044	\$40,032
11	\$4,510	\$2,264	\$4,528	\$2,264	\$9,287	\$7,256	\$3,870	\$7,256	\$41,233
12	\$4,645	\$2,332	\$4,663	\$2,332	\$9,566	\$7,473	\$3,986	\$7,473	\$42,470
13	\$4,784	\$2,402	\$4,803	\$2,402	\$9,853	\$7,698	\$4,105	\$7,698	\$43,744
14	\$4,928	\$2,474	\$4,947	\$2,474	\$10,149	\$7,929	\$4,229	\$7,929	\$45,057
15	\$5,076	\$2,548	\$5,096	\$2,548	\$10,453	\$8,166	\$4,355	\$8,166	\$46,408
16	\$5,228	\$2,624	\$5,249	\$2,624	\$10,767	\$8,411	\$4,486	\$8,411	\$47,801
17	\$5,385	\$2,703	\$5,406	\$2,703	\$11,090	\$8,664	\$4,621	\$8,664	\$49,235
18	\$5,546	\$2,784	\$5,568	\$2,784	\$11,422	\$8,924	\$4,759	\$8,924	\$50,712
19	\$5,713	\$2,868	\$5,735	\$2,868	\$11,765	\$9,191	\$4,902	\$9,191	\$52,233
20	\$5,884	\$2,954	\$5,907	\$2,954	\$12,118	\$9,467	\$5,049	\$9,467	\$53,800
<b>Sub Watershed #305 Dry Fork Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$3,440	\$1,727	\$3,453	\$1,727	\$7,084	\$5,534	\$2,952	\$5,534	\$31,451
2	\$3,543	\$1,779	\$3,557	\$1,779	\$7,296	\$5,700	\$3,040	\$5,700	\$32,394
3	\$3,649	\$1,832	\$3,664	\$1,832	\$7,515	\$5,871	\$3,131	\$5,871	\$33,366
4	\$3,759	\$1,887	\$3,774	\$1,887	\$7,741	\$6,047	\$3,225	\$6,047	\$34,367
5	\$3,871	\$1,943	\$3,887	\$1,943	\$7,973	\$6,229	\$3,322	\$6,229	\$35,398
6	\$3,988	\$2,002	\$4,003	\$2,002	\$8,212	\$6,416	\$3,422	\$6,416	\$36,460
7	\$4,107	\$2,062	\$4,124	\$2,062	\$8,459	\$6,608	\$3,524	\$6,608	\$37,554
8	\$4,230	\$2,124	\$4,247	\$2,124	\$8,712	\$6,806	\$3,630	\$6,806	\$38,680
9	\$4,357	\$2,187	\$4,375	\$2,187	\$8,974	\$7,011	\$3,739	\$7,011	\$39,841
10	\$4,488	\$2,253	\$4,506	\$2,253	\$9,243	\$7,221	\$3,851	\$7,221	\$41,036
11	\$4,623	\$2,321	\$4,641	\$2,321	\$9,520	\$7,438	\$3,967	\$7,438	\$42,267
12	\$4,761	\$2,390	\$4,780	\$2,390	\$9,806	\$7,661	\$4,086	\$7,661	\$43,535
13	\$4,904	\$2,462	\$4,924	\$2,462	\$10,100	\$7,891	\$4,208	\$7,891	\$44,841
14	\$5,051	\$2,536	\$5,071	\$2,536	\$10,403	\$8,127	\$4,335	\$8,127	\$46,186

15	\$5,203	\$2,612	\$5,224	\$2,612	\$10,715	\$8,371	\$4,465	\$8,371	\$47,572
16	\$5,359	\$2,690	\$5,380	\$2,690	\$11,037	\$8,622	\$4,599	\$8,622	\$48,999
17	\$5,520	\$2,771	\$5,542	\$2,771	\$11,368	\$8,881	\$4,736	\$8,881	\$50,469
18	\$5,685	\$2,854	\$5,708	\$2,854	\$11,709	\$9,147	\$4,879	\$9,147	\$51,983
19	\$5,856	\$2,940	\$5,879	\$2,940	\$12,060	\$9,422	\$5,025	\$9,422	\$53,543
20	\$6,032	\$3,028	\$6,056	\$3,028	\$12,422	\$9,704	\$5,176	\$9,704	\$55,149

**Sub Watershed #802 Hickory Creek Total Annual Cost of Cropland BMPs, 3% Inflation**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$164	\$82	\$165	\$82	\$338	\$264	\$141	\$264	\$1,502
2	\$169	\$85	\$170	\$85	\$348	\$272	\$145	\$272	\$1,547
3	\$174	\$87	\$175	\$87	\$359	\$280	\$150	\$280	\$1,593
4	\$179	\$90	\$180	\$90	\$370	\$289	\$154	\$289	\$1,641
5	\$185	\$93	\$186	\$93	\$381	\$297	\$159	\$297	\$1,690
6	\$190	\$96	\$191	\$96	\$392	\$306	\$163	\$306	\$1,741
7	\$196	\$98	\$197	\$98	\$404	\$316	\$168	\$316	\$1,793
8	\$202	\$101	\$203	\$101	\$416	\$325	\$173	\$325	\$1,847
9	\$208	\$104	\$209	\$104	\$428	\$335	\$179	\$335	\$1,902
10	\$214	\$108	\$215	\$108	\$441	\$345	\$184	\$345	\$1,959
11	\$221	\$111	\$222	\$111	\$455	\$355	\$189	\$355	\$2,018
12	\$227	\$114	\$228	\$114	\$468	\$366	\$195	\$366	\$2,079
13	\$234	\$118	\$235	\$118	\$482	\$377	\$201	\$377	\$2,141
14	\$241	\$121	\$242	\$121	\$497	\$388	\$207	\$388	\$2,205
15	\$248	\$125	\$249	\$125	\$512	\$400	\$213	\$400	\$2,271
16	\$256	\$128	\$257	\$128	\$527	\$412	\$220	\$412	\$2,340
17	\$264	\$132	\$265	\$132	\$543	\$424	\$226	\$424	\$2,410
18	\$271	\$136	\$273	\$136	\$559	\$437	\$233	\$437	\$2,482
19	\$280	\$140	\$281	\$140	\$576	\$450	\$240	\$450	\$2,557
20	\$288	\$145	\$289	\$145	\$593	\$463	\$247	\$463	\$2,633

**Sub Watershed #102 Honey Creek Total Annual Cost of Cropland BMPs, 3% Inflation**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$5,553	\$2,787	\$5,575	\$2,787	\$11,436	\$8,934	\$4,765	\$8,934	\$50,772
2	\$5,719	\$2,871	\$5,742	\$2,871	\$11,779	\$9,202	\$4,908	\$9,202	\$52,295
3	\$5,891	\$2,957	\$5,915	\$2,957	\$12,132	\$9,478	\$5,055	\$9,478	\$53,864
4	\$6,068	\$3,046	\$6,092	\$3,046	\$12,496	\$9,763	\$5,207	\$9,763	\$55,480
5	\$6,250	\$3,137	\$6,275	\$3,137	\$12,871	\$10,056	\$5,363	\$10,056	\$57,145
6	\$6,437	\$3,231	\$6,463	\$3,231	\$13,257	\$10,357	\$5,524	\$10,357	\$58,859
7	\$6,630	\$3,328	\$6,657	\$3,328	\$13,655	\$10,668	\$5,690	\$10,668	\$60,625

8	\$6,829	\$3,428	\$6,857	\$3,428	\$14,065	\$10,988	\$5,860	\$10,988	\$62,443
9	\$7,034	\$3,531	\$7,062	\$3,531	\$14,487	\$11,318	\$6,036	\$11,318	\$64,317
10	\$7,245	\$3,637	\$7,274	\$3,637	\$14,921	\$11,657	\$6,217	\$11,657	\$66,246
11	\$7,463	\$3,746	\$7,492	\$3,746	\$15,369	\$12,007	\$6,404	\$12,007	\$68,234
12	\$7,686	\$3,859	\$7,717	\$3,859	\$15,830	\$12,367	\$6,596	\$12,367	\$70,281
13	\$7,917	\$3,974	\$7,949	\$3,974	\$16,305	\$12,738	\$6,794	\$12,738	\$72,389
14	\$8,155	\$4,094	\$8,187	\$4,094	\$16,794	\$13,120	\$6,997	\$13,120	\$74,561
15	\$8,399	\$4,216	\$8,433	\$4,216	\$17,298	\$13,514	\$7,207	\$13,514	\$76,797
16	\$8,651	\$4,343	\$8,686	\$4,343	\$17,817	\$13,919	\$7,424	\$13,919	\$79,101
17	\$8,911	\$4,473	\$8,946	\$4,473	\$18,351	\$14,337	\$7,646	\$14,337	\$81,474
18	\$9,178	\$4,607	\$9,215	\$4,607	\$18,902	\$14,767	\$7,876	\$14,767	\$83,919
19	\$9,453	\$4,746	\$9,491	\$4,746	\$19,469	\$15,210	\$8,112	\$15,210	\$86,436
20	\$9,737	\$4,888	\$9,776	\$4,888	\$20,053	\$15,666	\$8,355	\$15,666	\$89,029
<b>Sub Watershed #103 Honey Creek Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$2,339	\$1,174	\$2,348	\$1,174	\$4,817	\$3,763	\$2,007	\$3,763	\$21,385
2	\$2,409	\$1,209	\$2,419	\$1,209	\$4,961	\$3,876	\$2,067	\$3,876	\$22,026
3	\$2,481	\$1,246	\$2,491	\$1,246	\$5,110	\$3,992	\$2,129	\$3,992	\$22,687
4	\$2,556	\$1,283	\$2,566	\$1,283	\$5,263	\$4,112	\$2,193	\$4,112	\$23,368
5	\$2,632	\$1,321	\$2,643	\$1,321	\$5,421	\$4,235	\$2,259	\$4,235	\$24,069
6	\$2,711	\$1,361	\$2,722	\$1,361	\$5,584	\$4,362	\$2,327	\$4,362	\$24,791
7	\$2,793	\$1,402	\$2,804	\$1,402	\$5,751	\$4,493	\$2,396	\$4,493	\$25,534
8	\$2,876	\$1,444	\$2,888	\$1,444	\$5,924	\$4,628	\$2,468	\$4,628	\$26,301
9	\$2,963	\$1,487	\$2,975	\$1,487	\$6,102	\$4,767	\$2,542	\$4,767	\$27,090
10	\$3,052	\$1,532	\$3,064	\$1,532	\$6,285	\$4,910	\$2,619	\$4,910	\$27,902
11	\$3,143	\$1,578	\$3,156	\$1,578	\$6,473	\$5,057	\$2,697	\$5,057	\$28,739
12	\$3,237	\$1,625	\$3,250	\$1,625	\$6,667	\$5,209	\$2,778	\$5,209	\$29,601
13	\$3,335	\$1,674	\$3,348	\$1,674	\$6,867	\$5,365	\$2,861	\$5,365	\$30,490
14	\$3,435	\$1,724	\$3,448	\$1,724	\$7,073	\$5,526	\$2,947	\$5,526	\$31,404
15	\$3,538	\$1,776	\$3,552	\$1,776	\$7,286	\$5,692	\$3,036	\$5,692	\$32,346
16	\$3,644	\$1,829	\$3,658	\$1,829	\$7,504	\$5,863	\$3,127	\$5,863	\$33,317
17	\$3,753	\$1,884	\$3,768	\$1,884	\$7,729	\$6,039	\$3,221	\$6,039	\$34,316
18	\$3,866	\$1,941	\$3,881	\$1,941	\$7,961	\$6,220	\$3,317	\$6,220	\$35,346
19	\$3,982	\$1,999	\$3,998	\$1,999	\$8,200	\$6,406	\$3,417	\$6,406	\$36,406
20	\$4,101	\$2,059	\$4,117	\$2,059	\$8,446	\$6,598	\$3,519	\$6,598	\$37,498
<b>Sub Watershed #603 Jenkins Creek Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total

1	\$5,461	\$2,742	\$5,483	\$2,742	\$11,248	\$8,787	\$4,686	\$8,787	\$49,936
2	\$5,625	\$2,824	\$5,648	\$2,824	\$11,585	\$9,051	\$4,827	\$9,051	\$51,434
3	\$5,794	\$2,909	\$5,817	\$2,909	\$11,933	\$9,322	\$4,972	\$9,322	\$52,977
4	\$5,968	\$2,996	\$5,992	\$2,996	\$12,290	\$9,602	\$5,121	\$9,602	\$54,566
5	\$6,147	\$3,086	\$6,171	\$3,086	\$12,659	\$9,890	\$5,275	\$9,890	\$56,203
6	\$6,331	\$3,178	\$6,357	\$3,178	\$13,039	\$10,187	\$5,433	\$10,187	\$57,890
7	\$6,521	\$3,274	\$6,547	\$3,274	\$13,430	\$10,492	\$5,596	\$10,492	\$59,626
8	\$6,717	\$3,372	\$6,744	\$3,372	\$13,833	\$10,807	\$5,764	\$10,807	\$61,415
9	\$6,918	\$3,473	\$6,946	\$3,473	\$14,248	\$11,131	\$5,937	\$11,131	\$63,257
10	\$7,126	\$3,577	\$7,154	\$3,577	\$14,675	\$11,465	\$6,115	\$11,465	\$65,155
11	\$7,340	\$3,684	\$7,369	\$3,684	\$15,116	\$11,809	\$6,298	\$11,809	\$67,110
12	\$7,560	\$3,795	\$7,590	\$3,795	\$15,569	\$12,163	\$6,487	\$12,163	\$69,123
13	\$7,787	\$3,909	\$7,818	\$3,909	\$16,036	\$12,528	\$6,682	\$12,528	\$71,197
14	\$8,020	\$4,026	\$8,052	\$4,026	\$16,517	\$12,904	\$6,882	\$12,904	\$73,333
15	\$8,261	\$4,147	\$8,294	\$4,147	\$17,013	\$13,291	\$7,089	\$13,291	\$75,533
16	\$8,509	\$4,271	\$8,543	\$4,271	\$17,523	\$13,690	\$7,301	\$13,690	\$77,799
17	\$8,764	\$4,399	\$8,799	\$4,399	\$18,049	\$14,101	\$7,520	\$14,101	\$80,133
18	\$9,027	\$4,531	\$9,063	\$4,531	\$18,590	\$14,524	\$7,746	\$14,524	\$82,537
19	\$9,298	\$4,667	\$9,335	\$4,667	\$19,148	\$14,960	\$7,978	\$14,960	\$85,013
20	\$9,577	\$4,807	\$9,615	\$4,807	\$19,723	\$15,408	\$8,218	\$15,408	\$87,563

**Sub Watershed #604 Jones Creek Total Annual Cost of Cropland BMPs, 3% Inflation**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$531	\$267	\$534	\$267	\$1,094	\$855	\$456	\$855	\$4,859
2	\$547	\$275	\$550	\$275	\$1,127	\$881	\$470	\$881	\$5,005
3	\$564	\$283	\$566	\$283	\$1,161	\$907	\$484	\$907	\$5,155
4	\$581	\$292	\$583	\$292	\$1,196	\$934	\$498	\$934	\$5,310
5	\$598	\$300	\$601	\$300	\$1,232	\$962	\$513	\$962	\$5,469
6	\$616	\$309	\$619	\$309	\$1,269	\$991	\$529	\$991	\$5,633
7	\$635	\$319	\$637	\$319	\$1,307	\$1,021	\$545	\$1,021	\$5,802
8	\$654	\$328	\$656	\$328	\$1,346	\$1,052	\$561	\$1,052	\$5,976
9	\$673	\$338	\$676	\$338	\$1,386	\$1,083	\$578	\$1,083	\$6,155
10	\$693	\$348	\$696	\$348	\$1,428	\$1,116	\$595	\$1,116	\$6,340
11	\$714	\$359	\$717	\$359	\$1,471	\$1,149	\$613	\$1,149	\$6,530
12	\$736	\$369	\$739	\$369	\$1,515	\$1,184	\$631	\$1,184	\$6,726
13	\$758	\$380	\$761	\$380	\$1,560	\$1,219	\$650	\$1,219	\$6,928
14	\$780	\$392	\$784	\$392	\$1,607	\$1,256	\$670	\$1,256	\$7,136
15	\$804	\$404	\$807	\$404	\$1,655	\$1,293	\$690	\$1,293	\$7,350
16	\$828	\$416	\$831	\$416	\$1,705	\$1,332	\$710	\$1,332	\$7,570

17	\$853	\$428	\$856	\$428	\$1,756	\$1,372	\$732	\$1,372	\$7,797
18	\$878	\$441	\$882	\$441	\$1,809	\$1,413	\$754	\$1,413	\$8,031
19	\$905	\$454	\$908	\$454	\$1,863	\$1,456	\$776	\$1,456	\$8,272
20	\$932	\$468	\$936	\$468	\$1,919	\$1,499	\$800	\$1,499	\$8,520
<b>Sub Watershed #605 Jones Creek Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$888	\$446	\$892	\$446	\$1,830	\$1,429	\$762	\$1,429	\$8,123
2	\$915	\$459	\$919	\$459	\$1,885	\$1,472	\$785	\$1,472	\$8,367
3	\$943	\$473	\$946	\$473	\$1,941	\$1,517	\$809	\$1,517	\$8,618
4	\$971	\$487	\$975	\$487	\$1,999	\$1,562	\$833	\$1,562	\$8,877
5	\$1,000	\$502	\$1,004	\$502	\$2,059	\$1,609	\$858	\$1,609	\$9,143
6	\$1,030	\$517	\$1,034	\$517	\$2,121	\$1,657	\$884	\$1,657	\$9,417
7	\$1,061	\$533	\$1,065	\$533	\$2,185	\$1,707	\$910	\$1,707	\$9,700
8	\$1,093	\$549	\$1,097	\$549	\$2,250	\$1,758	\$938	\$1,758	\$9,991
9	\$1,125	\$565	\$1,130	\$565	\$2,318	\$1,811	\$966	\$1,811	\$10,291
10	\$1,159	\$582	\$1,164	\$582	\$2,387	\$1,865	\$995	\$1,865	\$10,599
11	\$1,194	\$599	\$1,199	\$599	\$2,459	\$1,921	\$1,025	\$1,921	\$10,917
12	\$1,230	\$617	\$1,235	\$617	\$2,533	\$1,979	\$1,055	\$1,979	\$11,245
13	\$1,267	\$636	\$1,272	\$636	\$2,609	\$2,038	\$1,087	\$2,038	\$11,582
14	\$1,305	\$655	\$1,310	\$655	\$2,687	\$2,099	\$1,120	\$2,099	\$11,930
15	\$1,344	\$675	\$1,349	\$675	\$2,768	\$2,162	\$1,153	\$2,162	\$12,287
16	\$1,384	\$695	\$1,390	\$695	\$2,851	\$2,227	\$1,188	\$2,227	\$12,656
17	\$1,426	\$716	\$1,431	\$716	\$2,936	\$2,294	\$1,223	\$2,294	\$13,036
18	\$1,468	\$737	\$1,474	\$737	\$3,024	\$2,363	\$1,260	\$2,363	\$13,427
19	\$1,513	\$759	\$1,519	\$759	\$3,115	\$2,434	\$1,298	\$2,434	\$13,830
20	\$1,558	\$782	\$1,564	\$782	\$3,208	\$2,507	\$1,337	\$2,507	\$14,245
<b>Sub Watershed #201 North Fork Spring River Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$546	\$274	\$548	\$274	\$1,125	\$879	\$469	\$879	\$4,994
2	\$563	\$282	\$565	\$282	\$1,159	\$905	\$483	\$905	\$5,144
3	\$579	\$291	\$582	\$291	\$1,193	\$932	\$497	\$932	\$5,298
4	\$597	\$300	\$599	\$300	\$1,229	\$960	\$512	\$960	\$5,457
5	\$615	\$309	\$617	\$309	\$1,266	\$989	\$528	\$989	\$5,621
6	\$633	\$318	\$636	\$318	\$1,304	\$1,019	\$543	\$1,019	\$5,790
7	\$652	\$327	\$655	\$327	\$1,343	\$1,049	\$560	\$1,049	\$5,963
8	\$672	\$337	\$674	\$337	\$1,383	\$1,081	\$576	\$1,081	\$6,142
9	\$692	\$347	\$695	\$347	\$1,425	\$1,113	\$594	\$1,113	\$6,326

