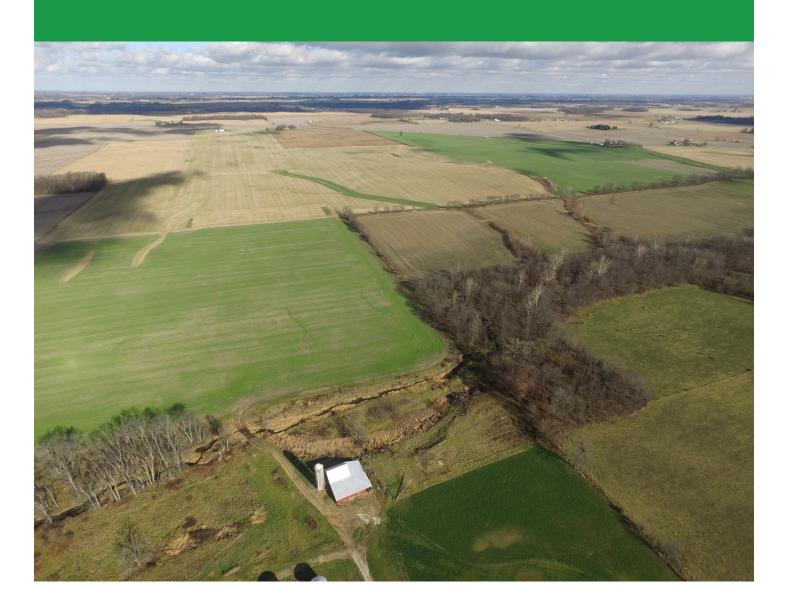


## 2024 Indiana Conservation Partnership Accomplishments





#### The Indiana Conservation Partnership

The <u>Indiana Conservation Partnership</u> (ICP) is comprised of eight Indiana agencies and organizations who share a common goal of promoting conservation. To that end, the mission of the Indiana Conservation Partnership is to provide technical, financial and educational assistance needed to implement economically and environmentally compatible land and water stewardship decisions, practices and technologies.

ICP entities that work with private landowners to provide direct technical and/or financial assistance for conservation projects share data with necessary formal agreements in place (1619 compliance, MOA's, etc.) to exchange information while always protecting personally identifiable information.

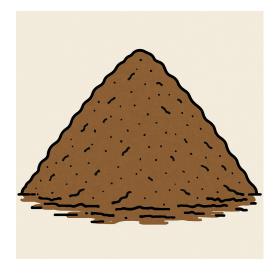


Key Highlights Accomplished by Private Landowner and the Indiana Conservation Partnership

In 2024 over **46 thousand** conservation and farm best management practices were implemented. **19 thousand** of these practices were modeled to quantify reductions of sediment and nutrients entering Indiana's waterways.

#### **Sediment Reduction**

**Over 2 Million Tons of Sediment** 



Enough to Fill 20 Thousand Train Cars

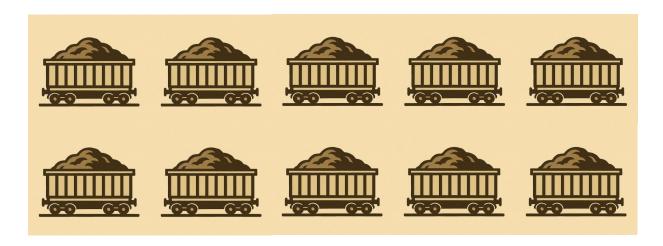


A Train That Would Span
Across Indiana

Thanks to the efforts of the ICP and private landowner **2,023,799 tons of sediment** were estimated to be saved from entering Indiana's waterways. This much soil would fill about 20 thousand train cars, which would be a train longer than the width of Indiana! There are many different ways to determine the economic impact of top soil. One ton of top soil cost approximately 44 dollars in 2024, which would mean the value of the top soil if sold commercially would be over 88 million dollars. Soil conservation provides many benefits, including preventing the loss of soil productivity. According to a <u>study</u> by USDA there is estimated average benefit of 1.01 dollars \$/ton of soil in soil productivity from preventing erosion. This results in over 2 million dollars of soil productivity that were retained from the ICP's efforts.

