

Indiana's Use of the Gulf Hypoxia Program Dollars

Indiana's MRB Soil Sampling Program & the Indiana Nutrient Research and Education Program

HTF Meeting
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Overview of GHP Dollars

Workplan

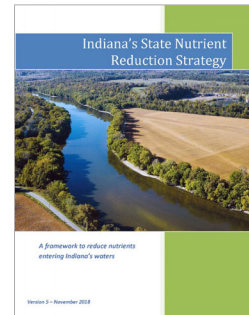
- The Indiana workplan is covering three main focus areas:
 - 1) Expanding **staff capacity** to manage the BIL-GHP funds, manage and administer the soil sampling program, and support the Indiana State Nutrient Reduction Strategy (SNRS) efforts, Indiana Conservation Partnership efforts, and on-farm trial programs.
 - 2) Development and expansion of a **soil sampling program** aimed at increasing 4R stewardship, nutrient use efficiency on Indiana farmland, non-point source pollution reduction, greenhouse gas reductions, and water quality improvements.
 - 3) Creation of an **Indiana Nutrient Research and Education Program (INREP)** to continue and expand the work of the Indiana Science Assessment, which focuses on quantifying nutrient reduction from conservation practices and determining conservation practice effectiveness toward improving water quality.



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1) Expanding Staff Capacity

- Strategic Outcome(s): Expand Capacity
- Nutrient Stewardship Program Manager
- Role was created to:
 - manage Indiana's Gulf Hypoxia Program funds,
 - manage and administer the soil sampling program,
 - support efforts of the Indiana State Nutrient Reduction Strategy (SNRS), and
 - support Indiana Conservation Partnership efforts



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2) Soil Sampling Program

- Focus is to increase the use of soil testing as a nutrient management practice to determine soil fertility levels to make good management decisions and provide essential information for the development of a nutrient management plan to improve nutrient use efficiency.

Work toward the Indiana Agriculture Nutrient Alliance (IANA) goal for 100% of Indiana farmers regularly performing soil sampling.

Provide Indiana farmers with the necessary information and tools to develop a plan for nutrient management to improve nutrient use efficiency.

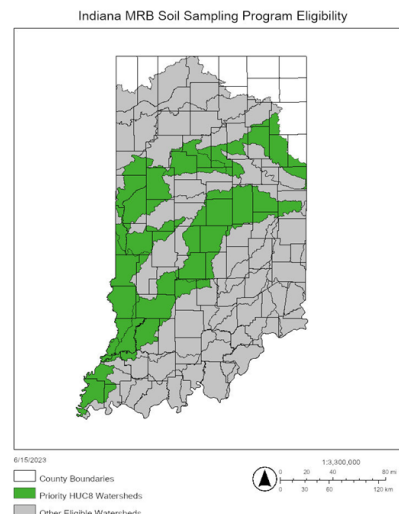
Educate and promote 4R Nutrient Stewardship to farmers, conservation professionals, and crop advisors.



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Soil Sampling Program

- **Program Launch:** September 2023
- **Partners:** Indiana Conservation Partnership members, Certified Crop Advisors (CCA), Ag Retailers, Indiana Agriculture Nutrient Alliance, Labs, and Producers.
- **Implementation:** ISDA Technical Staff & Private Sector; focus on smaller-scale growers who may not be sampling or not sampling regularly.
- **Education:** Public meetings and Workshops focused on CCA engagement; soil fertility and nutrient management for stakeholders, partners, and participants; and importance of soil health and water quality.



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Soil Sampling Program

- Sept. 22, 2023, through Nov. 1, 2023.
- Eligible if able to prioritize less than 200 acres within the MRB and have never soil tested or haven't soil tested within the last 3-4 years
- Over 13,000 acres across 150+ Farms
- Estimating more than 800 samples to be pulled by ISDA Resource Specialist practicing zone sampling
- Majority of participants indicating they have never soil tested
- Next year, ISDA plans to partner with Ag Retailers and Crop Advisors to assist with soil sampling and agronomic support.



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3) Indiana Nutrient Research and Education Program (INREP)

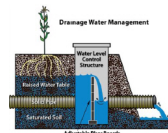
Indiana Science Assessment

➤ Includes two components:

- **Component 1:** Determine historic and ongoing nutrient load trends leaving the state, and also by watershed basins used in the SNRS.
 - A written report as well as an online tool are available showing trend results for loads and concentrations at 20 different locations in Indiana, including pour points and within the basins.
- **Component 2:** Improve current method for determining sediment and nutrient load reductions from conservation practices, including dissolved nutrients, and determine efficiency of conservation practices in reducing nutrient loads.