10	\$713	\$358	\$716	\$358	\$1,468	\$1,147	\$612	\$1,147	\$6,516
11	\$734	\$368	\$737	\$368	\$1,512	\$1,181	\$630	\$1,181	\$6,712
12	\$756	\$380	\$759	\$380	\$1,557	\$1,216	\$649	\$1,216	\$6,913
13	\$779	\$391	\$782	\$391	\$1,604	\$1,253	\$668	\$1,253	\$7,120
14	\$802	\$403	\$805	\$403	\$1,652	\$1,291	\$688	\$1,291	\$7,334
15	\$826	\$415	\$829	\$415	\$1,701	\$1,329	\$709	\$1,329	\$7,554
16	\$851	\$427	\$854	\$427	\$1,753	\$1,369	\$730	\$1,369	\$7,781
17	\$876	\$440	\$880	\$440	\$1,805	\$1,410	\$752	\$1,410	\$8,014
18	\$903	\$453	\$906	\$453	\$1,859	\$1,453	\$775	\$1,453	\$8,255
19	\$930	\$467	\$934	\$467	\$1,915	\$1,496	\$798	\$1,496	\$8,502
20	\$958	\$481	\$962	\$481	\$1,972	\$1,541	\$822	\$1,541	\$8,757
<b>Sub Watershed #202 North Fork Spring River Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$99	\$49	\$99	\$49	\$203	\$159	\$85	\$159	\$901
2	\$101	\$51	\$102	\$51	\$209	\$163	\$87	\$163	\$928
3	\$105	\$52	\$105	\$52	\$215	\$168	\$90	\$168	\$956
4	\$108	\$54	\$108	\$54	\$222	\$173	\$92	\$173	\$984
5	\$111	\$56	\$111	\$56	\$228	\$178	\$95	\$178	\$1,014
6	\$114	\$57	\$115	\$57	\$235	\$184	\$98	\$184	\$1,044
7	\$118	\$59	\$118	\$59	\$242	\$189	\$101	\$189	\$1,076
8	\$121	\$61	\$122	\$61	\$250	\$195	\$104	\$195	\$1,108
9	\$125	\$63	\$125	\$63	\$257	\$201	\$107	\$201	\$1,141
10	\$129	\$65	\$129	\$65	\$265	\$207	\$110	\$207	\$1,175
11	\$132	\$66	\$133	\$66	\$273	\$213	\$114	\$213	\$1,211
12	\$136	\$68	\$137	\$68	\$281	\$219	\$117	\$219	\$1,247
13	\$140	\$71	\$141	\$71	\$289	\$226	\$121	\$226	\$1,284
14	\$145	\$73	\$145	\$73	\$298	\$233	\$124	\$233	\$1,323
15	\$149	\$75	\$150	\$75	\$307	\$240	\$128	\$240	\$1,362
16	\$153	\$77	\$154	\$77	\$316	\$247	\$132	\$247	\$1,403
17	\$158	\$79	\$159	\$79	\$326	\$254	\$136	\$254	\$1,445
18	\$163	\$82	\$163	\$82	\$335	\$262	\$140	\$262	\$1,489
19	\$168	\$84	\$168	\$84	\$345	\$270	\$144	\$270	\$1,533
20	\$173	\$87	\$173	\$87	\$356	\$278	\$148	\$278	\$1,579
<b>Sub Watershed #203 North Fork Spring River Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$211	\$106	\$212	\$106	\$435	\$340	\$181	\$340	\$1,931
2	\$218	\$109	\$218	\$109	\$448	\$350	\$187	\$350	\$1,989

3	\$224	\$112	\$225	\$112	\$461	\$361	\$192	\$361	\$2,049
4	\$231	\$116	\$232	\$116	\$475	\$371	\$198	\$371	\$2,110
5	\$238	\$119	\$239	\$119	\$490	\$382	\$204	\$382	\$2,174
6	\$245	\$123	\$246	\$123	\$504	\$394	\$210	\$394	\$2,239
7	\$252	\$127	\$253	\$127	\$519	\$406	\$216	\$406	\$2,306
8	\$260	\$130	\$261	\$130	\$535	\$418	\$223	\$418	\$2,375
9	\$268	\$134	\$269	\$134	\$551	\$430	\$230	\$430	\$2,446
10	\$276	\$138	\$277	\$138	\$568	\$443	\$236	\$443	\$2,520
11	\$284	\$142	\$285	\$142	\$585	\$457	\$244	\$457	\$2,595
12	\$292	\$147	\$294	\$147	\$602	\$470	\$251	\$470	\$2,673
13	\$301	\$151	\$302	\$151	\$620	\$485	\$258	\$485	\$2,753
14	\$310	\$156	\$311	\$156	\$639	\$499	\$266	\$499	\$2,836
15	\$319	\$160	\$321	\$160	\$658	\$514	\$274	\$514	\$2,921
16	\$329	\$165	\$330	\$165	\$678	\$529	\$282	\$529	\$3,009
17	\$339	\$170	\$340	\$170	\$698	\$545	\$291	\$545	\$3,099
18	\$349	\$175	\$350	\$175	\$719	\$562	\$300	\$562	\$3,192
19	\$360	\$181	\$361	\$181	\$741	\$579	\$309	\$579	\$3,288
20	\$370	\$186	\$372	\$186	\$763	\$596	\$318	\$596	\$3,386

**Sub Watershed #206 North Fork Spring River Total Annual Cost of Cropland BMPs, 3% Inflation**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$210	\$105	\$211	\$105	\$432	\$338	\$180	\$338	\$1,918
2	\$216	\$108	\$217	\$108	\$445	\$348	\$185	\$348	\$1,976
3	\$223	\$112	\$223	\$112	\$458	\$358	\$191	\$358	\$2,035
4	\$229	\$115	\$230	\$115	\$472	\$369	\$197	\$369	\$2,096
5	\$236	\$119	\$237	\$119	\$486	\$380	\$203	\$380	\$2,159
6	\$243	\$122	\$244	\$122	\$501	\$391	\$209	\$391	\$2,224
7	\$251	\$126	\$252	\$126	\$516	\$403	\$215	\$403	\$2,291
8	\$258	\$130	\$259	\$130	\$531	\$415	\$221	\$415	\$2,359
9	\$266	\$133	\$267	\$133	\$547	\$428	\$228	\$428	\$2,430
10	\$274	\$137	\$275	\$137	\$564	\$440	\$235	\$440	\$2,503
11	\$282	\$142	\$283	\$142	\$581	\$454	\$242	\$454	\$2,578
12	\$290	\$146	\$292	\$146	\$598	\$467	\$249	\$467	\$2,656
13	\$299	\$150	\$300	\$150	\$616	\$481	\$257	\$481	\$2,735
14	\$308	\$155	\$309	\$155	\$635	\$496	\$264	\$496	\$2,817
15	\$317	\$159	\$319	\$159	\$654	\$511	\$272	\$511	\$2,902
16	\$327	\$164	\$328	\$164	\$673	\$526	\$280	\$526	\$2,989
17	\$337	\$169	\$338	\$169	\$693	\$542	\$289	\$542	\$3,078
18	\$347	\$174	\$348	\$174	\$714	\$558	\$298	\$558	\$3,171
19	\$357	\$179	\$359	\$179	\$736	\$575	\$307	\$575	\$3,266

20	\$368	\$185	\$369	\$185	\$758	\$592	\$316	\$592	\$3,364
<b>Sub Watershed #302 North Fork Spring River Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$676	\$339	\$679	\$339	\$1,393	\$1,088	\$580	\$1,088	\$6,183
2	\$697	\$350	\$699	\$350	\$1,434	\$1,121	\$598	\$1,121	\$6,369
3	\$717	\$360	\$720	\$360	\$1,477	\$1,154	\$616	\$1,154	\$6,560
4	\$739	\$371	\$742	\$371	\$1,522	\$1,189	\$634	\$1,189	\$6,756
5	\$761	\$382	\$764	\$382	\$1,567	\$1,225	\$653	\$1,225	\$6,959
6	\$784	\$394	\$787	\$394	\$1,615	\$1,261	\$673	\$1,261	\$7,168
7	\$807	\$405	\$811	\$405	\$1,663	\$1,299	\$693	\$1,299	\$7,383
8	\$832	\$418	\$835	\$418	\$1,713	\$1,338	\$714	\$1,338	\$7,604
9	\$857	\$430	\$860	\$430	\$1,764	\$1,378	\$735	\$1,378	\$7,833
10	\$882	\$443	\$886	\$443	\$1,817	\$1,420	\$757	\$1,420	\$8,068
11	\$909	\$456	\$912	\$456	\$1,872	\$1,462	\$780	\$1,462	\$8,310
12	\$936	\$470	\$940	\$470	\$1,928	\$1,506	\$803	\$1,506	\$8,559
13	\$964	\$484	\$968	\$484	\$1,986	\$1,551	\$827	\$1,551	\$8,816
14	\$993	\$499	\$997	\$499	\$2,045	\$1,598	\$852	\$1,598	\$9,080
15	\$1,023	\$513	\$1,027	\$513	\$2,107	\$1,646	\$878	\$1,646	\$9,353
16	\$1,054	\$529	\$1,058	\$529	\$2,170	\$1,695	\$904	\$1,695	\$9,633
17	\$1,085	\$545	\$1,089	\$545	\$2,235	\$1,746	\$931	\$1,746	\$9,922
18	\$1,118	\$561	\$1,122	\$561	\$2,302	\$1,798	\$959	\$1,798	\$10,220
19	\$1,151	\$578	\$1,156	\$578	\$2,371	\$1,852	\$988	\$1,852	\$10,526
20	\$1,186	\$595	\$1,191	\$595	\$2,442	\$1,908	\$1,018	\$1,908	\$10,842
<b>Sub Watershed #306 North Fork Spring River Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$741	\$372	\$744	\$372	\$1,525	\$1,192	\$636	\$1,192	\$6,772
2	\$763	\$383	\$766	\$383	\$1,571	\$1,227	\$655	\$1,227	\$6,975
3	\$786	\$394	\$789	\$394	\$1,618	\$1,264	\$674	\$1,264	\$7,184
4	\$809	\$406	\$813	\$406	\$1,667	\$1,302	\$694	\$1,302	\$7,400
5	\$834	\$418	\$837	\$418	\$1,717	\$1,341	\$715	\$1,341	\$7,622
6	\$859	\$431	\$862	\$431	\$1,768	\$1,381	\$737	\$1,381	\$7,851
7	\$884	\$444	\$888	\$444	\$1,821	\$1,423	\$759	\$1,423	\$8,086
8	\$911	\$457	\$915	\$457	\$1,876	\$1,466	\$782	\$1,466	\$8,329
9	\$938	\$471	\$942	\$471	\$1,932	\$1,510	\$805	\$1,510	\$8,579
10	\$966	\$485	\$970	\$485	\$1,990	\$1,555	\$829	\$1,555	\$8,836
11	\$995	\$500	\$999	\$500	\$2,050	\$1,601	\$854	\$1,601	\$9,101
12	\$1,025	\$515	\$1,029	\$515	\$2,111	\$1,650	\$880	\$1,650	\$9,374



13	\$1,056	\$530	\$1,060	\$530	\$2,175	\$1,699	\$906	\$1,699	\$9,655
14	\$1,088	\$546	\$1,092	\$546	\$2,240	\$1,750	\$933	\$1,750	\$9,945
15	\$1,120	\$562	\$1,125	\$562	\$2,307	\$1,802	\$961	\$1,802	\$10,243
16	\$1,154	\$579	\$1,158	\$579	\$2,376	\$1,857	\$990	\$1,857	\$10,551
17	\$1,188	\$597	\$1,193	\$597	\$2,448	\$1,912	\$1,020	\$1,912	\$10,867
18	\$1,224	\$615	\$1,229	\$615	\$2,521	\$1,970	\$1,050	\$1,970	\$11,193
19	\$1,261	\$633	\$1,266	\$633	\$2,597	\$2,029	\$1,082	\$2,029	\$11,529
20	\$1,299	\$652	\$1,304	\$652	\$2,675	\$2,090	\$1,114	\$2,090	\$11,875
<b>Sub Watershed #307 North Fork Spring River Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$824	\$414	\$828	\$414	\$1,698	\$1,327	\$707	\$1,327	\$7,539
2	\$849	\$426	\$853	\$426	\$1,749	\$1,366	\$729	\$1,366	\$7,765
3	\$875	\$439	\$878	\$439	\$1,801	\$1,407	\$751	\$1,407	\$7,998
4	\$901	\$452	\$905	\$452	\$1,855	\$1,450	\$773	\$1,450	\$8,238
5	\$928	\$466	\$932	\$466	\$1,911	\$1,493	\$796	\$1,493	\$8,485
6	\$956	\$480	\$960	\$480	\$1,968	\$1,538	\$820	\$1,538	\$8,739
7	\$984	\$494	\$988	\$494	\$2,027	\$1,584	\$845	\$1,584	\$9,001
8	\$1,014	\$509	\$1,018	\$509	\$2,088	\$1,631	\$870	\$1,631	\$9,271
9	\$1,044	\$524	\$1,049	\$524	\$2,151	\$1,680	\$896	\$1,680	\$9,550
10	\$1,076	\$540	\$1,080	\$540	\$2,215	\$1,731	\$923	\$1,731	\$9,836
11	\$1,108	\$556	\$1,112	\$556	\$2,282	\$1,783	\$951	\$1,783	\$10,131
12	\$1,141	\$573	\$1,146	\$573	\$2,350	\$1,836	\$979	\$1,836	\$10,435
13	\$1,175	\$590	\$1,180	\$590	\$2,421	\$1,891	\$1,009	\$1,891	\$10,748
14	\$1,211	\$608	\$1,216	\$608	\$2,494	\$1,948	\$1,039	\$1,948	\$11,071
15	\$1,247	\$626	\$1,252	\$626	\$2,568	\$2,007	\$1,070	\$2,007	\$11,403
16	\$1,284	\$645	\$1,290	\$645	\$2,645	\$2,067	\$1,102	\$2,067	\$11,745
17	\$1,323	\$664	\$1,328	\$664	\$2,725	\$2,129	\$1,135	\$2,129	\$12,097
18	\$1,363	\$684	\$1,368	\$684	\$2,806	\$2,193	\$1,169	\$2,193	\$12,460
19	\$1,404	\$705	\$1,409	\$705	\$2,891	\$2,258	\$1,204	\$2,258	\$12,834
20	\$1,446	\$726	\$1,451	\$726	\$2,977	\$2,326	\$1,241	\$2,326	\$13,219
<b>Sub Watershed #311 North Fork Spring River Annual Adoption (treated acres), Cropland BMPs</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$3,927	\$1,972	\$3,943	\$1,972	\$8,088	\$6,319	\$3,370	\$6,319	\$35,910
2	\$4,045	\$2,031	\$4,061	\$2,031	\$8,331	\$6,509	\$3,471	\$6,509	\$36,987
3	\$4,167	\$2,092	\$4,183	\$2,092	\$8,581	\$6,704	\$3,575	\$6,704	\$38,097
4	\$4,292	\$2,154	\$4,309	\$2,154	\$8,838	\$6,905	\$3,683	\$6,905	\$39,240
5	\$4,420	\$2,219	\$4,438	\$2,219	\$9,103	\$7,112	\$3,793	\$7,112	\$40,417

6	\$4,553	\$2,286	\$4,571	\$2,286	\$9,377	\$7,325	\$3,907	\$7,325	\$41,629
7	\$4,689	\$2,354	\$4,708	\$2,354	\$9,658	\$7,545	\$4,024	\$7,545	\$42,878
8	\$4,830	\$2,425	\$4,849	\$2,425	\$9,948	\$7,772	\$4,145	\$7,772	\$44,164
9	\$4,975	\$2,497	\$4,995	\$2,497	\$10,246	\$8,005	\$4,269	\$8,005	\$45,489
10	\$5,124	\$2,572	\$5,145	\$2,572	\$10,553	\$8,245	\$4,397	\$8,245	\$46,854
11	\$5,278	\$2,650	\$5,299	\$2,650	\$10,870	\$8,492	\$4,529	\$8,492	\$48,260
12	\$5,436	\$2,729	\$5,458	\$2,729	\$11,196	\$8,747	\$4,665	\$8,747	\$49,707
13	\$5,599	\$2,811	\$5,622	\$2,811	\$11,532	\$9,009	\$4,805	\$9,009	\$51,199
14	\$5,767	\$2,895	\$5,790	\$2,895	\$11,878	\$9,280	\$4,949	\$9,280	\$52,735
15	\$5,940	\$2,982	\$5,964	\$2,982	\$12,234	\$9,558	\$5,098	\$9,558	\$54,317
16	\$6,119	\$3,072	\$6,143	\$3,072	\$12,601	\$9,845	\$5,251	\$9,845	\$55,946
17	\$6,302	\$3,164	\$6,327	\$3,164	\$12,979	\$10,140	\$5,408	\$10,140	\$57,625
18	\$6,491	\$3,259	\$6,517	\$3,259	\$13,369	\$10,444	\$5,570	\$10,444	\$59,353
19	\$6,686	\$3,356	\$6,713	\$3,356	\$13,770	\$10,758	\$5,737	\$10,758	\$61,134
20	\$6,887	\$3,457	\$6,914	\$3,457	\$14,183	\$11,080	\$5,910	\$11,080	\$62,968
<b>Sub Watershed #706 Shoal, Pogue, and Joyce Creeks Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$21	\$11	\$21	\$11	\$43	\$34	\$18	\$34	\$193
2	\$22	\$11	\$22	\$11	\$45	\$35	\$19	\$35	\$199
3	\$22	\$11	\$22	\$11	\$46	\$36	\$19	\$36	\$205
4	\$23	\$12	\$23	\$12	\$48	\$37	\$20	\$37	\$211
5	\$24	\$12	\$24	\$12	\$49	\$38	\$20	\$38	\$217
6	\$24	\$12	\$25	\$12	\$50	\$39	\$21	\$39	\$224
7	\$25	\$13	\$25	\$13	\$52	\$41	\$22	\$41	\$230
8	\$26	\$13	\$26	\$13	\$53	\$42	\$22	\$42	\$237
9	\$27	\$13	\$27	\$13	\$55	\$43	\$23	\$43	\$244
10	\$28	\$14	\$28	\$14	\$57	\$44	\$24	\$44	\$252
11	\$28	\$14	\$28	\$14	\$58	\$46	\$24	\$46	\$259
12	\$29	\$15	\$29	\$15	\$60	\$47	\$25	\$47	\$267
13	\$30	\$15	\$30	\$15	\$62	\$48	\$26	\$48	\$275
14	\$31	\$16	\$31	\$16	\$64	\$50	\$27	\$50	\$283
15	\$32	\$16	\$32	\$16	\$66	\$51	\$27	\$51	\$292
16	\$33	\$17	\$33	\$17	\$68	\$53	\$28	\$53	\$301
17	\$34	\$17	\$34	\$17	\$70	\$54	\$29	\$54	\$310
18	\$35	\$18	\$35	\$18	\$72	\$56	\$30	\$56	\$319
19	\$36	\$18	\$36	\$18	\$74	\$58	\$31	\$58	\$329
20	\$37	\$19	\$37	\$19	\$76	\$60	\$32	\$60	\$338
<b>Sub Watershed #801 Shoal, Pogue, and Joyce Creeks Total Annual Cost of Cropland BMPs, 3% Inflation</b>									

