NCEL Fact Sheet

NUTRIENT POLLUTION

2026

ENVIRONMENTAL HEALTH

Overview

Nutrient pollution occurs when an overabundance of nutrients, like nitrogen and phosphorus, enters the water system. High quantities can lead to an overgrowth of algae and decrease the oxygen that fish and other aquatic life need to survive. The primary sources of excess nutrients are (1) runoff from fertilizers and animal manure, (2) discharges from sewage systems, (3) stormwater runoff, and (4) fossil fuels. Nutrient pollution is also detrimental to human health and the economy: it contaminates drinking water, leads to commercial fishing losses, and impacts recreational activities. Water bodies in every U.S. state are impacted by nutrient pollution, with many states now implementing nutrient reduction strategies to support local communities and economies.

Policy Options

Farmers can address nutrient pollution in waterways by adopting nutrient management techniques, planting field buffers, supporting healthy soils, and applying conservation practices. State governments can support farms in these efforts by providing funding, technical assistance, and educational information to farmers.

- **Maryland HB 0506 (Enacted 2025):** Established the Leaders in Environmentally Engaged Farming (LEEF) Program to support practices that reduce nutrient pollution in the Chesapeake Bay, as well as practices that support healthy soils.
- **Illinois SB 1701 (Enacted 2023):** Created the Illinois Healthy Soils Initiative to improve soil and water quality by supporting practices such as cover-cropping of highly erodible land, precision nitrogen and phosphorus application, and nutrient best management practices.
- **New York A 5386 (Enacted 2021):** Established the Soil Health Initiative to encourage agricultural producers to support the healthy cycling of nutrients in fields, including filtering and buffering pollution to reduce nutrient runoff and improve watershed health.

KEY POINTS

- Excess nutrient runoff from agricultural lands, stormwater, wastewater, and residential areas can be detrimental to human health, local economies, and aquatic life. (EPA).
- Millions of Americans rely on groundwater for drinking water sources. Nutrient contamination of this drinking water — even at low levels — can be harmful to human health, particularly for infants. (EPA).
- The Mississippi River has the third-largest drainage basin in the world, with around 40% of land in the continental U.S. draining into the Mississippi. Increasing rates of nutrient pollution in the river are putting economic activities such as tourism, farming, and transportation at risk. This pollution is also creating a large "dead zone" in the Gulf of Mexico that threatens aquatic species. (U.S. Army Corps of Engineers; EPA; MRCTI; NOAA).

Additional Resources

- **Nutrient Pollution | National Caucus of Environmental Legislators (NCEL)**
- **Nitrate Analysis for Large Water Systems & Phosphorus Monitoring in the Upper Mississippi River Basin | Environmental Working Group**
- **Explaining the Gulf of Mexico Dead Zone | Restore**
- **Mississippi River/Gulf of America Hypoxia Task Force | EPA**

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