

#### 1. What is hypoxia and why is it dangerous?

Hypoxia refers to a condition where algal blooms spurred by excess nutrients cause a lack of oxygen within a body of water. This lack of oxygen has killed populations of fish as well as aquatic plant species. Some of the worst effects can be found in the Gulf of Mexico, where hypoxia has lead to a dead zone nearly 9,000 square miles wide – roughly the size of the state of New Jersey.

### 2. What are the leading causes of nutrient pollution?

Nutrient pollution, which causes algal blooms and subsequent hypoxia, is the result of point and nonpoint source pollution. Point source pollution refers to a single identifiable source of pollution, such as a pipe from a factory or water treatment facility. However, the bulk of nutrient loading comes from agricultural fertilizers and manure. Synthetic fertilizers are typically made of nitrogen and phosphorus – nutrients that are found naturally in the environment, but in such excess lead to excessive algal growth.

# 3. What is the US Environmental Protection Agency's role in reducing nutrient pollution?

The US EPA oversees a number of programs to protect the country's freshwater from nutrient pollution. For example, the agency created a Gulf of Mexico Hypoxia Task Force in 2008 to reduce the size of the Gulf hypoxic zone by at least 5000 square kilometers. In doing so, it focuses on state-developed and implemented nutrient reduction strategies for each state along the Mississippi River, with the goal that each would reduce phosphorus and nitrogen loading and maintain water quality.

## 4. Which Mississippi River states have established formalized nutrient reduction strategies?

Although the US EPA Gulf of Mexico Hypoxia Task Force was first developed 10 years ago, only Minnesota and Illinois have established formalized strategies including goals and timelines to reduce phosphorus and nitrogen loading into

the Mississippi River. It is also worth noting that Wisconsin has developed a formalized strategy for Phosphorus.

#### 5. How does the Farm Bill affect clean water?

The farm bill is the primary legislation governing the nation's food and farming systems written by House and Senate Agriculture Committees and is reauthorized about every 5 years. This bill is broken down into 12 different "Titles," including a Conservation Title, which contains numerous voluntary programs vital to protecting water quality, soil health, and wildlife habitat through land preservation and sustainable agricultural practices.