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$507	\$255	\$509	\$255	\$1,045	\$816	\$435	\$816	\$4,639
2	\$523	\$262	\$525	\$262	\$1,076	\$841	\$448	\$841	\$4,779
3	\$538	\$270	\$540	\$270	\$1,109	\$866	\$462	\$866	\$4,922
4	\$554	\$278	\$557	\$278	\$1,142	\$892	\$476	\$892	\$5,070
5	\$571	\$287	\$573	\$287	\$1,176	\$919	\$490	\$919	\$5,222
6	\$588	\$295	\$591	\$295	\$1,211	\$946	\$505	\$946	\$5,378
7	\$606	\$304	\$608	\$304	\$1,248	\$975	\$520	\$975	\$5,540
8	\$624	\$313	\$627	\$313	\$1,285	\$1,004	\$535	\$1,004	\$5,706
9	\$643	\$323	\$645	\$323	\$1,324	\$1,034	\$552	\$1,034	\$5,877
10	\$662	\$332	\$665	\$332	\$1,363	\$1,065	\$568	\$1,065	\$6,053
11	\$682	\$342	\$685	\$342	\$1,404	\$1,097	\$585	\$1,097	\$6,235
12	\$702	\$353	\$705	\$353	\$1,446	\$1,130	\$603	\$1,130	\$6,422
13	\$723	\$363	\$726	\$363	\$1,490	\$1,164	\$621	\$1,164	\$6,615
14	\$745	\$374	\$748	\$374	\$1,535	\$1,199	\$639	\$1,199	\$6,813
15	\$767	\$385	\$771	\$385	\$1,581	\$1,235	\$659	\$1,235	\$7,018
16	\$791	\$397	\$794	\$397	\$1,628	\$1,272	\$678	\$1,272	\$7,228
17	\$814	\$409	\$817	\$409	\$1,677	\$1,310	\$699	\$1,310	\$7,445
18	\$839	\$421	\$842	\$421	\$1,727	\$1,349	\$720	\$1,349	\$7,668
19	\$864	\$434	\$867	\$434	\$1,779	\$1,390	\$741	\$1,390	\$7,898
20	\$890	\$447	\$893	\$447	\$1,832	\$1,432	\$763	\$1,432	\$8,135
<b>Sub Watershed #803 Shoal, Pogue, and Joyce Creeks Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$3,194	\$1,604	\$3,207	\$1,604	\$6,579	\$5,140	\$2,741	\$5,140	\$29,208
2	\$3,290	\$1,652	\$3,303	\$1,652	\$6,776	\$5,294	\$2,823	\$5,294	\$30,084
3	\$3,389	\$1,701	\$3,402	\$1,701	\$6,979	\$5,453	\$2,908	\$5,453	\$30,986
4	\$3,491	\$1,752	\$3,504	\$1,752	\$7,189	\$5,616	\$2,995	\$5,616	\$31,916
5	\$3,595	\$1,805	\$3,610	\$1,805	\$7,404	\$5,785	\$3,085	\$5,785	\$32,873
6	\$3,703	\$1,859	\$3,718	\$1,859	\$7,627	\$5,958	\$3,178	\$5,958	\$33,860
7	\$3,814	\$1,915	\$3,829	\$1,915	\$7,855	\$6,137	\$3,273	\$6,137	\$34,875
8	\$3,929	\$1,972	\$3,944	\$1,972	\$8,091	\$6,321	\$3,371	\$6,321	\$35,922
9	\$4,047	\$2,031	\$4,063	\$2,031	\$8,334	\$6,511	\$3,472	\$6,511	\$36,999
10	\$4,168	\$2,092	\$4,185	\$2,092	\$8,584	\$6,706	\$3,577	\$6,706	\$38,109
11	\$4,293	\$2,155	\$4,310	\$2,155	\$8,841	\$6,907	\$3,684	\$6,907	\$39,253
12	\$4,422	\$2,220	\$4,439	\$2,220	\$9,106	\$7,114	\$3,794	\$7,114	\$40,430
13	\$4,554	\$2,286	\$4,573	\$2,286	\$9,380	\$7,328	\$3,908	\$7,328	\$41,643
14	\$4,691	\$2,355	\$4,710	\$2,355	\$9,661	\$7,548	\$4,025	\$7,548	\$42,892

15	\$4,832	\$2,426	\$4,851	\$2,426	\$9,951	\$7,774	\$4,146	\$7,774	\$44,179
16	\$4,977	\$2,498	\$4,997	\$2,498	\$10,249	\$8,007	\$4,271	\$8,007	\$45,504
17	\$5,126	\$2,573	\$5,146	\$2,573	\$10,557	\$8,248	\$4,399	\$8,248	\$46,870
18	\$5,280	\$2,650	\$5,301	\$2,650	\$10,874	\$8,495	\$4,531	\$8,495	\$48,276
19	\$5,438	\$2,730	\$5,460	\$2,730	\$11,200	\$8,750	\$4,667	\$8,750	\$49,724
20	\$5,601	\$2,812	\$5,624	\$2,812	\$11,536	\$9,012	\$4,807	\$9,012	\$51,216
<b>Sub Watershed #806 Shoal, Pogue, and Joyce Creeks Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$4,765	\$2,392	\$4,784	\$2,392	\$9,813	\$7,666	\$4,089	\$7,666	\$43,567
2	\$4,908	\$2,464	\$4,927	\$2,464	\$10,107	\$7,896	\$4,211	\$7,896	\$44,874
3	\$5,055	\$2,538	\$5,075	\$2,538	\$10,411	\$8,133	\$4,338	\$8,133	\$46,220
4	\$5,207	\$2,614	\$5,227	\$2,614	\$10,723	\$8,377	\$4,468	\$8,377	\$47,607
5	\$5,363	\$2,692	\$5,384	\$2,692	\$11,045	\$8,629	\$4,602	\$8,629	\$49,035
6	\$5,524	\$2,773	\$5,546	\$2,773	\$11,376	\$8,887	\$4,740	\$8,887	\$50,506
7	\$5,689	\$2,856	\$5,712	\$2,856	\$11,717	\$9,154	\$4,882	\$9,154	\$52,021
8	\$5,860	\$2,942	\$5,883	\$2,942	\$12,069	\$9,429	\$5,029	\$9,429	\$53,582
9	\$6,036	\$3,030	\$6,060	\$3,030	\$12,431	\$9,712	\$5,179	\$9,712	\$55,189
10	\$6,217	\$3,121	\$6,242	\$3,121	\$12,804	\$10,003	\$5,335	\$10,003	\$56,845
11	\$6,404	\$3,215	\$6,429	\$3,215	\$13,188	\$10,303	\$5,495	\$10,303	\$58,550
12	\$6,596	\$3,311	\$6,622	\$3,311	\$13,583	\$10,612	\$5,660	\$10,612	\$60,307
13	\$6,793	\$3,410	\$6,821	\$3,410	\$13,991	\$10,930	\$5,830	\$10,930	\$62,116
14	\$6,997	\$3,513	\$7,025	\$3,513	\$14,411	\$11,258	\$6,004	\$11,258	\$63,979
15	\$7,207	\$3,618	\$7,236	\$3,618	\$14,843	\$11,596	\$6,185	\$11,596	\$65,899
16	\$7,423	\$3,727	\$7,453	\$3,727	\$15,288	\$11,944	\$6,370	\$11,944	\$67,876
17	\$7,646	\$3,838	\$7,677	\$3,838	\$15,747	\$12,302	\$6,561	\$12,302	\$69,912
18	\$7,875	\$3,953	\$7,907	\$3,953	\$16,219	\$12,671	\$6,758	\$12,671	\$72,009
19	\$8,112	\$4,072	\$8,144	\$4,072	\$16,706	\$13,051	\$6,961	\$13,051	\$74,170
20	\$8,355	\$4,194	\$8,388	\$4,194	\$17,207	\$13,443	\$7,170	\$13,443	\$76,395
<b>Sub Watershed #101 Spring River Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$5,479	\$2,750	\$5,501	\$2,750	\$11,284	\$8,815	\$4,701	\$8,815	\$50,096
2	\$5,643	\$2,833	\$5,666	\$2,833	\$11,622	\$9,080	\$4,843	\$9,080	\$51,599
3	\$5,813	\$2,918	\$5,836	\$2,918	\$11,971	\$9,352	\$4,988	\$9,352	\$53,147
4	\$5,987	\$3,005	\$6,011	\$3,005	\$12,330	\$9,633	\$5,137	\$9,633	\$54,741
5	\$6,166	\$3,096	\$6,191	\$3,096	\$12,700	\$9,922	\$5,292	\$9,922	\$56,383
6	\$6,351	\$3,188	\$6,377	\$3,188	\$13,081	\$10,219	\$5,450	\$10,219	\$58,075
7	\$6,542	\$3,284	\$6,568	\$3,284	\$13,473	\$10,526	\$5,614	\$10,526	\$59,817

8	\$6,738	\$3,383	\$6,765	\$3,383	\$13,877	\$10,842	\$5,782	\$10,842	\$61,611
9	\$6,940	\$3,484	\$6,968	\$3,484	\$14,294	\$11,167	\$5,956	\$11,167	\$63,460
10	\$7,149	\$3,589	\$7,177	\$3,589	\$14,722	\$11,502	\$6,134	\$11,502	\$65,364
11	\$7,363	\$3,696	\$7,392	\$3,696	\$15,164	\$11,847	\$6,318	\$11,847	\$67,324
12	\$7,584	\$3,807	\$7,614	\$3,807	\$15,619	\$12,202	\$6,508	\$12,202	\$69,344
13	\$7,812	\$3,921	\$7,843	\$3,921	\$16,088	\$12,568	\$6,703	\$12,568	\$71,425
14	\$8,046	\$4,039	\$8,078	\$4,039	\$16,570	\$12,945	\$6,904	\$12,945	\$73,567
15	\$8,287	\$4,160	\$8,320	\$4,160	\$17,067	\$13,334	\$7,111	\$13,334	\$75,774
16	\$8,536	\$4,285	\$8,570	\$4,285	\$17,579	\$13,734	\$7,325	\$13,734	\$78,048
17	\$8,792	\$4,414	\$8,827	\$4,414	\$18,107	\$14,146	\$7,544	\$14,146	\$80,389
18	\$9,056	\$4,546	\$9,092	\$4,546	\$18,650	\$14,570	\$7,771	\$14,570	\$82,801
19	\$9,327	\$4,682	\$9,365	\$4,682	\$19,209	\$15,007	\$8,004	\$15,007	\$85,285
20	\$9,607	\$4,823	\$9,646	\$4,823	\$19,786	\$15,458	\$8,244	\$15,458	\$87,843
<b>Sub Watershed #104 Spring River Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$3,604	\$1,809	\$3,619	\$1,809	\$7,423	\$5,799	\$3,093	\$5,799	\$32,957
2	\$3,713	\$1,864	\$3,727	\$1,864	\$7,646	\$5,973	\$3,186	\$5,973	\$33,945
3	\$3,824	\$1,920	\$3,839	\$1,920	\$7,875	\$6,153	\$3,281	\$6,153	\$34,964
4	\$3,939	\$1,977	\$3,954	\$1,977	\$8,111	\$6,337	\$3,380	\$6,337	\$36,013
5	\$4,057	\$2,036	\$4,073	\$2,036	\$8,355	\$6,527	\$3,481	\$6,527	\$37,093
6	\$4,178	\$2,098	\$4,195	\$2,098	\$8,605	\$6,723	\$3,586	\$6,723	\$38,206
7	\$4,304	\$2,161	\$4,321	\$2,161	\$8,864	\$6,925	\$3,693	\$6,925	\$39,352
8	\$4,433	\$2,225	\$4,451	\$2,225	\$9,130	\$7,132	\$3,804	\$7,132	\$40,533
9	\$4,566	\$2,292	\$4,584	\$2,292	\$9,403	\$7,346	\$3,918	\$7,346	\$41,749
10	\$4,703	\$2,361	\$4,722	\$2,361	\$9,686	\$7,567	\$4,036	\$7,567	\$43,001
11	\$4,844	\$2,432	\$4,863	\$2,432	\$9,976	\$7,794	\$4,157	\$7,794	\$44,291
12	\$4,989	\$2,505	\$5,009	\$2,505	\$10,275	\$8,028	\$4,281	\$8,028	\$45,620
13	\$5,139	\$2,580	\$5,160	\$2,580	\$10,584	\$8,268	\$4,410	\$8,268	\$46,988
14	\$5,293	\$2,657	\$5,314	\$2,657	\$10,901	\$8,517	\$4,542	\$8,517	\$48,398
15	\$5,452	\$2,737	\$5,474	\$2,737	\$11,228	\$8,772	\$4,678	\$8,772	\$49,850
16	\$5,616	\$2,819	\$5,638	\$2,819	\$11,565	\$9,035	\$4,819	\$9,035	\$51,345
17	\$5,784	\$2,904	\$5,807	\$2,904	\$11,912	\$9,306	\$4,963	\$9,306	\$52,886
18	\$5,958	\$2,991	\$5,981	\$2,991	\$12,269	\$9,585	\$5,112	\$9,585	\$54,472
19	\$6,136	\$3,080	\$6,161	\$3,080	\$12,637	\$9,873	\$5,266	\$9,873	\$56,107
20	\$6,320	\$3,173	\$6,346	\$3,173	\$13,017	\$10,169	\$5,424	\$10,169	\$57,790
<b>Sub Watershed #105 Spring River Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total

1	\$1,278	\$641	\$1,283	\$641	\$2,631	\$2,056	\$1,096	\$2,056	\$11,682
2	\$1,316	\$661	\$1,321	\$661	\$2,710	\$2,117	\$1,129	\$2,117	\$12,032
3	\$1,355	\$680	\$1,361	\$680	\$2,791	\$2,181	\$1,163	\$2,181	\$12,393
4	\$1,396	\$701	\$1,402	\$701	\$2,875	\$2,246	\$1,198	\$2,246	\$12,765
5	\$1,438	\$722	\$1,444	\$722	\$2,961	\$2,314	\$1,234	\$2,314	\$13,148
6	\$1,481	\$743	\$1,487	\$743	\$3,050	\$2,383	\$1,271	\$2,383	\$13,542
7	\$1,526	\$766	\$1,532	\$766	\$3,142	\$2,455	\$1,309	\$2,455	\$13,949
8	\$1,571	\$789	\$1,578	\$789	\$3,236	\$2,528	\$1,348	\$2,528	\$14,367
9	\$1,618	\$812	\$1,625	\$812	\$3,333	\$2,604	\$1,389	\$2,604	\$14,798
10	\$1,667	\$837	\$1,674	\$837	\$3,433	\$2,682	\$1,430	\$2,682	\$15,242
11	\$1,717	\$862	\$1,724	\$862	\$3,536	\$2,763	\$1,473	\$2,763	\$15,699
12	\$1,768	\$888	\$1,776	\$888	\$3,642	\$2,845	\$1,518	\$2,845	\$16,170
13	\$1,822	\$914	\$1,829	\$914	\$3,751	\$2,931	\$1,563	\$2,931	\$16,655
14	\$1,876	\$942	\$1,884	\$942	\$3,864	\$3,019	\$1,610	\$3,019	\$17,155
15	\$1,932	\$970	\$1,940	\$970	\$3,980	\$3,109	\$1,658	\$3,109	\$17,670
16	\$1,990	\$999	\$1,998	\$999	\$4,099	\$3,203	\$1,708	\$3,203	\$18,200
17	\$2,050	\$1,029	\$2,058	\$1,029	\$4,222	\$3,299	\$1,759	\$3,299	\$18,746
18	\$2,112	\$1,060	\$2,120	\$1,060	\$4,349	\$3,398	\$1,812	\$3,398	\$19,308
19	\$2,175	\$1,092	\$2,184	\$1,092	\$4,479	\$3,500	\$1,866	\$3,500	\$19,887
20	\$2,240	\$1,125	\$2,249	\$1,125	\$4,614	\$3,605	\$1,922	\$3,605	\$20,484

**Sub Watershed #107 Spring River Total Annual Cost of Cropland BMPs, 3% Inflation**

Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$98	\$49	\$99	\$49	\$203	\$158	\$84	\$158	\$900
2	\$101	\$51	\$102	\$51	\$209	\$163	\$87	\$163	\$927
3	\$104	\$52	\$105	\$52	\$215	\$168	\$90	\$168	\$955
4	\$108	\$54	\$108	\$54	\$222	\$173	\$92	\$173	\$984
5	\$111	\$56	\$111	\$56	\$228	\$178	\$95	\$178	\$1,013
6	\$114	\$57	\$115	\$57	\$235	\$184	\$98	\$184	\$1,043
7	\$118	\$59	\$118	\$59	\$242	\$189	\$101	\$189	\$1,075
8	\$121	\$61	\$122	\$61	\$249	\$195	\$104	\$195	\$1,107
9	\$125	\$63	\$125	\$63	\$257	\$201	\$107	\$201	\$1,140
10	\$128	\$64	\$129	\$64	\$265	\$207	\$110	\$207	\$1,174
11	\$132	\$66	\$133	\$66	\$272	\$213	\$114	\$213	\$1,210
12	\$136	\$68	\$137	\$68	\$281	\$219	\$117	\$219	\$1,246
13	\$140	\$70	\$141	\$70	\$289	\$226	\$120	\$226	\$1,283
14	\$145	\$73	\$145	\$73	\$298	\$233	\$124	\$233	\$1,322
15	\$149	\$75	\$150	\$75	\$307	\$240	\$128	\$240	\$1,362
16	\$153	\$77	\$154	\$77	\$316	\$247	\$132	\$247	\$1,402
17	\$158	\$79	\$159	\$79	\$325	\$254	\$136	\$254	\$1,444

<b>18</b>	\$163	\$82	\$163	\$82	\$335	\$262	\$140	\$262	\$1,488
<b>19</b>	\$168	\$84	\$168	\$84	\$345	\$270	\$144	\$270	\$1,532
<b>20</b>	\$173	\$87	\$173	\$87	\$356	\$278	\$148	\$278	\$1,578
<b>Sub Watershed #501 Spring River Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
<b>Year</b>	<b>No-Till</b>	<b>Cover Crops</b>	<b>Nutrient Mgmt Plan</b>	<b>Cons Crop Rotation</b>	<b>Grassed Waterways</b>	<b>Terraces</b>	<b>Vegetative Buffers</b>	<b>Water Retention Structures</b>	<b>Total</b>
<b>1</b>	\$392	\$197	\$393	\$197	\$807	\$630	\$336	\$630	\$3,582
<b>2</b>	\$403	\$203	\$405	\$203	\$831	\$649	\$346	\$649	\$3,689
<b>3</b>	\$416	\$209	\$417	\$209	\$856	\$669	\$357	\$669	\$3,800
<b>4</b>	\$428	\$215	\$430	\$215	\$882	\$689	\$367	\$689	\$3,914
<b>5</b>	\$441	\$221	\$443	\$221	\$908	\$709	\$378	\$709	\$4,031
<b>6</b>	\$454	\$228	\$456	\$228	\$935	\$731	\$390	\$731	\$4,152
<b>7</b>	\$468	\$235	\$470	\$235	\$963	\$753	\$401	\$753	\$4,277
<b>8</b>	\$482	\$242	\$484	\$242	\$992	\$775	\$413	\$775	\$4,405
<b>9</b>	\$496	\$249	\$498	\$249	\$1,022	\$798	\$426	\$798	\$4,537
<b>10</b>	\$511	\$257	\$513	\$257	\$1,053	\$822	\$439	\$822	\$4,673
<b>11</b>	\$526	\$264	\$529	\$264	\$1,084	\$847	\$452	\$847	\$4,813
<b>12</b>	\$542	\$272	\$544	\$272	\$1,117	\$872	\$465	\$872	\$4,958
<b>13</b>	\$558	\$280	\$561	\$280	\$1,150	\$899	\$479	\$899	\$5,106
<b>14</b>	\$575	\$289	\$578	\$289	\$1,185	\$926	\$494	\$926	\$5,260
<b>15</b>	\$592	\$297	\$595	\$297	\$1,220	\$953	\$508	\$953	\$5,417
<b>16</b>	\$610	\$306	\$613	\$306	\$1,257	\$982	\$524	\$982	\$5,580
<b>17</b>	\$629	\$316	\$631	\$316	\$1,295	\$1,011	\$539	\$1,011	\$5,747
<b>18</b>	\$647	\$325	\$650	\$325	\$1,333	\$1,042	\$556	\$1,042	\$5,920
<b>19</b>	\$667	\$335	\$670	\$335	\$1,373	\$1,073	\$572	\$1,073	\$6,097
<b>20</b>	\$687	\$345	\$690	\$345	\$1,415	\$1,105	\$589	\$1,105	\$6,280
<b>Sub Watershed #503 Spring River Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
<b>Year</b>	<b>No-Till</b>	<b>Cover Crops</b>	<b>Nutrient Mgmt Plan</b>	<b>Cons Crop Rotation</b>	<b>Grassed Waterways</b>	<b>Terraces</b>	<b>Vegetative Buffers</b>	<b>Water Retention Structures</b>	<b>Total</b>
<b>1</b>	\$51	\$25	\$51	\$25	\$104	\$82	\$44	\$82	\$464
<b>2</b>	\$52	\$26	\$52	\$26	\$108	\$84	\$45	\$84	\$478
<b>3</b>	\$54	\$27	\$54	\$27	\$111	\$87	\$46	\$87	\$492
<b>4</b>	\$55	\$28	\$56	\$28	\$114	\$89	\$48	\$89	\$507
<b>5</b>	\$57	\$29	\$57	\$29	\$118	\$92	\$49	\$92	\$522
<b>6</b>	\$59	\$30	\$59	\$30	\$121	\$95	\$50	\$95	\$538
<b>7</b>	\$61	\$30	\$61	\$30	\$125	\$97	\$52	\$97	\$554
<b>8</b>	\$62	\$31	\$63	\$31	\$129	\$100	\$54	\$100	\$571
<b>9</b>	\$64	\$32	\$65	\$32	\$132	\$103	\$55	\$103	\$588
<b>10</b>	\$66	\$33	\$66	\$33	\$136	\$107	\$57	\$107	\$605

