

## **2022 Reductions**

<b>Watershed</b>	<b>N Reductions (#)</b>	<b>P Reductions (#)</b>	<b>Sediment Reductions (tons)</b>
South Kinni	1203	1215	418.7
Hay River	784.8	1467.5	1388.2
Dry Run	147.24	220.63	121.6
Horse Creek	2161.24	640.4	220.5
	<b>4,296.3</b>	<b>3,543.5</b>	<b>2,149</b>

## **2022 Practices**

<b>Watershed</b>	<b>Cover Crops</b>	<b>Nutrient Management or P Indexing</b>	<b>Perennial Acres Est'd</b>
South Kinni	405	1415	19.6
Hay River	1362		
Dry Run	890		21.29
Horse Creek	918	1173	
	<b>3,575</b>	<b>2,588</b>	<b>40.89</b>

## **Calculations**

### **South Kinni 2022**

- 1,415 acres under a Nutrient Management Plan  
.4 lbs N/acre, 0.7# phosphorus No sediment reduction  
566, 990, 0
- 5 acres of Buffer Strip established  
0.60lbs/acre N reduced - 0.50 tons /acre sediment reduced, 1.1# phosphorus/acre,  
3, 5.5, 7.3
- 14.6 acres of Pollinator Plot established  
0.60lbs/acre N reduced - 0.50 tons /acre sediment reduced, 1.1# phosphorus/acre  
226, 16.06, 1.2
- 89 acres of No-Till planting cost shared  
2.54 lbs N reduced - 1.21 tons sediment
- 405 acres of Cover Crop cost shared  
.99 lbs N reduced - 0.50 # Phosphorus, 1.0 ton/acre sediment  
400, 202.5, 405
- 1 Grade Stabilization Structure construction cost shared  
41 tons sediment, 24.5# phosphorus (over life of the practice, 15 years)

0, 1.6, 2.7 per year

### Hay River

Cover Crops 1362.30ac 305 P Reduction (lbs) 74 N Reduction (lbs) 184 tons Sediment Reduction

This is based on what was included in the 2022 DATCP report.

Did all of the practices on the signup sheet go in? The revised reductions (assuming all signed up were completed) are below. I did not count the buffers since there's really no way to calculate the reduction without acreage.

Practice	Amount	P Reduction(lbs)	N Reduction (lbs) (tons)	Sediment Reduction
Cover Crops	2407.3	192.584	96.292	240.73
Waterway	5100	1275	688.5	1147.5

### Dry Run

#### Dry Run Reduction Numbers

##### Buffer Program:

Acre	21.29	Nitrogen (lbs/ac/yr)	Phosphorus (lbs/ac/yr)	Sediment (tons/ac/yr)
		43.2	76.64	36.6

##### Cover Crops

Acre	890	Nitrogen (lbs/ac)	Phosphorus (lbs/ac)	Sediment (tons/ac)
		104.04	143.99	85

TOTAL REDUCTIONS	Nitrogen (lbs/ac)	Phosphorus (lbs/ac)	Sediment (tons/ac)
	147.24	220.63	121.6

### Horse Creek

1583.62 acres soil sampling, 1173.1 phosphorous indexing, 918.72 acres cover crops

P index =  $1173.1 \times .37 = 434.04$  #N  $1173.1 \times .17 = 199.4$  #P,  $1173.1 \times .05 = 58.7$  tons sediment

Cover Crops  $918.72 \times 1.88 = 1727.2$  #N  $918.72 \times .48 = 441$  #P  $918.72 \times .24 = 220.5$  tons sediment

$434.04 + 1727.2 = 2161.24$  #N

$199.4 + 441 = 640.4$  #P

## 2023 Reduction numbers

- \$50,000 of DATCP grant funding provided towards local conservation incentive payments and soil health education to farmers
  - Planned cover crop acres planted this fall: 5,842 acres
  - Planned Soil samples: 2,341 tests
  - Planned transition to perennial root acres: 17.9 acres