#### **Phosphorus Reduction**

#### Over 2 million lbs. of Phosphorus



#### **Enough to Fill More than 10 Train Cars**

**2,140,450 lbs. of phosphorus** were estimated to be saved from entering Indiana's waterways, which is enough to fill 10.7 train cars. This is the equivalent amount of phosphorus contained in over 12 thousand tons of 10-20-10 fertilizer, which is over 7 million dollars worth of fertilizer. This much phosphorus would be enough to grow over 500 thousand tons of surface algae.

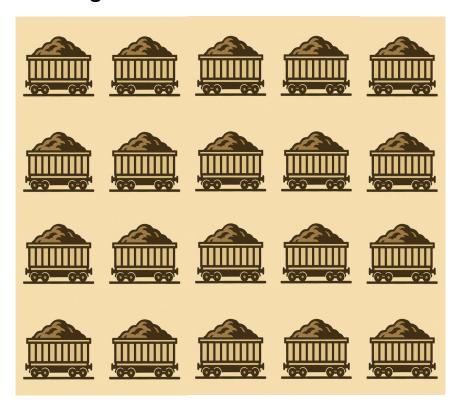


Enough Phosphorus to Grow More than 500,000 Tons of Algae

#### **Nitrogen Reduction**

**4,354,749 lbs. of nitrogen** were estimated to be saved from entering Indiana's waterways, which is enough to fill more than 21 train cars. This much nitrogen is equivalent to the amount of nitrogen in about 4700 tons of urea fertilizer, which is over 2.8 million dollars worth of fertilizer.

Over 4 million lbs. of Nitrogen
Enough to Fill More than 20 Train Cars



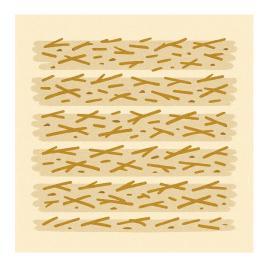
#### **Cover Crops and No-Till**

Utilizing cover crops and no-till and reduced-till agricultural systems are ways that Indiana producers can improve soil health and reduce soil erosion on their fields. In 2024 the ICP assisted in more than **8 thousand cover crop practices**, which covered about **225 thousand acres**. which is enough to cover about 85% of the area Marion County.

# 225 Thousand Acres of Cover Crops About 85% of the area of Marion County



The ICP assisted growers in almost **3 thousand no-till practices**, which covered almost **100 thousand acres**. Additionally the ICP assisted with over **2.3 thousand reduced till practices** totaling over **127 thousand acres**. In total the ICP assisted with **no-till and reduced-till practices covering about 227 thousand acres**.



227 Thousand Acres of No-Till and Reduced-Till
About the area of Adams County



#### **Wetlands and Ecosystem Best Management Practices**

Along with providing erosion control, and improving soil health, some practices that the ICP helps to implement create or provide natural ecosystems,. Natural ecosystems provide numerous benefits, like increasing the population of pollinating insects, or acting as a natural water filter for sediment and nutrients. Below are some key types of best management practices that promote natural ecosystems that ICP assisted with in 2024

BMP Type	Amount
Wetland creation, enhance- ment, or restoration	868 Acres
Grassy, pollinator, and wildlife habitat plantings	5,245 Acres
Tree or shrub plantings	19,916 Acres



#### **County Conservation Reports**

A lot of the work that the ICP does is at the county level, with Soil and Water Conservation Districts, NRCS field office staff, and ISDA resource specialists, and other ICP staff all working collaboratively to help private landowners with their resource needs.

Use the below QR code to access a web map that includes the county conservation reports



#### **Load Reductions by HUC8 Watershed**

HUC8 Sediment and Load Reduction Maps Load Reduction maps are include in in the Appendix

- <u>Sediment</u>
- Phosphorus
- Nitrogen

The practices highlighted in this report were completed via voluntary conservation efforts from private landowners in Indiana with support from the Indiana Conservation Partnership. This report does not capture the many unassisted in field and edge of field practices landowners install and pay for themselves. Reductions in

Champaign

Chicago

Michigan

Soluth Bend

Gesthen St.

Joseph-Michigan

Middle

Wabash-Deer

Wa

dissolved nutrients, such as dissolved reactive phosphorus (DRP) and nitrate (NO3), are not accounted for by the Region 5 Model.

Load reductions continue for the life of the practices modeled (e.g., grassed waterways are designed to be 10- year practices, while cover crops are 1-year practices, established annually). Some ICP practices were not modeled because they were not associated with sediment loss, and therefore not covered by the EPA Region 5 Model.



