

# A NUTRIENT REDUCTION FRAMEWORK

## INDIANA STATE NUTRIENT REDUCTION STRATEGY

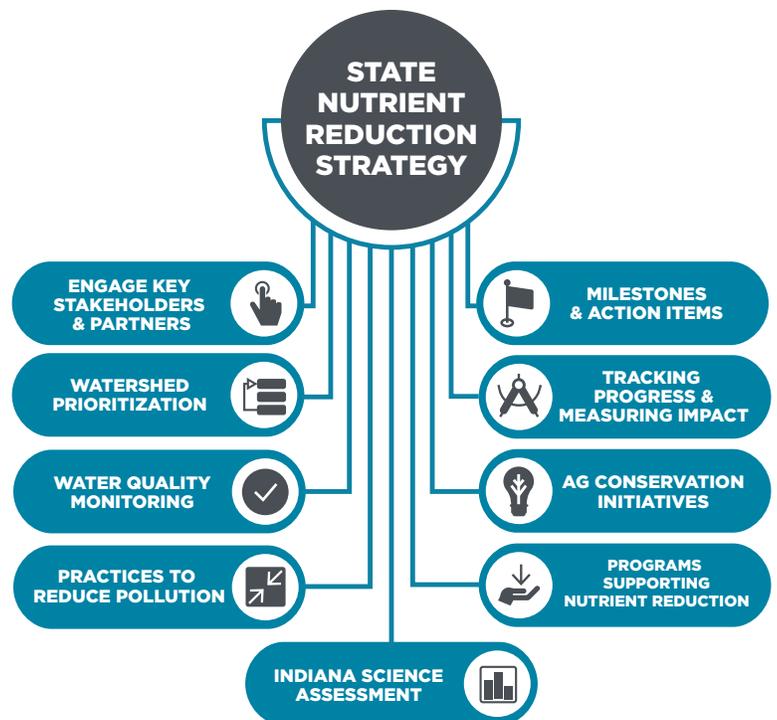
Nutrients are essential for plants and animals to live, but having an excess of nutrients can cause water to be polluted. Excessive nutrients like nitrogen and phosphorus can come from many sources. Algal blooms are a symptom of excess nutrients and can grow faster than ecosystems can handle. When the algae die and decompose, they consume oxygen from the water causing it to become oxygen-starved. These areas are often called “dead zones” or “hypoxia”, and have so little oxygen that aquatic life cannot survive.

The Gulf of Mexico dead zone occurs every summer due to nutrient pollution from the Mississippi River Basin (MRB). To help protect local streams and the Gulf of Mexico, Indiana and 11 other states in the MRB have developed state nutrient reduction strategies to reduce the nutrient loads leaving their state. These strategies are part of a national goal developed by the Gulf of Mexico Hypoxia Task Force (HTF) to reduce the size of the Gulf of Mexico hypoxia zone by targeting a 20% nitrogen and phosphorous load reduction by 2025.

Though originally developed as a result of the HTF Action Plan for the Gulf of Mexico, Indiana’s strategy encompasses all waters of the state that drain to the Mississippi River, including the Wabash, White and Kankakee River systems, as well as to Lake Michigan and Lake Erie. Indiana surface and ground waters are adversely affected by excessive nutrients that come from many different sources. Excess nutrients have negative economic impacts by increasing the cost of treating public water supplies as well as reducing the recreational use of our precious lakes, reservoirs and streams.

The Indiana State Nutrient Reduction Strategy represents the state’s commitment to reduce nutrient runoff from point sources and non-point sources alike, to ultimately improve our own lakes, streams and rivers, and downstream in the Mississippi River, Gulf of Mexico, and Great Lakes.

### MAJOR BASINS



## IN ACTION

- Continue cooperation of local, state and federal organizations and initiatives, such as the Indiana Agriculture Nutrient Alliance, the Soil Health Partnership, and the Conservation Cropping Systems Initiative
- Positively change individuals' behavior through understanding their motivations
- Identify the best location and nature of conservation best management practices, such as filter strips, buffers, cover crops, managed drainage, two-stage ditches and saturated buffers
- Improve fertilizer and manure use efficiency
- Ensure septic system maintenance
- Employ appropriate residential fertilizer applications, erosion control at construction sites, and green infrastructure in urban areas
- Continue to evaluate the efficacy of the nutrient reduction policies, programs, and practices outlined in the Strategy and modify the Strategy as necessary

## ACCOMPLISHING MORE, TOGETHER

### INDIANA'S STATE NUTRIENT REDUCTION STRATEGY

The State Nutrient Reduction Strategy (SNRS) is a collaborative effort designed to encourage education, outreach and stewardship. The SNRS was developed to positively impact Indiana's waters as well as determine conservation efforts and manage water quality improvement and soil health practice adoption. The SNRS is the product of an inclusive effort of the Indiana Conservation Partnership (ICP) and the SNRS Workgroup under the leadership of the Indiana State Department of Agriculture (ISDA) and the Indiana Department of Environmental Management (IDEM).

### INDIANA CONSERVATION PARTNERSHIP

- Indiana Department of Natural Resources
- Indiana Department of Environmental Management
- Indiana State Department of Agriculture
- USDA Farm Service Agency
- Indiana Association of Soil and Water Conservation Districts
- Indiana State Soil Conservation Board
- USDA Natural Resources Conservation Service
- Cooperative Extension Service

### INDIANA AGRICULTURE NUTRIENT ALLIANCE

- Agribusiness Council of Indiana
- Indiana Farm Bureau
- USDA-NRCS
- Indiana Soybean Alliance
- American Dairy Association of Indiana
- Indiana State Soil Conservation Board
- Indiana Association of SWCDs
- Indiana Beef Cattle Association
- Indiana Corn Marketing Council
- Indiana Dairy Producers
- Indiana Pork
- Indiana State Department of Agriculture
- Indiana State Poultry Association
- Purdue University College of Agriculture
- The Nature Conservancy of Indiana

LEARN MORE AT  
[IN.GOV/ISDA/2991.HTM](https://www.in.gov/isda/2991.htm)