11	\$68	\$34	\$68	\$34	\$140	\$110	\$59	\$110	\$623
12	\$70	\$35	\$71	\$35	\$145	\$113	\$60	\$113	\$642
13	\$72	\$36	\$73	\$36	\$149	\$116	\$62	\$116	\$661
14	\$75	\$37	\$75	\$37	\$153	\$120	\$64	\$120	\$681
15	\$77	\$39	\$77	\$39	\$158	\$123	\$66	\$123	\$702
16	\$79	\$40	\$79	\$40	\$163	\$127	\$68	\$127	\$723
17	\$81	\$41	\$82	\$41	\$168	\$131	\$70	\$131	\$744
18	\$84	\$42	\$84	\$42	\$173	\$135	\$72	\$135	\$767
19	\$86	\$43	\$87	\$43	\$178	\$139	\$74	\$139	\$790
20	\$89	\$45	\$89	\$45	\$183	\$143	\$76	\$143	\$814
<b>Sub Watershed #505 Spring River Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$382	\$192	\$384	\$192	\$787	\$615	\$328	\$615	\$3,493
2	\$394	\$198	\$395	\$198	\$810	\$633	\$338	\$633	\$3,598
3	\$405	\$203	\$407	\$203	\$835	\$652	\$348	\$652	\$3,706
4	\$417	\$210	\$419	\$210	\$860	\$672	\$358	\$672	\$3,817
5	\$430	\$216	\$432	\$216	\$886	\$692	\$369	\$692	\$3,932
6	\$443	\$222	\$445	\$222	\$912	\$713	\$380	\$713	\$4,050
7	\$456	\$229	\$458	\$229	\$939	\$734	\$391	\$734	\$4,171
8	\$470	\$236	\$472	\$236	\$968	\$756	\$403	\$756	\$4,296
9	\$484	\$243	\$486	\$243	\$997	\$779	\$415	\$779	\$4,425
10	\$498	\$250	\$500	\$250	\$1,027	\$802	\$428	\$802	\$4,558
11	\$513	\$258	\$515	\$258	\$1,057	\$826	\$441	\$826	\$4,695
12	\$529	\$265	\$531	\$265	\$1,089	\$851	\$454	\$851	\$4,835
13	\$545	\$273	\$547	\$273	\$1,122	\$876	\$467	\$876	\$4,980
14	\$561	\$282	\$563	\$282	\$1,155	\$903	\$481	\$903	\$5,130
15	\$578	\$290	\$580	\$290	\$1,190	\$930	\$496	\$930	\$5,284
16	\$595	\$299	\$598	\$299	\$1,226	\$958	\$511	\$958	\$5,442
17	\$613	\$308	\$616	\$308	\$1,263	\$986	\$526	\$986	\$5,606
18	\$631	\$317	\$634	\$317	\$1,300	\$1,016	\$542	\$1,016	\$5,774
19	\$650	\$326	\$653	\$326	\$1,339	\$1,046	\$558	\$1,046	\$5,947
20	\$670	\$336	\$673	\$336	\$1,380	\$1,078	\$575	\$1,078	\$6,125
<b>Sub Watershed #506 Spring River Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$888	\$446	\$891	\$446	\$1,828	\$1,428	\$762	\$1,428	\$8,116
2	\$914	\$459	\$918	\$459	\$1,883	\$1,471	\$785	\$1,471	\$8,359
3	\$942	\$473	\$945	\$473	\$1,939	\$1,515	\$808	\$1,515	\$8,610



4	\$970	\$487	\$974	\$487	\$1,998	\$1,561	\$832	\$1,561	\$8,868
5	\$999	\$501	\$1,003	\$501	\$2,057	\$1,607	\$857	\$1,607	\$9,134
6	\$1,029	\$517	\$1,033	\$517	\$2,119	\$1,656	\$883	\$1,656	\$9,408
7	\$1,060	\$532	\$1,064	\$532	\$2,183	\$1,705	\$909	\$1,705	\$9,691
8	\$1,092	\$548	\$1,096	\$548	\$2,248	\$1,756	\$937	\$1,756	\$9,981
9	\$1,124	\$564	\$1,129	\$564	\$2,316	\$1,809	\$965	\$1,809	\$10,281
10	\$1,158	\$581	\$1,163	\$581	\$2,385	\$1,863	\$994	\$1,863	\$10,589
11	\$1,193	\$599	\$1,198	\$599	\$2,457	\$1,919	\$1,024	\$1,919	\$10,907
12	\$1,229	\$617	\$1,234	\$617	\$2,530	\$1,977	\$1,054	\$1,977	\$11,234
13	\$1,266	\$635	\$1,271	\$635	\$2,606	\$2,036	\$1,086	\$2,036	\$11,571
14	\$1,303	\$654	\$1,309	\$654	\$2,684	\$2,097	\$1,119	\$2,097	\$11,918
15	\$1,343	\$674	\$1,348	\$674	\$2,765	\$2,160	\$1,152	\$2,160	\$12,276
16	\$1,383	\$694	\$1,388	\$694	\$2,848	\$2,225	\$1,187	\$2,225	\$12,644
17	\$1,424	\$715	\$1,430	\$715	\$2,933	\$2,292	\$1,222	\$2,292	\$13,024
18	\$1,467	\$736	\$1,473	\$736	\$3,021	\$2,360	\$1,259	\$2,360	\$13,414
19	\$1,511	\$759	\$1,517	\$759	\$3,112	\$2,431	\$1,297	\$2,431	\$13,817
20	\$1,556	\$781	\$1,563	\$781	\$3,205	\$2,504	\$1,336	\$2,504	\$14,231
<b>Sub Watershed #805 Thurman Creek Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
Year	No-Till	Cover Crops	Nutrient Mgmt Plan	Cons Crop Rotation	Grassed Waterways	Terraces	Vegetative Buffers	Water Retention Structures	Total
1	\$5,274	\$2,648	\$5,295	\$2,648	\$10,862	\$8,486	\$4,526	\$8,486	\$48,224
2	\$5,432	\$2,727	\$5,454	\$2,727	\$11,188	\$8,740	\$4,662	\$8,740	\$49,670
3	\$5,595	\$2,809	\$5,618	\$2,809	\$11,523	\$9,003	\$4,801	\$9,003	\$51,160
4	\$5,763	\$2,893	\$5,786	\$2,893	\$11,869	\$9,273	\$4,945	\$9,273	\$52,695
5	\$5,936	\$2,980	\$5,960	\$2,980	\$12,225	\$9,551	\$5,094	\$9,551	\$54,276
6	\$6,114	\$3,069	\$6,139	\$3,069	\$12,592	\$9,837	\$5,247	\$9,837	\$55,904
7	\$6,298	\$3,161	\$6,323	\$3,161	\$12,970	\$10,132	\$5,404	\$10,132	\$57,581
8	\$6,486	\$3,256	\$6,512	\$3,256	\$13,359	\$10,436	\$5,566	\$10,436	\$59,309
9	\$6,681	\$3,354	\$6,708	\$3,354	\$13,759	\$10,750	\$5,733	\$10,750	\$61,088
10	\$6,881	\$3,454	\$6,909	\$3,454	\$14,172	\$11,072	\$5,905	\$11,072	\$62,921
11	\$7,088	\$3,558	\$7,116	\$3,558	\$14,597	\$11,404	\$6,082	\$11,404	\$64,808
12	\$7,301	\$3,665	\$7,330	\$3,665	\$15,035	\$11,746	\$6,265	\$11,746	\$66,753
13	\$7,520	\$3,775	\$7,550	\$3,775	\$15,486	\$12,099	\$6,453	\$12,099	\$68,755
14	\$7,745	\$3,888	\$7,776	\$3,888	\$15,951	\$12,462	\$6,646	\$12,462	\$70,818
15	\$7,978	\$4,005	\$8,009	\$4,005	\$16,429	\$12,836	\$6,846	\$12,836	\$72,942
16	\$8,217	\$4,125	\$8,250	\$4,125	\$16,922	\$13,221	\$7,051	\$13,221	\$75,131
17	\$8,463	\$4,249	\$8,497	\$4,249	\$17,430	\$13,617	\$7,263	\$13,617	\$77,385
18	\$8,717	\$4,376	\$8,752	\$4,376	\$17,953	\$14,026	\$7,480	\$14,026	\$79,706
19	\$8,979	\$4,507	\$9,015	\$4,507	\$18,492	\$14,446	\$7,705	\$14,446	\$82,097
20	\$9,248	\$4,643	\$9,285	\$4,643	\$19,046	\$14,880	\$7,936	\$14,880	\$84,560

<b>Sub Watershed #901 Turkey Creek Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
<b>Year</b>	<b>No-Till</b>	<b>Cover Crops</b>	<b>Nutrient Mgmt Plan</b>	<b>Cons Crop Rotation</b>	<b>Grassed Waterways</b>	<b>Terraces</b>	<b>Vegetative Buffers</b>	<b>Water Retention Structures</b>	<b>Total</b>
1	\$421	\$211	\$423	\$211	\$867	\$678	\$361	\$678	\$3,851
2	\$434	\$218	\$436	\$218	\$894	\$698	\$372	\$698	\$3,967
3	\$447	\$224	\$449	\$224	\$920	\$719	\$383	\$719	\$4,086
4	\$460	\$231	\$462	\$231	\$948	\$741	\$395	\$741	\$4,208
5	\$474	\$238	\$476	\$238	\$976	\$763	\$407	\$763	\$4,335
6	\$488	\$245	\$490	\$245	\$1,006	\$786	\$419	\$786	\$4,465
7	\$503	\$252	\$505	\$252	\$1,036	\$809	\$432	\$809	\$4,599
8	\$518	\$260	\$520	\$260	\$1,067	\$834	\$445	\$834	\$4,737
9	\$534	\$268	\$536	\$268	\$1,099	\$859	\$458	\$859	\$4,879
10	\$550	\$276	\$552	\$276	\$1,132	\$884	\$472	\$884	\$5,025
11	\$566	\$284	\$568	\$284	\$1,166	\$911	\$486	\$911	\$5,176
12	\$583	\$293	\$585	\$293	\$1,201	\$938	\$500	\$938	\$5,331
13	\$601	\$301	\$603	\$301	\$1,237	\$966	\$515	\$966	\$5,491
14	\$619	\$311	\$621	\$311	\$1,274	\$995	\$531	\$995	\$5,656
15	\$637	\$320	\$640	\$320	\$1,312	\$1,025	\$547	\$1,025	\$5,826
16	\$656	\$329	\$659	\$329	\$1,352	\$1,056	\$563	\$1,056	\$6,000
17	\$676	\$339	\$679	\$339	\$1,392	\$1,088	\$580	\$1,088	\$6,180
18	\$696	\$349	\$699	\$349	\$1,434	\$1,120	\$597	\$1,120	\$6,366
19	\$717	\$360	\$720	\$360	\$1,477	\$1,154	\$615	\$1,154	\$6,557
20	\$739	\$371	\$742	\$371	\$1,521	\$1,188	\$634	\$1,188	\$6,753
<b>Sub Watershed #502 White Oak Creek Total Annual Cost of Cropland BMPs, 3% Inflation</b>									
<b>Year</b>	<b>No-Till</b>	<b>Cover Crops</b>	<b>Nutrient Mgmt Plan</b>	<b>Cons Crop Rotation</b>	<b>Grassed Waterways</b>	<b>Terraces</b>	<b>Vegetative Buffers</b>	<b>Water Retention Structures</b>	<b>Total</b>
1	\$2,402	\$1,206	\$2,412	\$1,206	\$4,947	\$3,865	\$2,061	\$3,865	\$21,963
2	\$2,474	\$1,242	\$2,484	\$1,242	\$5,095	\$3,981	\$2,123	\$3,981	\$22,622
3	\$2,548	\$1,279	\$2,558	\$1,279	\$5,248	\$4,100	\$2,187	\$4,100	\$23,301
4	\$2,625	\$1,318	\$2,635	\$1,318	\$5,406	\$4,223	\$2,252	\$4,223	\$24,000
5	\$2,704	\$1,357	\$2,714	\$1,357	\$5,568	\$4,350	\$2,320	\$4,350	\$24,720
6	\$2,785	\$1,398	\$2,796	\$1,398	\$5,735	\$4,480	\$2,390	\$4,480	\$25,461
7	\$2,868	\$1,440	\$2,880	\$1,440	\$5,907	\$4,615	\$2,461	\$4,615	\$26,225
8	\$2,954	\$1,483	\$2,966	\$1,483	\$6,084	\$4,753	\$2,535	\$4,753	\$27,012
9	\$3,043	\$1,527	\$3,055	\$1,527	\$6,267	\$4,896	\$2,611	\$4,896	\$27,822
10	\$3,134	\$1,573	\$3,147	\$1,573	\$6,455	\$5,043	\$2,689	\$5,043	\$28,657
11	\$3,228	\$1,621	\$3,241	\$1,621	\$6,648	\$5,194	\$2,770	\$5,194	\$29,516
12	\$3,325	\$1,669	\$3,338	\$1,669	\$6,848	\$5,350	\$2,853	\$5,350	\$30,402
13	\$3,425	\$1,719	\$3,438	\$1,719	\$7,053	\$5,510	\$2,939	\$5,510	\$31,314

14	\$3,527	\$1,771	\$3,542	\$1,771	\$7,265	\$5,676	\$3,027	\$5,676	\$32,253
15	\$3,633	\$1,824	\$3,648	\$1,824	\$7,483	\$5,846	\$3,118	\$5,846	\$33,221
16	\$3,742	\$1,879	\$3,757	\$1,879	\$7,707	\$6,021	\$3,211	\$6,021	\$34,218
17	\$3,855	\$1,935	\$3,870	\$1,935	\$7,938	\$6,202	\$3,308	\$6,202	\$35,244
18	\$3,970	\$1,993	\$3,986	\$1,993	\$8,177	\$6,388	\$3,407	\$6,388	\$36,302
19	\$4,089	\$2,053	\$4,106	\$2,053	\$8,422	\$6,580	\$3,509	\$6,580	\$37,391
20	\$4,212	\$2,114	\$4,229	\$2,114	\$8,674	\$6,777	\$3,614	\$6,777	\$38,512

## G HUC 10 and HUC 12 Geographic Regions

Table 283. HUC 10 and HUC 12 Geographic Regions.

HUC 10 Number	Waterway	HUC 12 Number	HUC 12 Name
1107020701	Spring River	110702070101	Headwaters Spring River
		110702070102	Headwaters Honey Creek
		110702070103	Honey Creek
		110702070104	Hillhouse Branch-Spring River
		110702070105	Williams Creek
		110702070106	Stahl Creek
		110702070107	Town of Freistatt-Spring River
1107020702	North Fork Spring River	110702070201	Headwaters North Fork Spring River
		110702070202	Kyle Creek-North Fork Spring River
		110702070203	Elm Branch-North Fork Spring River
		110702070204	Pettis Creek
		110702070205	West Fork Spring River
		110702070206	Lamar Lake-North Fork Spring River
1107020703	North Fork Spring River	110702070301	Coon Creek
		110702070302	Community of Boston-North Fork Spring River
		110702070303	Deer Creek
		110702070304	Headwaters Dry Fork
		110702070305	Dry Fork
		110702070306	Opossum Creek-North Fork Spring River
		110702070307	Buck Branch-North Fork Spring River
		110702070308	Glendale Fork
		110702070309	Headwaters Little North Fork
		110702070310	Little North Fork
		110702070311	North Fork Spring River
1107020704	Cow Creek	110702070403	East Cow Creek-Cow Creek
		110702070404	Brush Creek-Cow Creek
		110702070405	Long Branch-Cow Creek
1107020705	Spring River	110702070501	Cave Spring Branch
		110702070502	Headwaters White Oak Creek

		110702070503	White Oak Creek
		110702070504	Dry Hollow-Spring River
		110702070505	City of Carthage-Spring River
		110702070506	Town of Alba-Spring River
		110702070507	Blackberry Creek
		110702070508	Town of Waco-Spring River
<b>1107020706</b>	Jenkins, Center and Jones Creek	110702070601	Dry Valley Branch
		110702070602	Headwaters Center Creek
		110702070603	Jenkins Creek
		110702070604	Jones Creek
		110702070605	City of Sarcoxie-Center Creek
		110702070606	Grove Creek-Center Creek
		110702070607	Webb City-Center Creek
		110702070608	Center Creek
<b>1107020707</b>	North Fork Spring River	110702070701	Joyce Creek
		110702070702	Headwaters Shoal Creek
		110702070703	Capps Creek
		110702070704	Headwaters Clear Creek
		110702070705	Clear Creek
		110702070706	Zerbert Branch-Shoal Creek
<b>1107020708</b>	Hickory, Thurman Creeks and Baynham Branch	110702070801	Spencer Branch-Shoal Creek
		110702070802	Hickory Creek
		110702070803	Dry Branch-Shoal Creek
		110702070804	Baynham Branch-Shoal Creek
		110702070805	Thurman Creek-Shoal Creek
		110702070806	Shoal Creek
<b>1107020709</b>	Turkey Creek	110702070901	Turkey Creek
		110702070904	Short Creek-Spring River
<b>1107020710</b>	Warren Branch	110702071001	Fivemile Creek
		110702071002	Willow Creek-Spring River
		110702071003	Warren Branch

## Q Designated Uses in the Spring River Watershed<sup>xxix</sup>

Water Body ID	Water Body	Classified *	County	Warm Water Habitat	Cold Water Habitat	Cool Water Habitat	Drinking Water Supply	Industrial Water Supply	Irrigation	Livestock and Wildlife Water Supply	Secondary Contact Recreation	Whole Body Contact	Whole Body Category A	Whole Body Contact Category B
3236	S. Fk. Capps Cr.	C	Barry	X						X	X			X
3236	S. Fk. Capps Cr.	C	Barry	X						X	X			X
3237	Hudson Cr.	C	Barry	X						X	X			X