### **Greenhouse Gas Reductions from ICP Conservation Practices – 2024**

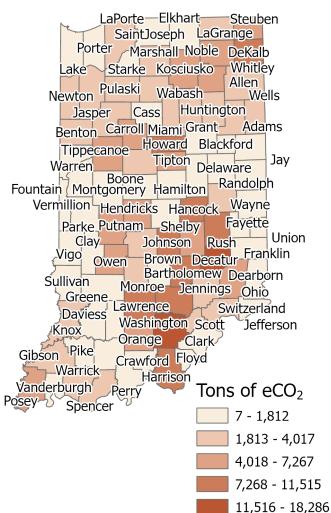
Many conservation practices that the ICP helps private landowners complete have the benefit of reducing greenhouse gases. Conservation practices can reduce greenhouse gases in a variety of ways including:

- Seguestering carbon in the soil
- Sequestering carbon in biomass
- Reducing fuel use

The Indiana Conservation Partnership assisted with conservation practices that are estimated to sequester greenhouse gases that are the equivalent of **310,999 tons of CO<sub>2</sub>**.

This is about the equivalent to the emissions from over **60,980 passenger vehicles** based on U.S EPA estimates.

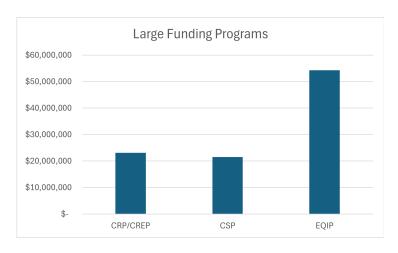
Conservation Practice		
	Cover Crop	
	Residue and Tillage Management, No Till	
	Nutrient Management	
	Tree/Shrub Establishment	
	Conservation Cover	
	Residue and Tillage Management, Reduced Till	
	Conservation Crop Rotation	
	Riparian Forest Buffer	
	Herbaceous Weed Treatment	
	Filter Strip	
	Forage and Biomass Planting	
	Grassed Waterway	
	Prescribed Grazing	
Field Border		
	Critical Area Planting	
	Mulching	
	Windbreak/Shelterbelt Establishment and Renovation	

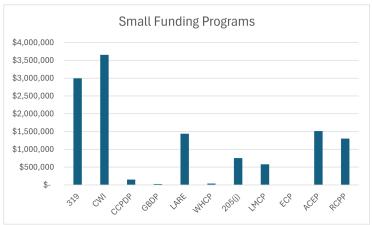


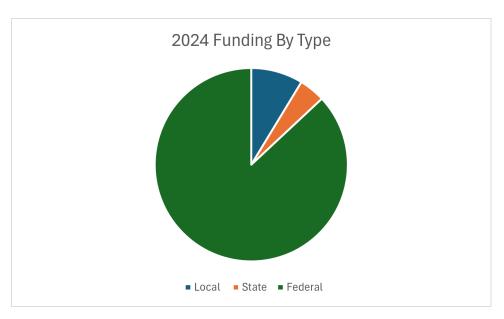
USDA and Colorado State University created an online tool called COMET-Farm for the estimation of green house gas reductions of conservation practices. COMET-Farm is a powerful tool for agricultural producers to complete estimations of their own operations effect on greenhouse gases. COMET-Farm's underlying data can be accessed on its website, and that is what was used in the estimation of greenhouse gas reduction for ICP funded conservation practices. If a conservation practice had more than one scenario, the mean value of the scenarios was used. The Table to the left shows the sum of each conservation practices GHG reductions that were able to be calculated.

#### **ICP Funding**

The ICP shares financial data for all conservation practices at the county level, on an annual basis, per conservation program published online. Find out how much local, state, and federal conservation dollars came into your county on the ICP County Conservation Reports web map . Total public conservation funding in 2024 totaled over \$121 million dollars.







#### **Programs Initiatives**

Every year the ICP implements program and initiatives to facilitate specific conservation goals and outcomes.



#### **Urban Soil Health**

The Urban Soil Health Program has a mission to educate and advocate to improve soil health on Indiana's urban and diversified small-scale farms and gardens.

#### **Conservation Cropping Systems** Initiative

Through a Farmer-focused and Farmer-driven process, the Conservation Cropping Systems Initia-



tive works with Local Level Partnerships and others to promote the adoption of practices and cropping systems that can lead to improved soil health. CCSI continues to promote the adoption of science-based, farmer-proven practices through grassroots leadership.



