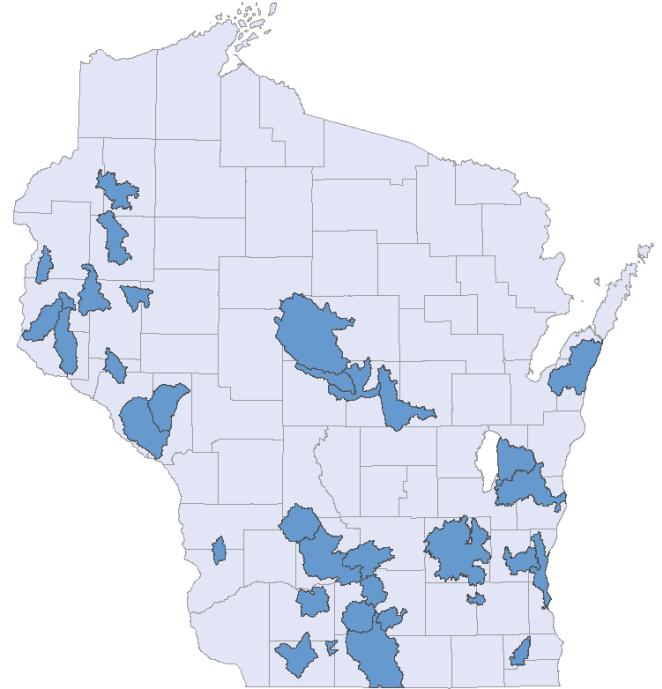


Tracking Conservation Outcomes of the Producer-Led Watershed Protection Grants Program

2019 No-Till and Cover Crop Analysis

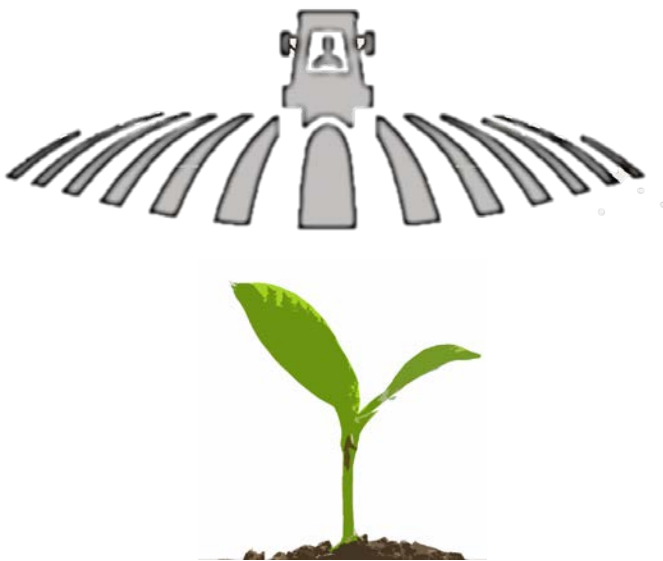
Project Overview

DATCP initiated a project in late 2019 to evaluate and track the conservation outcomes generated by Producer-Led watershed projects. The quantifiable benefits of conservation practices are complicated to estimate on a large scale; however, using Wisconsin's nutrient management planning software, SnapPlus, potential reductions in phosphorus runoff and soil erosion were estimated for reported cover crop and no-till acres. This analysis is part of the first stage in capturing the impact of this state conservation program on Wisconsin's soil and water resources.



Model Assumptions

- Dominant soil types for each watershed
- County average soil test P-levels (dominant county within watershed project boundary)
- No-till and cover crop acres reported by each group
- Baseline, cover crop, and no-till rotation scenarios



Analysis of Practice Changes

No till Practice Change

- Baseline: Corn- soybean rotation, chisel + disk, no cover crop
- Practice change: No-till soybean crop

Cover crop Practice Change

- Baseline: Corn- soybean rotation, chisel + disk, no cover crop
- Practice change: Rye cover crop after soybeans



Did you know?

One pound of phosphorus that reaches a stream or lake can potentially feed 500 pounds of algae. Excessive algae in surface water can cause algal blooms and result in impaired water quality.

No-Till Summary

2019 Reported No-till Statistics:

- **52,963 acres**
- **211 farms**

Estimated reductions from no-till acres:

- Sediment:
 - Average reduction: **1.1 t/ac/yr**
 - Average percent reduction: **25.9%**
 - Tons erosion reduced: **58,259**
- Phosphorus:
 - Average reduction: **0.6 lb/ac/yr**
 - Average percent reduction: **20.9%**
 - Pounds P reduced: **31,777 lbs P**

Cover Crop Summary

2019 Reported Cover Crop Statistics:

- **70,161 acres**
- **417 farms**

Estimated reductions from cover crop acres:

- Sediment:
 - Average reduction: **0.8 t/ac/yr**
 - Average percent reduction: **19.5%**
 - Tons erosion reduced: **56,128**
- Phosphorus:
 - Average reduction: **0.6 lb/ac/yr**
 - Average percent reduction: **16.1%**
 - Pounds P reduced: **39,686 lbs P**



Did you know?

A soil loss of 100 tons is close in volume to the equivalent of 10 standard dump truck loads of soil.