3237	Hudson Cr.	C	Barry	X						X	X		X
3236	S. Fk. Capps Cr.	C	Barry	X						X	X		X
3231	Shoal Cr.	C	Barry	X						X			X
3233	Joyce Cr.	C	Barry	X						X			X
3233	Joyce Cr.	C	Barry	X						X			X
3233	Joyce Cr.	C	Barry	X						X			X
3233	Joyce Cr.	C	Barry	X						X			X
3233	Joyce Cr.	C	Barry	X						X			X
3232	Pogue Cr.	C	Barry	X						X			X
3232	Pogue Cr.	C	Barry	X						X			X
3231	Shoal Cr.	C	Barry	X						X			X
3231	Shoal Cr.	C	Barry	X						X			X
3198	West Fk.	C	Barton	X						X			X
3198	West Fk.	C	Barton	X						X			X
3198	West Fk.	C	Barton	X						X			X
3192	L. Coon Cr.	C	Barton	X						X			X
3192	L. Coon Cr.	C	Barton	X						X			X
3192	L. Coon Cr.	C	Barton	X						X			X
3192	L. Coon Cr.	C	Barton	X						X			X
3193	Pettis Cr.	C	Barton	X						X			X
3192	L. Coon Cr.	C	Barton	X						X			X
3192	L. Coon Cr.	C	Barton	X						X			X
3192	L. Coon Cr.	C	Barton	X						X			X
3192	L. Coon Cr.	C	Barton	X						X			X
3192	L. Coon Cr.	C	Barton	X						X			X
3193	Pettis Cr.	C	Barton	X						X			X
3195	Kyle Cr.	C	Barton	X						X			X
3195	Kyle Cr.	C	Barton	X						X			X
3195	Kyle Cr.	C	Barton	X						X			X
3195	Kyle Cr.	C	Barton	X						X			X
3196	Trib. to N. Fk. Spring R.	C	Barton	X						X			X
3201	Trib. to L. N. Fk. Spring R.	C	Barton	X						X			X
3202	Glendale Fk.	C	Barton	X						X	X		
3202	Glendale Fk.	C	Barton	X						X	X		
3202	Glendale Fk.	C	Barton	X						X	X		
3202	Glendale Fk.	C	Barton	X						X	X		
3197	Dicks Fk.	C	Barton	X						X			X
3197	Dicks Fk.	C	Barton	X						X			X
3197	Dicks Fk.	C	Barton	X						X			X
3191	Coon Cr.	C	Barton	X						X			X

3191	Coon Cr.	C	Barton	X					X			X
3191	Coon Cr.	C	Barton	X					X			X
3191	Coon Cr.	C	Barton	X					X			X
3191	Coon Cr.	C	Barton	X					X			X
3191	Coon Cr.	C	Barton	X					X			X
3194	Coon Cr.	C	Dade	X					X			X
3194	Coon Cr.	C	Dade	X					X			X
3194	Coon Cr.	C	Dade	X					X			X
3194	Coon Cr.	C	Dade	X					X			X
3194	Coon Cr.	C	Dade	X					X			X
3194	Coon Cr.	C	Dade	X					X			X
3194	Coon Cr.	C	Dade	X					X			X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3184	Blackberry Cr.	C	Jasper	X					X			X
3184	Blackberry Cr.	C	Jasper	X					X			X
3187	Buck Br.	C	Jasper	X					X			X
3187	Buck Br.	C	Jasper	X					X			X
3187	Buck Br.	C	Jasper	X					X			X
3187	Buck Br.	C	Jasper	X					X			X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3203	Center Cr.	P	Jasper	X		X		X	X	X	X	
3203	Center Cr.	P	Jasper	X		X		X	X	X	X	
3203	Center Cr.	P	Jasper	X		X		X	X	X	X	
3203	Center Cr.	P	Jasper	X		X		X	X	X	X	
3203	Center Cr.	P	Jasper	X		X		X	X	X	X	
3188	N. Fk. Spring R.	C	Jasper	X					X	X		X
3160	Spring R.	P	Jasper	X		X		X	X	X	X	
3160	Spring R.	P	Jasper	X		X		X	X	X	X	
3160	Spring R.	P	Jasper	X		X		X	X	X	X	
3160	Spring R.	P	Jasper	X		X		X	X	X	X	
3162	Cave Spring Br.	C	Jasper	X					X			X
3203	Center Cr.	P	Jasper	X		X		X	X	X	X	
3203	Center Cr.	P	Jasper	X		X		X	X	X	X	
3203	Center Cr.	P	Jasper	X		X		X	X	X	X	
3203	Center Cr.	P	Jasper	X		X		X	X	X	X	
3203	Center Cr.	P	Jasper	X		X		X	X	X	X	
3203	Center Cr.	P	Jasper	X		X		X	X	X	X	
3203	Center Cr.	P	Jasper	X		X		X	X	X	X	
3203	Center Cr.	P	Jasper	X		X		X	X	X	X	



3199	Duval Cr.	C	Jasper	X					X			X
3199	Duval Cr.	C	Jasper	X					X			X
3199	Duval Cr.	C	Jasper	X					X			X
3199	Duval Cr.	C	Jasper	X					X			X
3199	Duval Cr.	C	Jasper	X					X			X
3199	Duval Cr.	C	Jasper	X					X			X
3199	Duval Cr.	C	Jasper	X					X			X
3199	Duval Cr.	C	Jasper	X					X			X
3204	Grove Cr.	P	Jasper	X					X			X
3205	Jones Cr.	P	Jasper	X		X			X		X	
3205	Jones Cr.	P	Jasper	X		X			X		X	
3205	Jones Cr.	P	Jasper	X		X			X		X	
3205	Jones Cr.	P	Jasper	X		X			X		X	
3200	L. N. Fork	C	Jasper	X				X	X			X
3200	L. N. Fork	C	Jasper	X				X	X			X
3200	L. N. Fork	C	Jasper	X				X	X			X
3200	L. N. Fork	C	Jasper	X				X	X			X
3200	L. N. Fork	C	Jasper	X				X	X			X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3190	Opossum Cr.	C	Jasper	X					X			X
3190	Opossum Cr.	C	Jasper	X					X			X
3190	Opossum Cr.	C	Jasper	X					X			X
3159	Spring R.	P	Jasper	X		X		X	X	X	X	
3159	Spring R.	P	Jasper	X		X		X	X	X	X	
3160	Spring R.	P	Jasper	X		X		X	X	X	X	
3188	N. Fk. Spring R.	C	Jasper	X					X	X		X
3188	N. Fk. Spring R.	C	Jasper	X					X	X		X
3188	N. Fk. Spring R.	C	Jasper	X					X	X		X
3188	N. Fk. Spring R.	C	Jasper	X					X	X		X
3188	N. Fk. Spring R.	C	Jasper	X					X	X		X
3160	Spring R.	P	Jasper	X		X		X	X	X	X	







3161	Trib. to Spring R.	C	Jasper	X					X			X
3161	Trib. to Spring R.	C	Jasper	X					X			X
3216	Turkey Cr.	P	Jasper	X					X			X
3216	Turkey Cr.	P	Jasper	X					X			X
3217	Turkey Cr.	P	Jasper	X					X		X	
3217	Turkey Cr.	P	Jasper	X					X		X	
3217	Turkey Cr.	P	Jasper	X					X		X	
3217	Turkey Cr.	P	Jasper	X					X		X	
3217	Turkey Cr.	P	Jasper	X					X		X	
3217	Turkey Cr.	P	Jasper	X					X		X	
3217	Turkey Cr.	P	Jasper	X					X		X	
3217	Turkey Cr.	P	Jasper	X					X		X	
3217	Turkey Cr.	P	Jasper	X					X		X	
3217	Turkey Cr.	P	Jasper	X					X		X	
3217	Turkey Cr.	P	Jasper	X					X		X	
3182	White Oak Cr.	C	Jasper	X				X	X		X	
3182	White Oak Cr.	C	Jasper	X				X	X		X	
3182	White Oak Cr.	C	Jasper	X				X	X		X	
3182	White Oak Cr.	C	Jasper	X				X	X		X	
3182	White Oak Cr.	C	Jasper	X				X	X		X	
3182	White Oak Cr.	C	Jasper	X				X	X		X	
3182	White Oak Cr.	C	Jasper	X				X	X		X	
3182	White Oak Cr.	C	Jasper	X				X	X		X	
3182	White Oak Cr.	C	Jasper	X				X	X		X	
3182	White Oak Cr.	C	Jasper	X				X	X		X	
3182	White Oak Cr.	C	Jasper	X				X	X		X	
3182	White Oak Cr.	C	Jasper	X				X	X		X	
3182	White Oak Cr.	C	Jasper	X				X	X		X	
3182	White Oak Cr.	C	Jasper	X				X	X		X	
3206	Fidelity Br..	P	Jasper	X					X			X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3186	N. Fk. Spring R.	P	Jasper	X					X	X		X
3185	Pond Cr.	C	Jasper	X					X			X
3185	Pond Cr.	C	Jasper	X					X			X
3208	Jenkins Cr.	C	Jasper	X					X		X	
3208	Jenkins Cr.	C	Jasper	X					X		X	
3208	Jenkins Cr.	C	Jasper	X					X		X	
3207	Jenkins Cr.	P	Jasper	X					X		X	
3207	Jenkins Cr.	P	Jasper	X					X		X	
3207	Jenkins Cr.	P	Jasper	X					X		X	
3168	Chat Cr.	C	Lawrence	X					X	X		X

3183	Trib. to White Oak Cr.	C	Lawrence	X						X			X
3164	Spring R.	P	Lawrence	X	X			X	X	X	X	X	
3164	Spring R.	P	Lawrence	X	X			X	X	X	X	X	
3176	Stahl Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3170	Honey Cr.	C	Lawrence	X						X			X
3170	Honey Cr.	C	Lawrence	X						X			X
3170	Honey Cr.	C	Lawrence	X						X			X
3165	Spring R.	P	Lawrence	X						X	X	X	
3165	Spring R.	P	Lawrence	X						X	X	X	
3165	Spring R.	P	Lawrence	X						X	X	X	
3165	Spring R.	P	Lawrence	X						X	X	X	
3165	Spring R.	P	Lawrence	X						X	X	X	
3165	Spring R.	P	Lawrence	X						X	X	X	
3165	Spring R.	P	Lawrence	X						X	X	X	
3165	Spring R.	P	Lawrence	X						X	X	X	
3165	Spring R.	P	Lawrence	X						X	X	X	
3165	Spring R.	P	Lawrence	X						X	X	X	
3165	Spring R.	P	Lawrence	X						X	X	X	
3165	Spring R.	P	Lawrence	X						X	X	X	
3165	Spring R.	P	Lawrence	X						X	X	X	
3165	Spring R.	P	Lawrence	X						X	X	X	
3165	Spring R.	P	Lawrence	X						X	X	X	
3168	Chat Cr.	C	Lawrence	X						X	X		X
3179	Trib. to Spring R.	C	Lawrence	X						X			X
3167	Spring R.	C	Lawrence	X						X			X
3167	Spring R.	C	Lawrence	X						X			X
3164	Spring R.	P	Lawrence	X	X			X	X	X	X	X	
3164	Spring R.	P	Lawrence	X	X			X	X	X	X	X	
3164	Spring R.	P	Lawrence	X	X			X	X	X	X	X	

3164	Spring R.	P	Lawrence	X	X			X	X	X	X	X	
3164	Spring R.	P	Lawrence	X	X			X	X	X	X	X	
3164	Spring R.	P	Lawrence	X	X			X	X	X	X	X	
3164	Spring R.	P	Lawrence	X	X			X	X	X	X	X	
3164	Spring R.	P	Lawrence	X	X			X	X	X	X	X	
3176	Stahl Cr.	P	Lawrence	X						X			X
3176	Stahl Cr.	P	Lawrence	X						X			X
3176	Stahl Cr.	P	Lawrence	X						X			X
3176	Stahl Cr.	P	Lawrence	X						X			X
3176	Stahl Cr.	P	Lawrence	X						X			X
3176	Stahl Cr.	P	Lawrence	X						X			X
3176	Stahl Cr.	P	Lawrence	X						X			X
3176	Stahl Cr.	P	Lawrence	X						X			X
3176	Stahl Cr.	P	Lawrence	X						X			X
3176	Stahl Cr.	P	Lawrence	X						X			X
3176	Stahl Cr.	P	Lawrence	X						X			X
3176	Stahl Cr.	P	Lawrence	X						X			X
3176	Stahl Cr.	P	Lawrence	X						X			X
3176	Stahl Cr.	P	Lawrence	X						X			X
3176	Stahl Cr.	P	Lawrence	X						X			X
3180	Trib. to Spring R.	C	Lawrence	X						X			X
3181	Trib. to Spring R.	P	Lawrence	X						X			X
3177	Trib. to Stahl Cr.	C	Lawrence	X						X			X
3183	Trib. to White Oak Cr.	C	Lawrence	X						X			X
3183	Trib. to White Oak Cr.	C	Lawrence	X						X			X
3183	Trib. to White Oak Cr.	C	Lawrence	X						X			X
3183	Trib. to White Oak Cr.	C	Lawrence	X						X			X
3174	Truitt Cr.	P	Lawrence	X						X			X
3175	Truitt Cr.	C	Lawrence	X						X			
3175	Truitt Cr.	C	Lawrence	X						X			
3175	Truitt Cr.	C	Lawrence	X						X			
3175	Truitt Cr.	C	Lawrence	X						X			
3175	Truitt Cr.	C	Lawrence	X						X			
3175	Truitt Cr.	C	Lawrence	X						X			
3175	Truitt Cr.	C	Lawrence	X						X			
3175	Truitt Cr.	C	Lawrence	X						X			
3175	Truitt Cr.	C	Lawrence	X						X			
3171	Williams Cr.	P	Lawrence	X	X					X		X	
3171	Williams Cr.	P	Lawrence	X	X					X		X	
3172	Williams Cr.	P	Lawrence	X						X		X	
3172	Williams Cr.	P	Lawrence	X						X		X	
3172	Williams Cr.	P	Lawrence	X						X		X	

3172	Williams Cr.	P	Lawrence	X						X		X	
3172	Williams Cr.	P	Lawrence	X						X		X	
3172	Williams Cr.	P	Lawrence	X						X		X	
3172	Williams Cr.	P	Lawrence	X						X		X	
3172	Williams Cr.	P	Lawrence	X						X		X	
3172	Williams Cr.	P	Lawrence	X						X		X	
3173	Williams Cr.	C	Lawrence	X						X			X
3173	Williams Cr.	C	Lawrence	X						X			X
3173	Williams Cr.	C	Lawrence	X						X			X
3166	Browning Hollow	C	Lawrence	X						X			X
3239	Clear Cr.	C	Lawrence	X						X			X
3239	Clear Cr.	C	Lawrence	X						X			X
3239	Clear Cr.	C	Lawrence	X						X			X
3239	Clear Cr.	C	Lawrence	X						X			X
3239	Clear Cr.	C	Lawrence	X						X			X
3239	Clear Cr.	C	Lawrence	X						X			X
3178	Dry Fk.	C	Lawrence	X						X			X
3178	Dry Fk.	C	Lawrence	X						X			X
3163	Dry Hollow	C	Lawrence	X						X			
3163	Dry Hollow	C	Lawrence	X						X			
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3169	Honey Cr.	P	Lawrence	X						X			X
3215	Center Cr.	P	Lawrence	X						X		X	

3215	Center Cr.	P	Lawrence	X					X		X	
3215	Center Cr.	P	Lawrence	X					X		X	
3215	Center Cr.	P	Lawrence	X					X		X	
3215	Center Cr.	P	Lawrence	X					X		X	
3215	Center Cr.	P	Lawrence	X					X		X	
3215	Center Cr.	P	Lawrence	X					X		X	
3215	Center Cr.	P	Lawrence	X					X		X	
3215	Center Cr.	P	Lawrence	X					X		X	
3168	Chat Cr.	C	Lawrence	X					X	X		X
3810	Douger Br.	C	Lawrence	X					X			
3178	Dry Fk.	C	Lawrence	X					X			X
3230	Shoal Cr.	P	Newton	X		X			X	X	X	X
3230	Shoal Cr.	P	Newton	X		X			X	X	X	X
3230	Shoal Cr.	P	Newton	X		X			X	X	X	X
3230	Shoal Cr.	P	Newton	X		X			X	X	X	X
3229	Shoal Cr.	P	Newton	X	X				X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3228	Newtonia Br.	P	Newton	X					X			X
3228	Newtonia Br.	P	Newton	X					X			X
3228	Newtonia Br.	P	Newton	X					X			X
3221	Rock Br.	P	Newton	X					X			X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X

3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3214	Center Cr.	P	Newton	X	X			X	X	X	X	X	
3230	Shoal Cr.	P	Newton	X		X			X	X	X	X	
3227	Elm Spring Br.	C	Newton	X						X			X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3240	Baynham Br.	P	Newton	X						X			X
3224	Beef Br.	P	Newton	X						X			X
3234	Capps Cr.	P	Newton	X	X				X	X	X	X	
3241	Carver Br.	P	Newton	X						X		X	
3225	Cedar Cr.	P	Newton	X						X			X
3238	Clear Cr.	P	Newton	X						X			X
3238	Clear Cr.	P	Newton	X						X			X
3238	Clear Cr.	P	Newton	X						X			X
3212	Dry Valley Br.	P	Newton	X						X			X
3213	Dry Valley Br.	C	Newton	X						X			
3220	Fivemile Cr.	P	Newton	X					X	X			X
3220	Fivemile Cr.	P	Newton	X					X	X			X
3226	Hickory Cr.	P	Newton	X						X		X	
3223	Jacobs Br.	P	Newton	X						X			X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3244	Silver Cr.	P	Newton	X						X			X



3243	Thurman Cr.	P	Newton	X						X			X
3243	Thurman Cr.	P	Newton	X						X			X
3235	Trib. to Capps Cr.	P	Newton	X						X			X
3235	Trib. to Capps Cr.	P	Newton	X						X			X
3211	Trib. to Center Cr.	C	Newton	X						X			X
3242	Trib. to Shoal Cr.	P	Newton	X						X			X
3242	Trib. to Shoal Cr.	P	Newton	X						X			X
3218	Warren Br.	P	Newton	X						X			X
3219	Warren Br.	C	Newton	X						X			X
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
3222	Shoal Cr.	P	Newton	X		X	X	X	X	X	X	X	
Lakes													

## R Monitoring Sites in the Spring River Watershed <sup>17</sup>

Table 284. Jasper County Health Department Monitoring Sites.