#### **Indiana Invasives Initiative**

In late 2017, Southern Indiana Cooperative
Invasives Management (SICIM) and the Invasives Management (SICIM) and the **USDA Natural Resources Conservation Ser**vice (NRCS) entered into a contribution

agreement for the purpose of developing local Cooperative Invasive Species Management Areas (CISMAs) throughout Indiana. Both SICIM and the NRCS have been working for many years to combat invasive plants and raise public awareness of the devastation being caused by these non-native pests, and both have come to the realization that we will not begin to make much headway until the problem is addressed at the local level

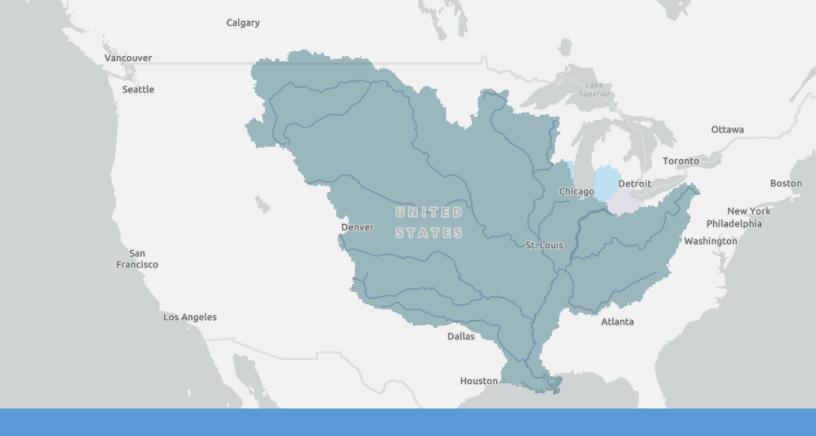


#### **2024 Conservation Transect**

The conservation transect is a visual survey of cropland in the state. It was conducted between March and April 2024 by members of the Indiana Conservation Partnership. The primary purpose is to estimate the amount of cover crops that are employed by Indiana farmers, show and a more complete story of the state's conservation efforts, outside of cost shared BMPs.

The Conservation Transect estimated that Indiana farms planted over **1.62 Million acres of living cover**.

For more information about the Conservation Transect see: <a href="https://www.in.gov/isda/divisions/soil-conservation/conservation-transect/">https://www.in.gov/isda/divisions/soil-conservation/conservation-transect/</a>



#### **National Collaboration**

Watersheds span state and political boundaries. The ICP is proud to work with other states in the Midwest and across the country to improve water quality and promote science-based practices that reduce nutrient runoff and build soil health. The ICP collaborates through:

- Mississippi Hypoxia Task Force
- Indiana's Great Lakes Water Quality Agreement (GLWQA)
- Domestic Action Plan (DAP)
- Great Lakes conservation (Tri-State Watershed Alliance)



#### **Significant Water Bodies**

The ICP focuses on reporting the positive impacts of conservation practices to key drinking water sources throughout the state that have significant percentages of agricultural land use within their watershed. To identify what watershed you live in, find out the positive impacts farmers are having on water sources, and to learn about the most popular conservation practices visit <a href="Indiana's Nutrient Reduction Strategy website">Indiana's Nutrient Reduction Strategy website</a>.

To view one page data sheets for significant water bodies please use the online version of this report

#### Resources

#### For more information visit the ICP member websites

Indiana Conservation Partnership—

USDA NRCS—https://www.nrcs.usda.gov/state-offices/indiana

USDA FSA—https://www.fsa.usda.gov/state-offices/indiana

Indiana State Department of Agriculture Division of Soil Conservation—<a href="https://www.in.gov/isda/divisions/soil-conservation/">https://www.in.gov/isda/divisions/soil-conservation/</a>

IDNR LARE—<a href="https://www.in.gov/dnr/fish-and-wildlife/wildlife-resources/lake-and-river-enhancement/">https://www.in.gov/dnr/fish-and-wildlife/wildlife-resources/lake-and-river-enhancement/</a>

IDEM 319—<a href="https://www.in.gov/idem/nps/funding/clean-water-act-section-319h-grants/">https://www.in.gov/idem/nps/funding/clean-water-act-section-319h-grants/</a>

IDEM 205(j)—https://www.in.gov/idem/nps/funding/clean-water-act-section-205j-grants/

Indiana Association of Soil and Water Districts—<a href="https://iaswcd.org/">https://iaswcd.org/</a>