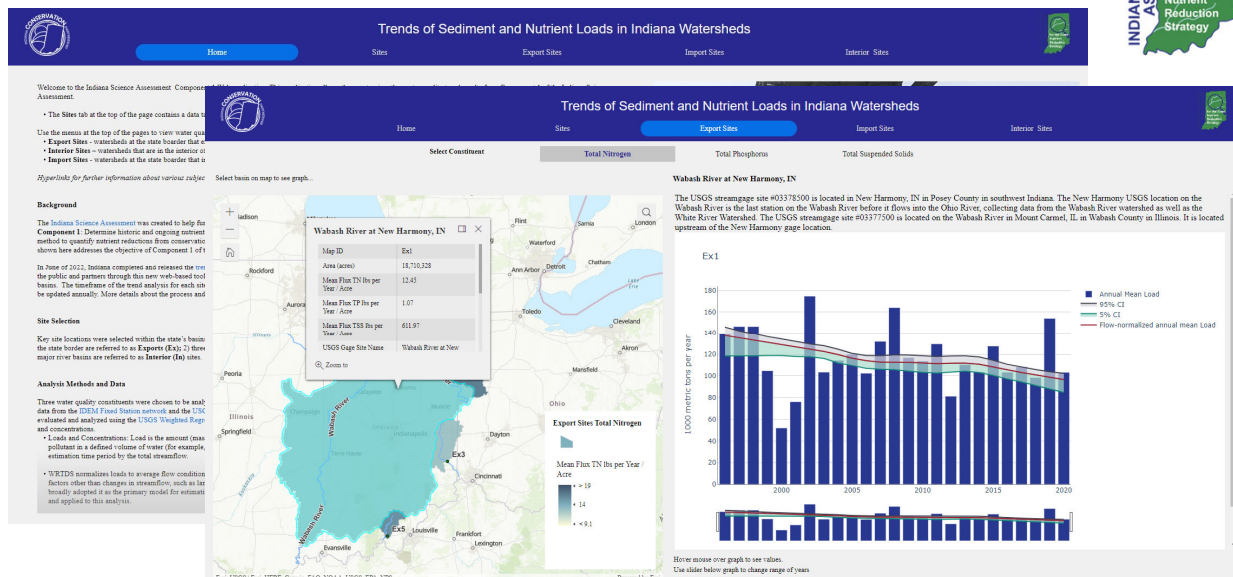


<https://www.in.gov/isda/divisions/soil-conservation/indiana-state-nutrient-reduction-strategy/indiana-science-assessment>



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Trends Tool (Component 1)

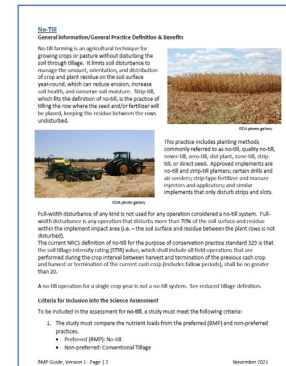


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Products of the Science Assessment (Component 2)

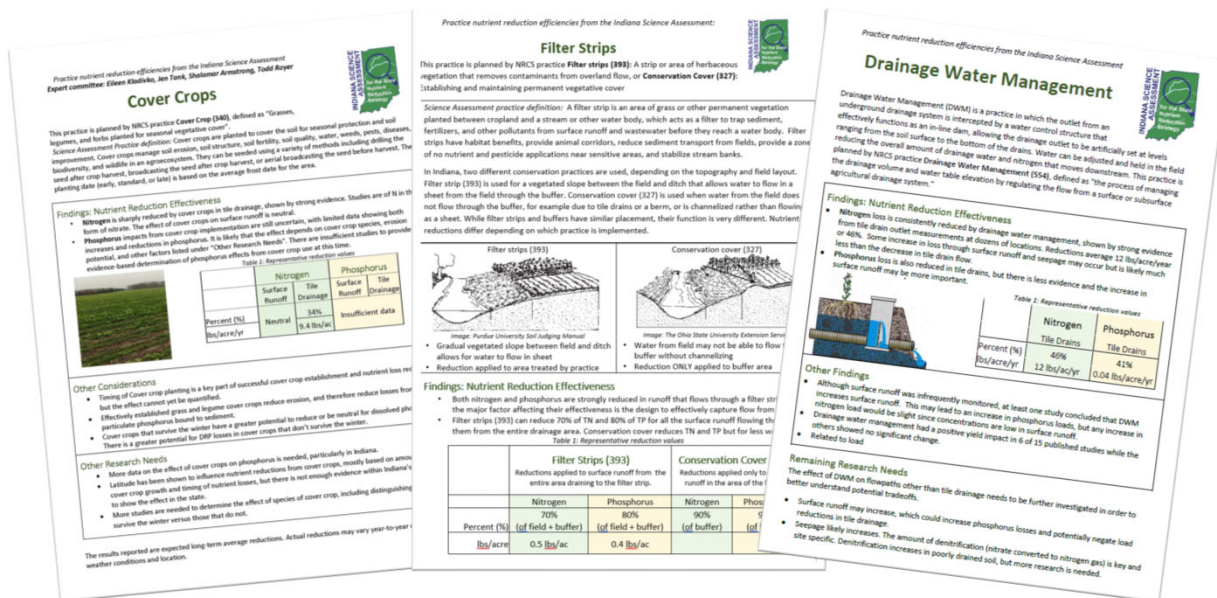
- Component 2: Improve current method for determining sediment and nutrient load reductions from conservation practices, including dissolved nutrients, and determine efficiency of conservation practices in reducing nutrient loads.

- 1) Document of Practice Definitions;
- 2) A tool that will calculate practice effectiveness for new practices implemented in the state and improve the current method to calculate and track nutrient reduction;
- 3) A table that will report effectiveness of each practice;



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Practice Documents developed for each practice



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The Indiana Nutrient Research and Education Program (INREP)



Enhancing the scientific foundation for informing and improving nutrient stewardship in Indiana.

Purpose: to continue and expand the work of the Indiana Science Assessment

INREP will be based at Purdue and include scientists and agencies from across Indiana.

Goals are to:

1. Sustain and strengthen the network of scientists and agencies collaborating to provide the scientific foundation for the Indiana SNRS and related conservation and education efforts.
2. Lead a continual process of refining and improving the Science Assessment.
3. Increase the availability of data from Indiana research on nutrient loss reduction.
4. Synthesize and deliver the knowledge to conservation partners and the agricultural community.