Organization	Site Code (WBID)	Site Name	UTM Easting	UTM Northing	No. of Samples
JCHD	3160/15.7b	Spring River. side channel @ Hwy D	371563	4122020	37
JCHD	3160/2.0	Spring River. 2 mile South of Waco	357372	4120259	37
JCHD	3160/21.4/0.6	Dead Cr. at CR 180	377316.52 5	4118359.79 9	34
JCHD	3160/26.1	Spring River. at Civil War Rd.	382341	4116614	36
JCHD	3160/28.3	Spring River. ab. Hwy. 96	385266	4116273	36
JCHD	3160/33.5	Spring River. at Forest Mills	392064	4115101	37
JCHD	3160/46.9	Spring River. @ HWY U	405732	4112068	36
JCHD	3160/7.6	Spring River. upstream CR 270 0.1 mi	363246	4125558	37
JCHD	3162/1.2	Cave Spring Br. at CR 20	402915.83	4110145.32 2	12
JCHD	3182/2.3	White Oak Cr. at CR 40	399825.97 6	4114227.10 9	19
JCHD	3184/1.9	Blackberry Cr. 6.9 mile below. Asbury PP ashpond	362105	4126424	33
JCHD	3186/9.9	N. Fk. Spring River @ CR 210	372743	4124590	37
JCHD	3187/0.9	Buck Br. at Hwy. O	374352.08 7	4124949.11 1	34
JCHD	3188/0.3	N. Fk. Spring River @Hwy M	379782	4128698	33
JCHD	3188/6.5	N. Fk. Spring River nr Hwy H	382118	4133521	37
JCHD	3189/1.4	Dry Fk. at Pine Rd.	380984.88 8	4127375.47 5	34
JCHD	3189/10.2/0.3 a	Trib. to Dry Fk. at Nova Rd.	391765.30 3	4123136.27 9	34

JCHD	3189/10.2/0.4	Dry Fk. at Nova Rd.	392041.61 3	4123130.48 2	34
JCHD	3189/9.2	Dry Fk. @ County Road 100	390507	4124157	37
JCHD	3189/9.6/0.1/ 1.0	Stony Br. at County Road 90	392204.75 3	4125097.22 8	21
JCHD	3189/9.6/0.9	Deer Cr. at County Road 90	392168.5	4124269.44 2	34
JCHD	3190/1.1	Opossum Cr. 0.6 mile below. Jasper Lagoon	382958	4131973	4
JCHD	3190/1.6	Opossum Cr. 0.1 mile above. Jasper Lagoon	383628	4131777	29
JCHD	3191/3.5	Coon Cr. @ County Road 120	387927	4134007	23
JCHD	3199/0.5	Duval Cr. at Pine Rd.	369200.84 1	4128083.10 2	17
JCHD	3200/1.9	L. North Fork R. @ Hwy M	363825	4129662	34
JCHD	3203/1.0	Center Cr. nr. Smithfield, 10 mile below Oronogo	357623	4113382	37
JCHD	3203/15.7/0.3	Stout's Cr. at CR 200	373995.75 9	4114103.79 9	13
JCHD	3203/15.8	Center Cr. @ (Old) Hwy 66 Bus	374241	4114370	37
JCHD	3203/20.7	Center Cr. @ CR 175	377167	4110061	33
JCHD	3203/26.6	Center Cr. @ Hwy 71 frontage rd.	383494	4107326	37
JCHD	3203/8.5	Center Cr. @ Hwy 43	365969	4114461	37
JCHD	3204/2.9	Grove Cr. just below. Grace Trib.	376856.32 7	4105900.35 4	16
JCHD	3205/1.1	Jones Cr. @ Co. Rd. 130	385014	4106782	37
JCHD	3205/3.0	Jones Cr. at Bobwhite Rd.	386682.23 9	4104331.22 5	34
JCHD	3207/1.4	Jenkins Cr. at Blackberry Rd.	387746.43 6	4104343.54	34
JCHD	3210/10.9	Center Cr. @ Hwy 37	396266	4104637	17
JCHD	3210/16.6	Center Cr. @ High St. nr Sarcoxie	401336	4103401	37
JCHD	3210/3.5	Center Cr. @ County Road 110	388241	4108777	37
JCHD	3210/9.1	Center Cr. @ Cedar Road	393267	4106085	20
JCHD	3216/0.7	Turkey Cr. south of Hwy P @ N Fox Bluff Ln	357070	4110067	37
JCHD	3216/6.0	Turkey Cr. @ Lone Elm Hollow Rd	364447	4108463	37
JCHD	3216/6.4/0.1	Joplin Cr. near Mouth	364808.10 8	4108108.47	34
JCHD	3217/1.4/0.8	Trib. Turkey Cr. from Oakland Park	368837	4107950	32
JCHD	3217/5.4	Turkey Cr. south of Rt. 66 @ Kenser Rd.	372304	4104578	37
JCHD	3754/0.3	Slater Br. at Pine Rd.	369570.16 8	4128070.69	18
JCHD	3980/0.1	Bens Br. nr. mouth	370922	4115170	30
JCHD	3980/0.5	Bens Br. at Hawthorne Rd.	371296	4114748	4

**Table 285. Lawrence County Health Department.**

Organization	Site Code (WBID)	Site Name	UTM Easting	UTM Northing	No. of Samples
LCHD	3160/46.9	Spring R. @ HWY U	405732	4112068	16
LCHD	3160/50.8	Spring R. @ CR 1040	412569	4110646	10
LCHD	3160/54.0	Spring R. @ Hwy 97, north of Stotts City	415757	4110467	16
LCHD	3160/57.0	Spring R. @ FR 1082 near Talbot	418514.96	4109711.109	16
LCHD	3163/0.4	Dry Hollow @ CR 2100	413391	4110259	16
LCHD	3164/0.4	Spring R. @ CR 1090 & 2110	420494	4108292	26
LCHD	3164/3.9	Spring R. @ FR 2130 W. of Mt. Vernon	422814.28	4105044.119	18
LCHD	3164/6.2	Spring R. @ CR 2137 E. of Hoberg	424744	4103260	16
LCHD	3165/2.8	Spring R. ab. Browning Hollow	426615	4097587	16
LCHD	3165/4.5	Spring R. @ Verona Beach, Farm Road 2190	426575.582	4095645.011	22
LCHD	3165/5.0	Spring R. @ CR 2192	427321	4094907	16
LCHD	3165/7.4	Spring R. 0.2 mile above Douger Br.	428928	4092275	16
LCHD	3165/8.5	Spring R. nr. Verona	429028	4090510	16
LCHD	3169/4.0	Honey Cr. @ County Road 1137	427483	4101075	22
LCHD	3170/2.6	Honey Cr. @ Marionville City Park	443606	4095830	2
LCHD	3170/2.6/0.05/0.1	Marionville Spring No.2	443618.053	4095770.745	8
LCHD	3170/2.6/0.07/0.1	Marionville Spring No. 3	443618.718	4095750.394	8
LCHD	3170/2.6/0.1/0.1	Spring No.1 in Marionville City Park	443619	4095718	12
LCHD	3170/2.6/0.2	Honey Cr @ Benton Street, Marionville	443627.689	4095657.045	10
LCHD	3171/0.9/0.1	Big Spring near Baptist Hill	421700	4107433	23
LCHD	3172/4.8	Williams Cr. @ Mt. Vernon City Park	427264	4107278	12
LCHD	3175/2.2	Truitt Cr. @ Hwy 39	426152	4110847	12
LCHD	3176/2.1	Stahl Cr.@ CR 2082	420775.473	4112146.83	12
LCHD	3214/2.6	Center Cr. @ CR 1010	407420	4100553	12
LCHD	3239/0.2	Clear Cr. @ Pierce City Park	411181	4088849	12

**Table 286. Newton County Health Department.**

Organization	Site Code (WBID)	Site Name	UTM Easting	UTM Northing	No. of Samples
NCHD	3205/5.4	Jones Cr. @ Newton Co. line	387236	4101515	7
NCHD	3208/2.7/2.8	Motley Br. @ Newton Co. Line	396730.387	4101117.442	7
NCHD	3208/3.8	Jenkins Cr. @ Newton Co. Line	393216.997	4101249.595	5

NCHD	3214/1.2	Center Cr. 3.5 mile below Hwy 97	405797	4100077	7
NCHD	3218/0.0	Warren Br. @ state line road	355947.2 33	4090630.9 75	7
NCHD	3220/2.2	Five Mile Cr. @ Atlanta Ln	358674.8 79	4092374.2 21	7
NCHD	3222/14.3	Shoal Cr. @ Tipton Ford Conservation Area	371718	4094015	26
NCHD	3222/25.8	Shoal Cr. @ Lime Kiln CA boat ramp	378112	4084209	28
NCHD	3222/31.1	Shoal Cr. @ Cherry Corners Conservation Area	383233	4087915	29
NCHD	3222/46.9	Shoal Cr. @ Smack Out Conservation Area Boat Ramp	399025	4086176	29
NCHD	3222/7.7	Shoal Cr. Nr. I-44 @ Wildcat Park, Joplin	364684	4099241	28
NCHD	3224/0.7	Beef Br. @ Cedar Rd.	366450.1 9	4096741.7 54	29
NCHD	3225/0.3	Cedar Cr @ Old Scenic Dr Br	373735	4091962	29
NCHD	3226/0.9	Hickory Cr. @ Business 60	377825	4082882	29
NCHD	3226/4.9/0.1	Gibson Spring near Hwy HH	382029.8 97	4079115.6 52	7
NCHD	3226/4.9/2.7 /0.1	Monark Spring @ Monark Dr.	385035.3 99	4080454.0 65	7
NCHD	3227/1.0/0.1	Elm Spring Br. Below spring	382090	4075454	5
NCHD	3234/0.6	Capps Cr. Near Mouth	403125	4082912	29
NCHD	3238/1.6	Clear Cr. at Vole Dr.	399303	4088614	29
NCHD	3240/1.7	Baynham Br. @ Lime Kiln Dr	376680	4091616	29
NCHD	3241/2.2	Carver Br. at Lime Kiln Rd.	375983.1 01	4093038.7 64	28
NCHD	3243/0.3	Thurman Cr. at Business 71	368326	4097416	29
NCHD	3244/0.2	Silver Cr. 300 yards downstream of Hwy 86	364907.8 08	4098977.5 63	28

**Table 287. Missouri Department of Natural Resources.**

Organization	Site Code (WBID)	Site Name	UTM Easting	UTM Northing	No. of Samples
MoDNR	3186/9.9	N. Fk. Spring R. @ CR 210	372743	4124590	1
MoDNR	3188/1.8	N. Fk. Spring R. @ Red Bud Lane	379321	4130344	82
MoDNR	3188/13.4	N. Fk. Spring R. @ Hwy 126	383995.8 66	4139900.53 2	13
MoDNR	3188/15.3	N. Fk. Spring R. at SW 60th St.	384210.3 05	4141721.02 2	84
MoDNR	3188/16.8	N. Fk. Spring R. near Hwy. 71	384899	4143117	34
MoDNR	3188/2.0	N. Fk. Spring R. above Redbud Rd.	379233	4130569	24
MoDNR	3188/20.5	N. Fk. Spring R. 3.5 miles below Lamar WWTP	386636	4146338	2
MoDNR	3188/26.5	N. Fk. Spring R. @ Lamar Heights	386146	4152019	2
MoDNR	3188/34.7	N. Fk. Spring R. downstream NE 50th Ln.	393414	4152006	2
MoDNR	3188/37.9	N. Fk. Spring R. 12 miles above Lamar	397681	4149040	2

MoDNR	3188/42.1	N. Fk. Spring R. upstream SE 30th Rd.	400621	4145609	2
MoDNR	3188/43.0	N. Fk. Spring R. @ Hwy 160 Golden City	402906	4143629	103
MoDNR	3188/47.0	N. Fk. Spring R. @ Golden City	404011	4138989	2
MoDNR	3188/55.9/3.1	N. Fk. Spring R. US of CR 51	412177.3 38	4129380.32 2	2
MoDNR	3188/8.0	N. Fk. Spring R. at SW 100th Rd.	383646	4135053	1
MoDNR	3200/1.9	L. North Fork R. @ Hwy M	363825	4129662	8
MoDNR	3203/0.1	Center Cr. near Mouth	356487	4112913	1
MoDNR	3203/1.0	Center Cr. near Smithfield,10 miles below Oronogo	357623	4113382	6
MoDNR	3203/11.45/0.1	Trib. Center Cr. @ Oronogo, near. Mouth	369331	4116123	7
MoDNR	3205/5.4	Jones Cr. @ Newton Co. line	387236	4101515	6
MoDNR	3205/7.0	Jones Cr. US of Aspen Rd.	387900.4 32	4099854.64 5	2
MoDNR	3208/2.8/1.0	Motley Br. @ CR 70	394557.0 15	4102064	1
MoDNR	3216/2.1	Turkey Cr. @ Hwy P, just below East Hollow	359449	4109456	7
MoDNR	3216/4.4/0.1	Leadville Hollow near. Mouth	362883	4108545	14
MoDNR	3216/6.4/0.7	Joplin Cr. nr. Murphy Blvd.	365341.0 41	4107350.32 6	7
MoDNR	3216/6.6	Turkey Cr. 0.6 mile above Joplin Cr.	365639	4108078	7
MoDNR	3216/6.6/2.2	Joplin Cr. 0.1 mile downstream od Hwy 66	366470.3 38	4104945	2
MoDNR	3216/6.6/2.5	Joplin Cr. 0.2 mile upstream of Hwy 66	366555.0 15	4104946.32 2	3
MoDNR	3216/6.6/2.8	Joplin Cr. 0.2 mile upstream of Campbell Parkway	366929.9 84	4104577.64 5	2
MoDNR	3216/6.6/3.3	Joplin Cr. 0.1 mile downstream S of 15th St.	367529.8 67	4104269	2
MoDNR	3216/6.6/4.4	Joplin Cr. downstream of Geneva Ave.	368729.0 15	4103452	2
MoDNR	3216/6.6/4.4 5	Joplin Cr. upstream of Geneva Ave.	368758.3 38	4103309.32 2	2
MoDNR	3223/0.5	Jacob's Br. @ Cedar Rd.	366181.3 45	4096743.59 1	1
MoDNR	3223/0.8	Jacob's Br. @ Coffee Dr.	366146	4096330	7
MoDNR	3224/0.7	Beef Br. @ Cedar Rd.	366450.1 9	4096741.75 4	1
MoDNR	3224/1.0	Beef Br. @ Coffee Rd.	366360	4096315	14
MoDNR	3226/4.9/0.8/ 1.7	Trib. to Elm Spring Br. @ Hwy HH	384121	4076584	2
MoDNR	3243/0.3	Thurman Cr. at Bus. 71	368326	4097416	2
MoDNR	3244/1.1	Silver Cr. @ Joplin Middle School	366146.0 68	4099025.36 3	7
MoDNR	3244/1.9/1.4	Silver Cr. downstream of Richard Joseph	368314.3	4100587	2

		Blvd.	38		
MoDNR	3244/1.9/1.5	Trib. to Silver Cr. downstream of I-44	368327.9 84	4100711.32 2	2
MoDNR	3980/0.5	Bens Br. at Hawthorne Rd.	371296	4114748	7
MoDNR	3983/0.3	Lone Elm Hollow near Mouth	364396	4108121	7

**Table 288. USGS Monitoring Locations.**

Organization	Site Code (WBID)	Site Name	UTM Easting	UTM Northing	No. of Samples
USGS	3160/30.0	Spring R. above Carthage	387419	4115630	39
USGS	3203/1.0	Center Cr. near Smithfield, 10 mi below Oronogo	357623	4113382	30
USGS	3216/2.1	Turkey Cr. @ Hwy P, just below. East Hollow	359449	4109456	29
USGS	3222/8.3	Shoal Cr at Hwy. 86	365357	4098252	39

## S Past Watershed Projects

Projects in the Spring River Watershed  
(319 Nonpoint Source and partner efforts)

### **Upper Reach Spring River 319 Project - FY2000 319 Grant**

A nutrient management specialist was hired as the project manager to develop a formal nutrient management school curriculum. This curriculum will be implemented to educate producers in the project area. Area producers were assisted with the implementation of restoration projects for riparian buffers and wetlands, and educated on evaluating the condition of their streams. Financial assistance was provided to the participants in the restoration activities and for those that construct animal waste facilities. Stream teams collected data in selected locations during the project period. Field days and tours were held to demonstrate the best management practices used by the landowners that participate in this project. Products completed include a Quality Assurance Project Plan (QAPP) for testing and monitoring activities, three nutrient management schools, two new Stream Teams, five producers trained in the use of Stream Visual Assessment Protocol (SVAP), restoration of 25 acres of wetland, protection of 20 miles of riparian corridor, development and follow-up on 50 comprehensive nutrient management plans (CNMP) for producers, construction of six dairy waste management facilities and ten poultry waste management facilities, two tours and three field days.

### **Accomplishments**

The project was successful as the following objectives and goals were accomplished.

- **Objective #1: Provide nutrient management training to producers who manage animal feeding operations or utilize animal waste in the project area.** A committee was formed with local farmers SWCD board members, extension and NRCS personal. This committee met and determined topics for the nutrient management school. A survey

was developed to determine knowledge of subject before school and things learned at school. The school was held at the Mt. Vernon University Extension Outreach Research building on March 5, 2002 and March 7, 2002. There were 24 participants each day.

Additional nutrient management schools were also held. Tyson producers hosted a school at the Monett casino on May 21, 2003 and May 28, 2003. There were 14 participants each day. Another nutrient management school was held on February 22, 2005, at the Monett casino for six more Tyson producers. A nutrient management school/preplanning session was held for 14 Willowbrook producers on April 14, 2005, at Monett offices.

- Objective #2: Inform public about water quality concerns and restoration efforts in the project area. The participants of the nutrient management school toured the extension research dairy facility and looked at “in the field” waste application and different methods were discussed. A tour day was held to look at local farms that had implemented riparian corridors. In addition to the presentations given at the schools listed above, presentations were given at the Quad State Poultry Dialogue EPA meetings, Tyson grower meetings, riparian field days, James River Basin Partnership meetings, and at the annual UMC Research Center field days.
- Objective #3: Restoration of riparian corridor. Nineteen landowners excluded livestock from their stream, creek and river banks and used natural regeneration or plantings to restore the corridor with a total of 8.86 miles of corridor being protected. This will prevent tons of sediment from being washed away (with possible harmful nutrients and/or chemicals attached to the particles).
- Objective # 4: Implement Stream Visual Assessment landowners that completed a riparian corridor restoration project. A final assessment was conducted successfully on five landowner’s riparian project sites.
- Objective #5: Develop comprehensive nutrient management plans (CNMPs) for 50 producers who manage animal feeding operations in the project area and/or utilize animal waste in the project area. Thirty eight (38) CNMPs were written for grassland farmers who used litter or waste to fertilize their farms. Soil tests and waste tests were provided by the project as an incentive for farmers to develop the plans. An incentive was provided for producers when they applied waste in accordance with their CNMP. CNMPs were also written for the farmers who developed poultry and dairy waste systems. Follow-up was done on all CNMPs to make changes if needed.
- Objective #6: Develop waste management facilities for dairy and poultry producers. Seven dairy waste storage systems and eight poultry stack sheds &/or composters were built during the life of the project. The seven dairy systems have a total of 965 head of dairy cattle (675 animal units) in seven individual operations where a total of 61 tons of waste per day, or 22,265 tons of waste per year, is being produced, and now being

stored and managed properly. Composition of this waste is 88% liquid and the balance solid. The solids are spread on land with a box spreader and the liquids are pumped out and spread with a spider or traveling gun. Occasionally these two forms are mixed and the slurry is spread with a tank. The poultry systems consisted of mix of chicken layers, broilers, pullets and turkey pullets. The 8161 animal units in eight individual operations produced 5,427 tons of litter, which is now being stored and properly managed.

## **CONTACT**

Lawrence County Soil and Water Conservation District  
10733 Highway 39  
Mt. Vernon, MO 65712  
Paula Champion (417) 466-7687

---

## **Elk River/Shoal Creek Water Quality Restoration Project – FY2001 319 Grant**

This project implement best management practices which include: development and implementation of comprehensive nutrient management plans (CNMPs); transport of poultry litter out of the watersheds to areas of intensive crop production; construction of poultry litter stacking sheds; tarps to prevent runoff from stored litter; pH correction of soils on farms utilizing CNMPs; piloting of livestock watering wells with rotational grazing systems; and livestock exclusion from streams. This project coordinated with other 319 projects in the area for outreach and education that will focus on proper nutrient management of poultry and livestock wastes.

## **Accomplishments**

Implementation included 150 CNMPs; 24 manure storage sheds; pH correction on 6,000 acres; ten litter storage tarps; feasibility study of litter transport to intensive crop production areas in need of nitrogen (N) and phosphate fertilizers; 20 livestock watering wells in combination with rotational grazing systems; compilation of soil and litter analyses as an indicator of quantification of the nutrient problem in the watersheds; exclusion fencing on five miles of riparian corridor; and photographic documentation of all the tasks included in the milestones.

Other accomplishments include:

- Development of 155 CNMPs on approximately 16,000 acres.
- A litter spreading application was recommended to farmers based on the phosphorus index as stated in their CNMPs.
- Nutrient uptake by plants was increased on 6,055 acres that had a soil pH of 5.8 or below.
- 640,000 cu. ft. of animal waste storage was provided by the installation of 40 manure/litter staking sheds (11,000 tons of poultry litter was managed properly each year).



- 11,837 tons of litter was transported from within the Elk/Shoal watersheds and spread on fields, not in a watershed with 303(d) impaired streams as specified in the nutrient management plans. Approximately 745,748 lbs. of nitrogen and 757,585 lbs. of phosphorus (P) were reduced in the Elk/Shoal watershed during the project period.
- 65,600 lbs. of N and 30,800 lbs. of P<sub>2</sub>O<sub>5</sub> per year were reduced by restricting livestock from five miles of streams.
- Several wells were installed using soil and water conservation district cost share programs, CCRP programs and EQIP programs.
- There was an estimated 60 landowners who updated their Animal Waste Plan to a CNMP over the life of the 319 project.
- Multiple promotions were implemented through brochures, pamphlets, other media types. Multiple meetings and activities took place to promote the project and the cost share available.
- During the life of the 319 project 22,000 acres were soil tested. Each soil test was reviewed with the landowner and custom soil recommendations were given. There were also 130 different manure analyses taken from at least 100 different farms in the watershed.