Indiana State Soil Conservation Board—<a href="https://www.in.gov/isda/boards/state-soil-conservation-board/">https://www.in.gov/isda/boards/state-soil-conservation-board/</a>

Purdue Extension—https://extension.purdue.edu/

A web version of this report with interactive features can be found at:

https://storymaps.arcgis.com/ sto-

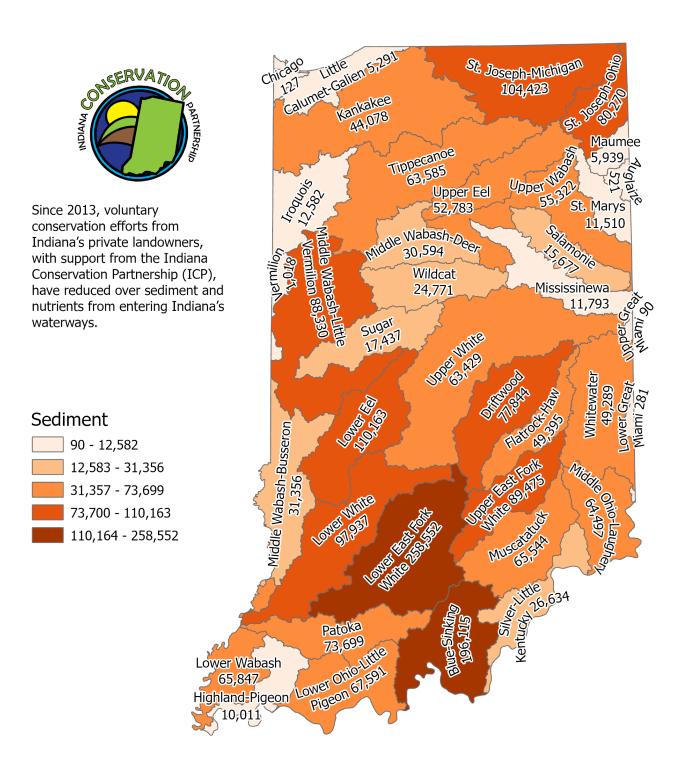
ries/843ab0b0806649abb13d135c27452f72

Or by scanning the QR code

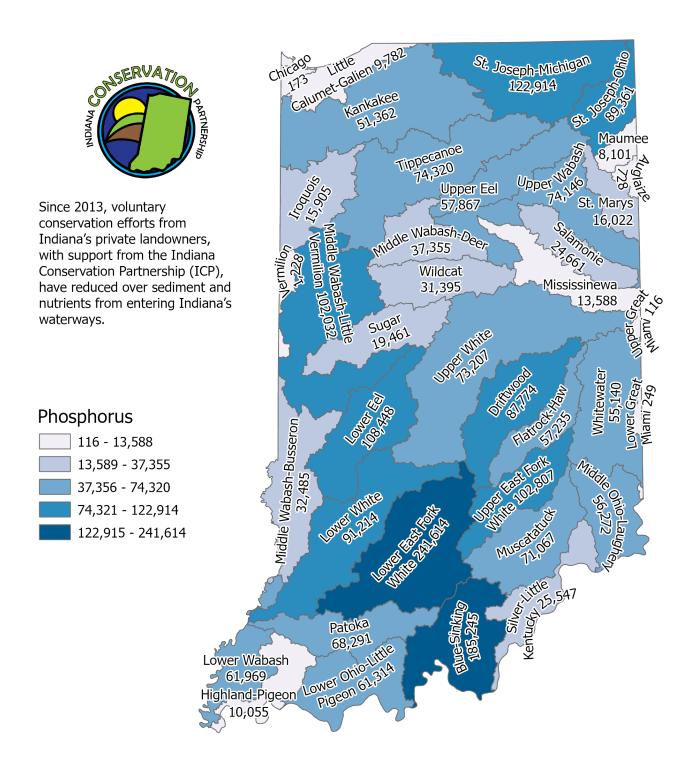




## **Sediment Load Reduction From Best Management Practices Active in 2024**



### **Phosphorus Load Reduction From Best Management Practices Active in 2024**



### Nitrogen Load Reduction From Best Management Practices Active in 2024



Since 2013, voluntary conservation efforts from Indiana's private landowners, with support from the Indiana Conservation Partnership (ICP), have reduced over sediment and nutrients from entering Indiana's waterways.

#### Nitrogen