#### **CONTACT**

McDonald County Soil and Water Conservation District  
 1900 South HWY. 71  
 Neosho, MO 64850  
 Lynn Jenkins, District Conservationist  
 (417) 451-1366, Ext. 3

---

#### **Lower Shoal Creek Watershed Restoration Action Strategy Project – FY2003 319 Grant**

During the development of the a Total Maximum Daily Load (TMDL) for excess fecal coliform in Spring River in 2003, local community members (stakeholders) were encouraged to form a citizen-based watershed organization to promote education and out efforts to provide local leadership on water quality improvement to address bacteria contamination in 13.5 miles of upper Shoal Creek target by the TMDL. The TMDL was amended in 2007 adding 4.0 miles of upper Shoal Creek and 7.5 mile to Lower Shoal. The Shoal Creek Watershed Partnership (SCWP) was organized 2006 as a project of the Environmental Task Force of Jasper and Newton Counties to establish community–based watershed management for lower Shoal Creek watershed. The group will promote voluntary, common sense actions to improve and protect water quality within the Shoal Creek watershed.

In 2006 the SCWP submitted an application to the Missouri Department of Natural Resources and was approved for 319 nonpoint source grant funding to develop a watershed plan strategy to address the stream impairments in lower Shoal Creek. The watershed project empowered many local stakeholders to participate in local watershed management activities and plans for

lower Shoal Creek watershed. The stakeholders gathered and integrated present and future water quality monitoring and information activities that were underway by local and federal agencies.

### **Accomplishment**

The project activities resulted in the development of a Watershed Restoration Action Strategy (WRAS), which will be used as the guide for immediate and long-term actions to protect and improve the quality of the lower Shoal Watershed by reducing nutrients and bacteria, the significant water quality problems associated with lower Shoal Creek. Nonpoint source pollution and point source pollution both were considered in the WRAS. The project integrated lessons learned from neighboring watershed alliances operating in southwest Missouri, into the plan. The WRAS is complementary to, consistent with, and not duplicative of, any other local, state and federal watershed protection and water quality activity in the region or lower Shoal Creek.

### **CONTACT**

Harry Rogers  
Harry S Truman Coordinating Council (HSTCC)  
24943 DeMott, PO BOX 388  
Web City, MO 64870  
(417) 782-3515 or (800) 788-3515

---

### **Poultry Litter Fertility and Water Quality Demonstration -FY2003 - 319 Grant**

Barton County produces over 2 million bushels of soybeans and 3.5 million bushels of corn (<http://agebb.missouri.edu/mass/farmfact/pdf/>) per year, which is fertilized most often with commercial fertilizer. This project will demonstrate poultry litter application to crop fields on three predominant soil types in Barton County. This demonstration and associated field days will educate producers on the importance of soil testing prior to fertilization, use of the soil survey, nonpoint source pollution potential of poultry litter, best management practices for applying animal waste, proper nutrient management, economics of using litter, and the practice of litter transport to crop producing areas from watersheds with excess nutrients.

### **Accomplishments**

The project helped educate farmers on the advantages of using poultry litter nutrients vs. commercial nutrients. The project demonstrated poultry litter application in lieu of commercial fertilizer to crop fields on three predominant soil types in Barton County. Three farmers participated in test site for the demonstration. Each location had a different soil type, to be able to compare the infiltration and runoff rate of commercial fertilize and litter applications. Field days were held to education farmers on reading soil tests and proper application of fertilize and litter. Other project accomplishments include the implementation of one field day, four training workshops, and distribution of several brochures/factsheets. The project also

developed and implemented four comprehensive nutrient management plans that impacted 124 acres.

### **CONTACT**

Ben Reed, District Manager  
Barton County Soil & Water Conservation District  
701 E. 12<sup>th</sup> Street  
Lamar, MO 64759

---

### **Wildcat Glades Conservation and Audubon Center - FY2004 319 Grant**

National Audubon Society, Missouri State office

The National Audubon Society along with its key partners constructed an Audubon Nature Center south of Joplin on 160 acres in the Wildcat Glades park area. The primary goal of the National Audubon Society, local stakeholders and their regional governing board is to provide children and adults with nature-related educational programs and outdoor experiences through a sustainably developed Leadership in Energy & Environmental Design (LEED) accredited nature center facility, site amenities and system of trail in Joplin, Missouri.

The Audubon Nature Center facility showcases viewable green technologies and erosion control principles that will serve as demonstrations for other developments in the region. The project implements practices and techniques that safeguard the unique natural resources of the Spring River watershed through stewardship activities, hands-on outdoor programs, and remediation and management of site erosion and sedimentation issues and building and parking lot runoff. In addition, the biologically unique resources of Shoal Creek like the chart glades landscape was showcased through exhibits; education programs and a unique sustainably designed facility in Joplin.

### **Accomplishments**

All of the proposed information education programs and best management practice demonstrations were successfully completed. Those include the following:

- Design and construction of a Silver Level Certified LEED facility that employs and demonstrates specific green architectural and site practices related to water.
- Development of a green eco roof – A beautiful, educational, and environmentally conscious addition to the building that will be used as a premier highlight and demonstration area.
- Reduction of soil erosion along one mile of Shoal Creek. Post and cable barriers installed to allow growth of restored areas and riparian corridor. Thousands of trees and shrubs, and forbs were planted along the one-mile segment of Shoal Creek. Regular community volunteer work days focused on installing additional plantings, removing invasive species control and natural resource management.

- Reduction of soil erosion within the Wildcat Glade Park area by restoring two acres of developed park and savanna areas. Approximately 150 lbs. of native wildflowers and grasses were seeded, with the planting of an additional 800 native perennials, trees and shrubs.
- Developed and provided educational programs to the Greater Joplin Metropolitan Area on disposal of used oil, antifreeze, paints, and other household chemicals, importance of well-maintained septic systems, ecologically sound lawn maintenance practices, and natural area management and stewardship opportunities within the watershed. Green technology and other related programs were piloted prior to opening and major programming began shortly after opening and will continue as regular offerings of the Center.
- Provide on-going environmental educational programs and activities to the target audiences of pre-school aged children, 3<sup>rd</sup>-5<sup>th</sup> graders, youth groups, homeschoolers and tourists. During project period, 12,818 participated in various Audubon programs and 12,889 have participated in activities and outreach such as the water festival.
- Created two outdoor interpretive learning stations in the park which specifically focused on water quality through pond ecology and stream ecology. Creek and pond stations were completed as part of the regular education programming and include interpretive elements for self-guided education.
- Provided educational and interpretive programs to at least one in four Joplin students within two years of the center opening with a total target annual attendance of approximately 50,000 visitors. Over 80,000 visitors toured the center during the Fall 2007. In October 2008, every 4<sup>th</sup> grade student in the Pittsburg, Kansas, district came to the center for programming and every 3<sup>rd</sup> grade student in Joplin, Missouri, came to the center for programming in February 2009.
- Created permeable parking areas and bio-detention areas for both parking lot and building runoff.
- Green tech brochures were developed and made available to visitors of the center as well as on the website. Over 2000 were distributed.
- Newsletters were emailed to over 2000 citizens quarterly and mailed to 600. They were also made available on the Audubon Center website.
- The first annual water festival was developed and implemented, in which over 300 attended.
- Development of Audubon Center Stream Team #371, which implemented bi-monthly water quality monitoring and bi annual stream cleanup activities throughout the riparian corridor.

## **CONTACT**

Tony W. Robyn

Audubon Center Executive Director  
214 W 5<sup>th</sup> St, Suite C  
Joplin, MO 64801  
(417) 623-2211  
[trobyn@audubon.org](mailto:trobyn@audubon.org)

---

### **Upper Shoal Creek On-Site System Implementation – FY2005 & 2007 319 Grants**

The Upper Shoal Creek On-Site System Implementation Project is targeting homeowners nearest Shoal Creek and its tributaries to carry out septic system clean-outs, repairs and replacements. Interested parties within the target area will have an assessment of their location and on-site system that may include a pump out. Homeowners are being advised on other practical BMPs (e.g., livestock exclusion, manure handling) to implement on their property. Approximately 30 failing residential on-site systems will be repaired or replaced by a registered or licensed on-site system professional and according to all state and local statutes, laws, ordinances, or other requirements with a maximum cost share of 75 percent. An additional 40 residential on-site systems will be cleaned out/pumped at a 50 percent cost-share, with a maximum \$75 reimbursement. Each participating homeowner must sign a maintenance agreement to receive reimbursement. Each of the homes that participate in the repair, replacement and pump-out programs will have the opportunity to sample their private drinking well water to ensure bacterial contamination has not occurred. The goal is to accomplish 50 bacteriological drinking water tests during the project period. The Shoal Creek Watershed Improvement Group (SCWIG) and partners will develop project maps with geographic positioning system (GPS) data of locations assisted with the on-site system pump-outs, repairs, replacements, water quality monitoring sites and any other BMPs implemented as a result of this project. Those data and maps will be submitted to the department at the end of the project.

In 2003, during the development of the total maximum daily load (TMDL) for the 13.5 miles of Upper Shoal Creek (HUC #110702070701, 02, 03 & 06), the Missouri Department of Natural Resources held meetings regularly with the watershed stakeholder committee to discuss the stream impairment and encourage local participation to address the pollutants problem, which lead to the creation of the SCWIG in 2005. The group originated as a project of the Environmental Task Force of Jasper and Newton counties. SCWIG volunteers and cooperating partners immediately began implementing water quality improvement projects by promoting conservation practices and other BMPs. With the goal of restoring the upper Shoal Creek streams back within the state's water quality standards. Through their grant project, the SCWIG developed a watershed management plan for the Upper Shoal Creek Watershed to help implement their goal. The watershed management plan takes a holistic approach to improving water quality by reducing pollutant runoff that is entering upper Shoal Creek. The plan itself describes various strategies/objectives to achieve the overall goal. Because of the proposed 2003 303(d) impaired waters listing, and interest of stakeholder's involvement, the SCWIG coordinate development using a stakeholder driven watershed management plan process and

addressing the nine critical elements of a watershed management plan identified by the U.S. Environmental Protection Agency. Contributing partners in this collaborative effort include, but not limited to: landowners, University of Missouri Extension, Barry County Soil and Water Conservation District, Natural Resources Conservation Service, and other local and state entities.

### **Objectives**

- Complete a 9-element watershed management plan;
- Repair or replace approximately 30 septic systems;
- Pump out an additional 40 septic systems;
- Homeowner participants will sign septic system maintenance agreements;
- Promote the project to targeted watershed residents through targeted landowner events, direct mailings, educational materials, newspaper articles, radio programs, community contacts, and annual field demonstration days;
- Provide educational materials to residents in target watershed areas (materials will include EPA on-site system booklets and fliers, options for financing repairs and replacements, soil potential index maps, soil potential ratings, and NRCS materials on Agricultural BMPs);
- Survey residents to assess knowledge, attitude and behavioral changes;
- Test 50 drinking water wells for bacteria contamination;
- Develop a water quality sampling plan and QAPP;
- Monitor water quality of the Upper Shoal Creek with the aid of the Volunteer Water Quality Monitoring Program;
- Develop a GIS project to track water quality and BMPs in the focus area; and
- Report load reductions for bacteria.

### **Accomplishments**

The SCWIG was able to reach the majority of its project goals and milestones, particularly the community outreach and public involvement activities. The overall project outcomes included the successful development of a nine element watershed management plan for Upper Shoal Creek, the completion of 20 landowner septic tank pump-outs, and 16 failing system repairs or replacements. Community outreach and public involvement activities achieved included the development of two project brochures, an internet-based GIS mapping application, a landowner On-site Wastewater Treatment System procedures packet, 14 newspaper articles, four community stakeholder meetings, and pre and post surveys. Pollutant load reduction for nutrient 225 lbs., 185 lbs. nitrogen and 40 lbs. phosphorus per year.

### **CONTACT**

Drew Holt

Shoal Creek Watershed Improvement Group  
PO Box 6  
Pineville, MO 64856

---

**Spring River Watershed Management Plan Implementation Project - (on-going)**  
**Jasper County Commission (JCC), FY08-09 & 2010 319 Grant**

The Spring River Watershed encompasses an area approximately 2,271 square miles and is located in southwest Missouri in Barry, Barton, Christian, Dade, Jasper, Lawrence, Newton and Stone counties. The Spring River exits Missouri and passes through southeastern Kansas where it is collected by the Grand Lake O' The Cherokees in Oklahoma. Major tributaries within the watershed are the North Fork of the Spring River, Center Creek, Turkey Creek and Shoal Creek. Three segments of the Spring River are listed as impaired on Missouri's 2010 303(d) impaired waters list, caused by rural nonpoint sources. The stream is designated for category A, whole body contact recreation use.

The Spring River Watershed Management Plan Implementation project will be implemented in southwest Missouri, in and around the city of Carthage in Jasper County. This area of Spring River is approximately 38.73 square miles and has been noted as impaired due to high levels of bacteria (*E. coli*). The project will start the implementation of the Spring River Watershed Management Plan (WMP), which the primary objective is to reduce bacteria levels to below the whole body contact level for recreational waters. As proposed in the plan, the project will implement best management practices (BMPs), targeted in areas of possible sources of bacteria pollution occurring from human, agriculture production and livestock operations. This will be accomplished by: 1) educating the landowners, stakeholders and general public about the types and proper installation of BMPs; 2) implementing urban, rural residential, and riverfront/ agricultural BMPs with landowners and stakeholders; and, 3) holding educational days and events for the general public (volunteers, youth etc.), private landowners and stakeholders. Stream riparian corridor and on-site wastewater treatment system cost-share programs will be made available for landowners to help install BMPs that will address the stream bacteria and other nonpoint source pollution related problems. The JCC will also implement an educational program that includes stormwater BMP demonstrations, stream team activities, and storm drain stenciling to educate the citizens about the water quality problems of Spring River and practical solutions. In addition, stream monitoring and modeling will be conducted to determine pollutant load reduction.

**Objectives**

- Implement agricultural BMPs outside the city of Carthage according to Section C, Part B of the Spring River Watershed Management Plan. Developing educational outreach projects that bring an increased knowledge of cost-share programs that are available through the Natural Resources Conservation Service, Soil and Water Conservation

Districts, and other local businesses will increase the number of landowners implementing these BMP projects in the area.

- Educating local landowners about the benefits of implementing BMPs to protect water quality. The project will host several public meetings with landowners throughout the length of the project to discuss how to implement these BMPs, where they can apply for grants and discuss their effect on the watershed.
- Educating the local youth as well as future farmers about new methods of water quality protection. This will provide local youth with the opportunity to learn and also implement their own BMP projects, such as storm drain stenciling.
- Provide modeling and monitoring of BMPs throughout the entire subwatershed (HUC #1107020714002). These practices will help in showing the effectiveness of BMPs that are implemented as well as show areas that might have a greater need for implementation. Monitoring will show pre- and post-implementation geometric means for bacterial loads.

## **Methods Employed**

**Advisory Committee:** The Spring River Watershed Partnership (SRWP) will serve as an Advisory Committee to guide all education and BMP projects implemented in the Spring River Watershed project area. The SRWP will also advise on updates to the Spring River WMP, including prioritizing additional sub-watersheds for subsequent grants for WMP implementation activities.

**Project Manager:** The Project Manager will administer the proposed planning project. The Project Manager will be responsible for scheduling and hosting advisory and technical committee meetings, maintaining communication of committees, stakeholders, and the public about the plan and planning processes, and participate in all committees' planning meetings.

**Watershed Modeling Contractor:** A contractor will be obtained to develop and conduct water quality modeling for the Spring River Watershed project. The watershed modeling will be conducted using applicable modeling tools to estimate the sources and amounts of pollutant loading within the watershed. Modeling will also be used to determine the water quality benefits/impacts of BMPs.

**Field Agency/Technician:** The Field Agency/Technician will function under the guidance of the Jasper County Health Department (JCHD) Administrator, assisting with the administration of the 319 project Septic System and Riparian Buffer cost-share programs. The Field Agency/Technician will also be responsible for organizing, planning and implementing the project outreach and education efforts and prepare and administer surveys and other efforts to evaluate the success of the project.



**Information and Outreach:** The project will implement activities to educate area residents on the issue of water quality in the Spring River, the impact of urban streams on water quality, and the importance of protecting and restoring urban stream channels and riparian corridor. The educational program will target both urban and rural landowners, youth organizations and stakeholders, educating them about the benefits of implementing BMPs to protect water quality.

**Riparian BMPs Cost-share Incentive Program:** A cost–share incentive program will be made available for streamside landowners that would like to improve or protect the riparian corridor. This program will be used in conjunction with other state and federal programs as an incentive to get riparian corridor practices installed.

**On-site Wastewater Treatment System (OWTS) Cost-share Incentive Program:** The OWTS will focus on the identification and remediation of failing OWTSs within the Spring River watershed project area. This main goal will be accomplished through several tasks, including a computer-based management program for OWTSs, remediation (repaired or replaced) of failing systems, septic tank pump-outs, public education and outreach, and water quality monitoring.

**Water Quality Modeling and Assessment:** Water quality modeling will be conducted using applicable modeling tools to estimate the sources and amounts of pollutant loading within the watershed. Modeling will also be used to determine the water quality benefits/impacts of BMPs and prioritize the BMPs according to predicted pollutant removal effectiveness as determined by the model.

**Water Quality Monitoring Data:** The environmental staff from the JCHD will conduct the sample collection and analysis for E. coli and nutrients. The JCHD will conduct weekly testing during the recreational season for five years. A total of 21 sample locations will be tested weekly during the recreational season. Four of these sites will be monitored within the project watershed boundary. Stream teams or water quality monitoring groups will be enlisted with the assistance of Southwest Ozark Stream Teams (SWOST) to perform basic site assessments, water chemistry tests and macroinvertebrate sampling in accordance with volunteer water quality monitoring procedures.

### **Accomplishments**

The JCC has made great progress in implementing stormwater demonstrations, education activities, and OWTS practices in the Spring River Watershed (city of Carthage area). Some of the educational activities and BMP demonstration projects completed include landowner and agriculture producers meetings, water quality monitoring, watershed landuse assessment, rain garden demonstrations, rain barrel demonstrations and storm drain stenciling. OWTS projects completed include 25 septic tank pump-outs, ten septic systems repaired or replaced, and two homeowners provided cost-share assistance for connecting to the city of Carthage wastewater treatment system.

### **CONTACT**

Project Manager: Tony Moehr, JCHD Administrator  
Authorized Representative: Jim Honey, Eastern District Commissioner  
Jasper County Commission  
105 Lincoln  
Carthage, MO 64836  
(417) 358-0480  
E-mail: [moehra@lpha.mopublic.org](mailto:moehra@lpha.mopublic.org)

---

**Our Missouri Waters, Spring River Watershed Plan, and other Department Prioritized Watershed Needs** (Statewide and Targeted Project) **FY2012 & 2014 319 Grant (on-going)**

The “Our Missouri Waters” (OMW) initiative began by prioritizing three pilot watersheds (Lower Grand River, Big River, and **Spring River**) for this holistic watershed based approach to improving water quality. Implementing this significant watershed-based effort requires multiple partners. University of Missouri Extension has the capabilities to assist the Department of Natural Resources with a portion of responsibilities that will fall upon the state. An agreement between University Extension and the department results in a professional assistance and partnership to move the OMW initiative forward. The agreement will help the department develop the necessary infrastructure, policies and procedures to implement the “Our Missouri Waters” approach across all 66 of the state’s HUC-8 level watersheds (OMW Webpage, <http://www.dnr.mo.gov/omwi.htm>). Additional watersheds efforts will be launched and prioritized after the first three get underway. The Spring River watershed planning effort involves multiple partners but three major contributors were identified to create a nine element watershed based plan. A major role is envisioned for the University Extension to assist with stakeholder facilitation, agricultural outreach, and watershed information gathering.

**Objectives**

1. Provide technical support relating to: training, critical areas, meeting facilitation, workgroup participation or leadership, agriculture, OMW summit logistics and organization.
2. Assist Kansas State University and Harry S Truman Coordinating Council in the development of a high quality nine-element watershed based plan.
3. Promote agricultural practices, nine-element planning, and landowner commitments to implement BMPs in OMW areas.
4. Plan and host the annual nonpoint source watershed conference for watershed groups and department personnel, which highlights watershed planning, OMW, related tools and resources, watershed group experiences, and workshops.
5. Assist with three OMW watershed summits, which may include logistics, facilitation, training, and coordination.

## Methods Employed

- ✓ Ensure technical information provided to watershed planners is based upon sound science.
- ✓ Provide all written materials and presentations to the department's project manager for review and approval.
- ✓ Provide continuing professional guidance and technical support throughout the duration of the project, with timely input to the department and making necessary modifications as required to the process. Technical support provided will include training and assistance with watershed assessment and identifying critical areas.
- ✓ Promote nine-element watershed planning by identifying existing groups in priority watersheds and assisting with the completion of department acceptable nine element watershed plans.
- ✓ Help to form and foster new watershed groups in priority watersheds as defined by the department.
- ✓ Plan and host an annual watershed conference for watershed groups and department personnel.
- ✓ Assist with OMW summits and launching watershed initiatives by conferring with the project manager and the OMW Coordinator.

## Accomplishments

The University successfully completed the original Scope of Work, obtaining many accomplishments which include:

- Providing general assistance to watershed groups by email and telephone, focusing on the department priorities. University Extension also supported existing water groups with continual watershed planning or implementation activities. Some of the groups or watersheds assisted include Spring River, Bolivar-Town Branch, Jacks Fork, Vandalia, Monroe City, Goodwater Creek, Hinkson Creek, Bonne Femme Creek, Lower Chariton, James River, Big River and Lower Grand River.
- Assist with education and outreach efforts in the Spring River, Lower Grand and Big River watershed in accordance with the needs of the OMW initiative. This includes working with the watershed groups, planning and implementing watershed summits. They also serve as a facilitator of workgroup breakout sessions at the summits and partnership planning meetings.
- Conducted presentations at the Water Quality Coordinating Committee (WQCC) meetings and other department meetings as needed to promote watershed planning.
- Planned and implemented two statewide watershed conferences.

- Assistance with the development of the Black Creek Watershed and Spring River Watershed nine elements watershed management plans.

To continue bringing watershed leaders and stakeholders together to stimulate watershed-based discussion, collaboration, and problem-solving and implement the OMW approach statewide, the department has decided to retain the services of the University and extend the current project. The Agreement has been extended to July 2016 with a new set of objectives and milestones. The University will continue to assist the department with several initiatives involving watershed group formation, watershed planning and OMW. The project milestones and expanded Scope of Work will include:

- Coordination and facilitation with members of the regional planning commissions (RPCs) and other University Extension Specialists to provide expertise regarding water quality and watershed planning.
- Development and implementation of OMW Watershed Advisory Committees.
- Participating in the local Watershed Advisory Committee meetings as part of the department's OMW effort.
- Facilitating, coordinating and soliciting participation from local stakeholders and facilitate communication during watershed committee meetings.
- Compiling information and creating a Watershed 101 training module for use as introduction, assisting the department with the implementation of the Watershed 101 training. Provide an in-service training to University Extension Specialists, RPC personnel, watershed organizations and department personnel within designated watershed areas.
- Providing watershed and water resource information for Watershed Advisory Committee meetings throughout the state.

#### **CONTACT**

Project Manager: Dan Downing, Investigator  
 Water Quality Program  
 University of Missouri Columbia  
 205 Agricultural Engineering Building  
 Columbia, MO 65211  
 (573) 882-0085

---

**Our Missouri Waters Spring River Watershed Summit and Tour project-** (State Revolving Fund Contract Project)

Our Missouri Waters Initiative is a statewide water policy initiative aimed to transition the Department of Natural Resources' water resource activities towards a coordinated, holistic and collaborative watershed approach to manage and protect our Missouri waters. The

department implemented a Summit in the Spring River watershed, May 29-31, 2013, in Joplin, Missouri, as part of the “Our Missouri Waters Initiative.” The Summit served as a platform to bring watershed leaders and stakeholders together to stimulate watershed-based discussion, collaboration, and problem-solving. The Summit included a one-day watershed tour and a two-day conference. Through a joint funding contract agreement, the local planning and community’s coordination services of the Harry S Truman Coordinating Council (HSTCC) was obtained to aid the department with the implementation of a successful conference. The HSTCC provided coordination, organization and implementation assistance for the Spring River Watershed Summit and assisted the department with implementing the main objectives of the Summit:

1. Promote a sense of ‘watershed community’ by providing information on the connection between a broad spectrum of water resource users to increase attendees knowledge of watershed challenges, concerns, activities, major land uses, and the people/agencies/ organizations involved.
2. Provide attendees with a picture of the past, present, and future of water resource challenges in the watershed from nonpoint source pollution (agriculture, historical mining, etc.) to water quantity demands to community infrastructure needs.
3. Provide information on what governmental and non-governmental agencies are doing in the watershed to address challenges and concerns.
4. Provide data on water quality, water quantity, etc.
5. Provide examples of successful watershed projects and partnerships to stimulate, inspire, and encourage community action, increased local awareness and participation.
6. Discuss the need for community-based action; determine and develop the interest of Summit attendees in building consensus, taking action, and setting attainable goals.
7. Identify opportunities and chart a path forward for on-going collaboration among agencies, organizations, businesses, and individuals.

### **Accomplishments**

The HSTCC assisted the department with the planning, development and implementation of the Spring River Watershed Summit and Tour. The HSTCC engaged and encouraged local stakeholders (e.g., county/city officials, concerned citizens/landowners) representing the watershed to provide input, guidance and support for the “Our Missouri Waters Initiative” and Spring River Watershed Summit. Emails, local websites and newsletters were utilized to keep advisory committee members, key stakeholders and other interested individuals and organizations informed about the Summit and Tour. Overall, approximately 50 participants attend the tour and 200 participated in the summit.

During the summit, breakout workgroups were formed from the participants to address five topics: 1) Urban and agricultural nonpoint source pollution, 2) Watershed management plan, 3) Infrastructure assessment and leak detection, 4) Watershed education, outreach and

stakeholders involvement, and 5) Drought planning and water conservation - ensuring adequate water supplies for all users. The final task of the contract was to conduct follow-up meetings and activities with the workgroups after the summit, to continue discussion and obtain additional feedback needed to address the topics. Unfortunately, HSTCC and the summit Steering Committee were unable to identify the specific activities needed and develop a work plan to implement the meetings before the project ended on December 31, 2013. The department plans to continue discussing environmental issues with the local Spring River watershed stakeholders through future meetings and events held in the watershed.

## **CONTACT**

### Harry S Truman Coordinating Council Collaborator:

Project Manager: Harry Rogers, Exec. Director

Authorized Representative: Steve Lawver, President of Board

Harry S Truman Coordinating Council

800 E. Pennell St.

Carl Junction, MO 64834

(417) 649-6400

**E-mail: [hrogers@hstcc.org](mailto:hrogers@hstcc.org)**

### Department of Natural Resources Collaborator:

John Johnson

Soil and Water Conservation Program

P.O. Box 176

Jefferson City, MO 65102

(573) 751-4932

[john.johnson@dnr.mo.gov](mailto:john.johnson@dnr.mo.gov)

---

### **Spring River Watershed Planning Support and Coordination Project - FY08-09 319 (on-going)**

This project will coordinate the local planning meetings and input that will assist Kansas State University Cooperative Extension (KSU), contractor, with developing a Watershed Management Plan (WMP) for Spring River (HUC 11070207) watershed. The Harry S Truman Coordinating Council (HSTCC) will encourage and engage a diverse group of stakeholders to support, guide, and provide input into the development of a nine-element watershed plan for the Spring River watershed.

The project will provide local stakeholder coordination and support to KSU or their development of a WMP for Spring River, by providing information (especially regarding metropolitan concerns), involving local stakeholders and other community leaders in a meaningful watershed management planning process. The overall goal of the project is to obtain local stakeholders' and other community leader's participation in a planning process that will support development of a WMP for the Spring River Watershed that addresses the nine critical elements of a WMP as identified by EPA.

## **Methods Employed**

### **Harry S Truman Coordinating Council (HSTCC)**

The HSTCC will oversee and administer the Spring River Watershed Planning Support and Coordination project. They will provide a community perspective to the plan process and assist with local public meetings, attend and support KSU led stakeholder meetings, direct mailings and other means to obtain stakeholder participation. They will also work with major urbanized communities and other regional planning commissions (RPCs) to provide KSU with urban nonpoint source concerns, priorities, BMPs, and known critical source areas. As part of grant administration, the HSTCC will submit quarterly progress reports, report on numbers and affiliations of project participants, and submit the final WMP for DNR acceptance.

The HSTCC will:

- conduct and complete all aspects of the grant to ensure successful implementation;
- be responsible for organizing and engaging stakeholders;
- be responsible for scheduling and coordinating meetings, maintaining communications among the partners, stakeholders and the public about the WMP and the planning processes;
- work with partners and other entities to obtain assistance and expertise in completing aspects of the project activities;
- preside and/or present at all planning and public meetings;
- coordinate and oversee stakeholder participation to ensure all input is provided to KSU in a timely manner. HSTCC may decide to form a small ad-hoc committee to assist with coordination tasks;
- provide draft copy of articles, publications and outreach agendas to the department's project manager for review before materials are finalized; and
- finalize the watershed management plan for distribution to partners.

### **Accomplishments**

Throughout the planning process the HSTCC has helped engage riparian landowners, agricultural producers, community leaders and local resource agencies through public meetings and direct mailings, and publicity in local newspapers and HSTCC's website (hstcc.org). Emails, local websites and newsletters were used to keep advisory committee members, key stakeholders and other interested individuals and organizations informed about the WMP project. Updates regarding WMP development were posted to the HSTCC website to help promote public awareness about the WMP and obtain public comments. HSTCC assisted KSU will completing a series of four public planning meetings that were conducted at three different locations within the Spring River Watershed. Monthly partnership meetings with KSU,

University of Missouri Extension, Jasper County Health Department and the department were held.

## **CONTACT**

Project Manager: Harry Rogers, Exec. Director

Authorized Representative: Steve Lawver, President of Board

Harry S Truman Coordinating Council

800 E. Pennell St.

Carl Junction, MO 64834

(417) 649-6400

E-mail: [hrogers@hstcc.org](mailto:hrogers@hstcc.org)

---

### **Development of Watershed Management Plan for Spring River Watershed (HUC 11070207) and Develop Information for 319 Nonpoint Source Implementation Project in Carthage, Missouri** Contracted 319 Grant Project - (ongoing)

This project through a contract agreement with Kansas State University Cooperative Extension (KSU) will assist the Missouri Department of Natural Resources, and applicable watershed stakeholder groups, in developing a nine element watershed management plan for the Spring River watershed (HUC 11070207) and developing information needed to assist an existing Section 319 nonpoint source implementation project in Carthage, Missouri, with recommended BMP placement and anticipated pollutant load reductions.

The KSU will develop the information needed to address elements A through G of the Environmental Protection Agency's (EPA) prescribed "nine element watershed management plan" as outlined below:

- Identification of the causes and sources or groups of similar sources that will need to be controlled to achieve required load reductions.
- Estimate of the load reductions expected for the nonpoint source (NPS) management measures.
- Description of the NPS management measures that will need to be implemented to achieve the load reductions and identification of the critical areas in which those measures will be needed.
- Estimate of the amounts of technical and financial assistance needed, associated costs to implement.
- Information/education component. (Assisted by other partners; defined as the department, University of Missouri Extension, and applicable watershed stakeholder groups.)



- Schedule for implementing the NPS management measures. (Assisted by other partners.)
- Interim measurable milestones for determining whether NPS management measures are being implemented.

In addition, the KSU will develop information needed to assist with identifying critical areas, types of BMPs and potential load reductions for the Jasper County Commission, through the Jasper County Health Department's (JCHD), 319 NPS implementation project in the vicinity of Carthage. Work with the JCHD to identify critical areas would be performed early in the process to assist with time sensitive BMP placement.

The department will develop the information needed to address elements H and I of the EPA prescribed "nine element watershed management plan":

- Criteria that can be used to determine whether loading reductions are being achieved over time and substantial progress is being made toward attaining water quality standards.
- Monitoring component to evaluate the effectiveness of the implementation efforts over time.

### **Accomplishments**

- Development of a calibrated SWAT model for the Spring River watershed (HUC 11070207) for use in identifying critical areas and selecting targeted areas for future BMP implementation.
- Development of a nine element watershed management plan document for the Spring River watershed (HUC 11070207). The document identifies and plan for subwatersheds (HUC 12) that are determined to be more significant contributors to the pollutant loads. These HUC 12 subwatersheds have been individually analyzed, according to EPA planning elements A through G (outlined herein) down to a catchment level for more detailed planning purposes.
- Implemented four stakeholder group planning meetings during the plan development process.
- Development of documents for JCHD to assist with critical area location, BMP recommendations and associated load reductions.
- Participated in conference calls meetings as need with partners to discuss the drafted watershed plan and the public planning meetings
- Provide seven quarterly progress reports to the department and partners.

- Have provided three drafted version of the watershed plan for review. Plan revisions were based on public comments.

**CONTACT**

John Johnson  
Missouri Department of Natural Resources  
Division of Environmental Quality  
Soil and Water Conservation Program  
P.O. Box 176  
Jefferson City, MO 65101  
573-751-4932  
[john.johnson@dnr.mo.gov](mailto:john.johnson@dnr.mo.gov)

## 12. Bibliography

- <sup>1</sup> EPA Section 319 funding information. <http://water.epa.gov/polwaste/nps/cwact.cfm>
- <sup>2</sup> Missouri Department of Natural Resources. <http://dnr.mo.gov/env/wpp/permits/wpcpermits-issued.htm>
- <sup>3</sup> Kansas WRAPS plans [www.kswraps.org](http://www.kswraps.org)
- <sup>4</sup> Missouri Department of Natural Resources for current information and listing.  
<http://www.dnr.mo.gov/env/Wpp/wqstandards/index.html>  
[http://www.dnr.mo.gov/env/wpp/wqstandards/wq\\_uses.htm](http://www.dnr.mo.gov/env/wpp/wqstandards/wq_uses.htm)  
[http://www.dnr.mo.gov/mocwis\\_public/waterQualityStandardsSearch.do](http://www.dnr.mo.gov/mocwis_public/waterQualityStandardsSearch.do)
- <sup>5</sup> EPA. <http://water.epa.gov/scitech/swguidance/standards/upload/mowqs.pdf>
- <sup>6</sup> Missouri Department of Natural Resources. 1996. <http://mdc.mo.gov/your-property/greener-communities/missouri-watershed-inventory-and-assessment/spring-river-southwe-30>
- <sup>7</sup> Joplin rainfall data records. <http://countrystudies.us/united-states/weather/missouri/joplin.htm>
- <sup>8</sup> United State Census Bureau. 2013. <http://quickfacts.census.gov/qfd/states/29000.html>
- <sup>9</sup> EPA estimates “30 to 50 % of on-site wastewater systems malfunction each year”.  
[http://water.epa.gov/aboutow/owm/upload/2004\\_07\\_07\\_septics\\_septic\\_2002\\_osdm\\_all.pdf](http://water.epa.gov/aboutow/owm/upload/2004_07_07_septics_septic_2002_osdm_all.pdf)  
Best professional guess to claim the number of failing on-site wastewater treatment systems to be 10%.
- <sup>10</sup> Missouri Nutrient Reduction Strategy. <http://dnr.mo.gov/env/wpp/opcert/>
- <sup>11</sup> Missouri Spatial Data Analysis.  
[ftp://msdis.missouri.edu/pub/metadata\\_gos/MO\\_2006\\_Depth\\_to\\_Groundwater\\_shp.xml#Identification\\_Information](ftp://msdis.missouri.edu/pub/metadata_gos/MO_2006_Depth_to_Groundwater_shp.xml#Identification_Information)
- <sup>12</sup> Missouri Spatial Data Analysis.  
[ftp://msdis.missouri.edu/pub/metadata\\_gos/MO\\_2012\\_Public\\_Water\\_Districts\\_shp.xml](ftp://msdis.missouri.edu/pub/metadata_gos/MO_2012_Public_Water_Districts_shp.xml)
- <sup>13</sup> Missouri Department of Natural Resources for current information and listing.  
<http://www.dnr.mo.gov/env/wpp/permits/wpcpermits-issued.htm>
- <sup>14</sup> Missouri Spatial Data Analysis.  
[ftp://msdis.missouri.edu/pub/metadata\\_gos/MO\\_2012\\_National\\_Pollutant\\_Discharge\\_Elimination\\_System\\_Outfalls\\_shp.xml](ftp://msdis.missouri.edu/pub/metadata_gos/MO_2012_National_Pollutant_Discharge_Elimination_System_Outfalls_shp.xml)
- <sup>15</sup> Missouri Department of Natural Resources. <http://dnr.mo.gov/env/wpp/cafo/>
- <sup>16</sup> Missouri Spatial Data Analysis.  
[ftp://msdis.missouri.edu/pub/metadata\\_gos/MO\\_2012\\_NPDES\\_Animal\\_Feeding\\_Operations\\_shp.xml](ftp://msdis.missouri.edu/pub/metadata_gos/MO_2012_NPDES_Animal_Feeding_Operations_shp.xml)
- <sup>17</sup> Information provided by Missouri Department of Natural Resources. September, 2014.
- <sup>18</sup> For most up to date 303(b) listing, go to the Missouri Department of Natural Resources:  
<http://dnr.mo.gov/env/wpp/waterquality/303d.htm>
- <sup>19</sup> Missouri Department of Natural Resources. <http://www.dnr.mo.gov/env/wpp/tmdl/3188-n-fk-spring-r-record.htm>

---

<sup>20</sup> Refer to Missouri Department of Natural Resources general information sheet for *e. coli*.  
<http://dnr.mo.gov/pubs/pub2401.htm>

<sup>21</sup>

Doran, J.W. and D.M. Linn. 1979. Bacteriological Quality of Runoff Water from Pasture Land. 1979. *Appl. Environ. Microbiol.* 37:985-991.

Duda, A.M. and D.S. Finan. 1983. Influence of Livestock on Non-Point source Nutrient Levels of Streams. *Trans. Of the ASAE.* 26:1710-1716.

Kauffman, J.B. and W.C. Drueger. 1984. Livestock Impacts on Riparian Ecosystems and Streamside Management Implications. A Review. *J. Range Mgmt.* 37:430-437.

<sup>22</sup> Sudduth, T.Q. and M.J. Loveless. Decreasing Nitrogen and Phosphorus Excretion by Dairy Cattle. [https://www.clemson.edu/extension/livestock/camm/camm\\_files/dairy/dch3b\\_04.pdf](https://www.clemson.edu/extension/livestock/camm/camm_files/dairy/dch3b_04.pdf)

Schmitt, Michael and George Rehm. Fertilizing Cropland with Beef Manure. 2002. University of Minnesota Extension Bulletin.

Koelsch, Rick. Estimating Manure Nutrient Excretion. 2007. University of Nebraska Extension Bulletin.

<sup>23</sup> Missouri Department of Natural Resources. 2014 Proposed Section 303(d) Impaired Waters List. <http://dnr.mo.gov/env/wpp/waterquality/docs/2014-303d-list-for-cwc2-24-2014.pdf>

<sup>24</sup> <http://mdc.mo.gov/sites/default/files/resources/2011/05/370cotxt.pdf>  
[http://health.jaspercounty.org/environmental/watershed/Spring\\_River\\_Watershed\\_Management\\_Plan.pdf](http://health.jaspercounty.org/environmental/watershed/Spring_River_Watershed_Management_Plan.pdf)

<sup>25</sup> Missouri Department of Natural Resources for further information.  
<http://dnr.mo.gov/env/hwp/sfund/nrda.htm>

<sup>26</sup> Diebel, Matthew W., Jeffrey T. Maxted, Peter J. Nowak, and M. Jake Vander Zanden. *Journal of Environmental Management.* 2008. Landscape Planning for Agricultural Nonpoint Source Pollution Reduction I: A Geographical Allocation Framework.

<sup>27</sup> Estimated load reductions and efficiencies are derived from a Kansas State University Extension *publication Water Quality Best Management Practices, Effectiveness, and Cost for Reducing Contaminant Losses from Cropland.* Kansas State University, 2003.  
<http://www.ksre.ksu.edu/bookstore/pubs/MF2572.pdf>

<sup>28</sup> Rules of the Department of Natural Resources.  
<http://www.sos.mo.gov/adrules/csr/current/10csr/10c20-7a.pdf>

<sup>xxix</sup> Designated Uses provided by MoDNR. 2015.