NUTRIENT POLLUTION

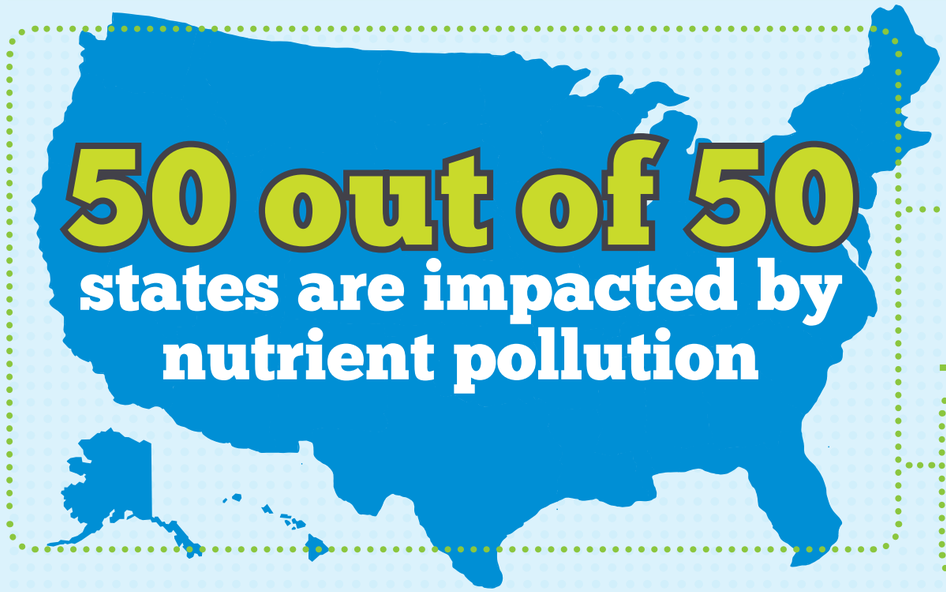
IMPACTS ON THE NATION

Nutrient Pollution is one of America's most serious water pollution issues today. Limiting nutrient pollution will protect people's health, support the economy, and keep America's waters safe for swimming and fishing.

EPA United States Environmental Protection Agency

www.epa.gov/NutrientPollution

Nutrient pollution occurs when there is an excess of nitrogen and phosphorus

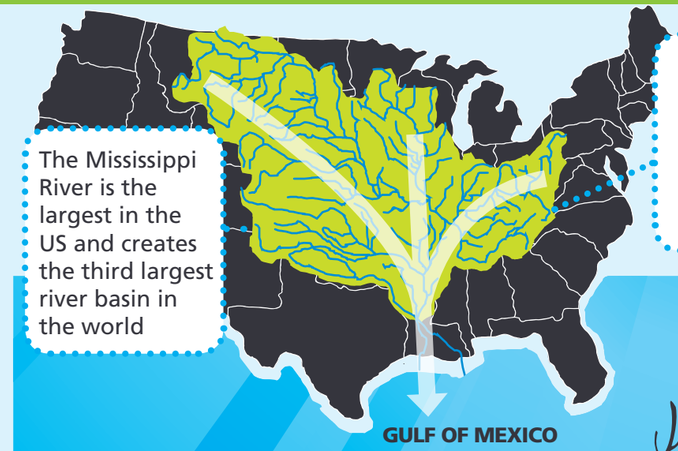


50 out of 50
states are impacted by nutrient pollution

States have identified about **15,000** water bodies in the US with nutrient-related problems

Reported drinking water violations for nitrates have nearly doubled in the last decade

Nutrient pollution is widespread



The Mississippi River is the largest in the US and creates the third largest river basin in the world

GULF OF MEXICO

DID YOU KNOW?
The Mississippi River Basin spans 31 states and ultimately drains into the Gulf of Mexico

Nutrient pollution from the Mississippi River Basin is causing a large "dead zone" in the Gulf of Mexico that cannot support aquatic life

Where does nutrient pollution come from?

Fossil Fuels

250 million cars and trucks in the US release more than 7 million tons of nitrogen oxides into the atmosphere, contributing to pollution in air and water

Agriculture

Animal manure, excess fertilizer applied to crops and fields, and soil erosion make agriculture a large source of nutrient pollution

Livestock production generates close to **1 BILLION TONS** of manure

From 1964 to 2008, agricultural fertilizer use increased by **25%**

Urban Sources

About 10% of the nutrients flowing from the Gulf of Mexico come from urban stormwater and wastewater/sewage treatment plants.

Industry

In 2010, **592** industrial facilities released more than **3,000** railroad cars full of nitrate compounds

SOURCES EPA Clean Water Act 303 (d) listings, May 2012, The Facts about Nutrient Pollution, EPA Fact Sheet, April 2012, EPA Mississippi River Gulf of Mexico Watershed Nutrient Task Force http://water.epa.gov/type/watersheds/named/msbasin/, USGS, "Phosphorus and Groundwater: Establishing Links Between Agriculture Use and Transport to Streams," http://pubs.usgs.gov/fs/2012/3004/, EPA, "Nutrient Pollution," http://www.epa.gov/nutrientpollution/), An Urgent Call to Action: Report of the State-EPA Nutrient Innovations Task Group, Aug. 2009 http://water.epa.gov/scitech/swguidance/standards/criteria/nutrients/doing.cfm, 2010 EPA Toxics Release Inventory; based on carrying capacity of a standard 40 foot railway car, NOAA, "State of the Coast," http://stateofthecoast.noaa.gov/hypoxia/welcome.html, EPA 2008 National Emissions Inventory, http://www.epa.gov/ttn/chief/net/2008inventory.html and Transportation Energy Data book http://cta.ornl.gov/data/index.shtml, Comparison of nitrogen and phosphorus sources in the Chesapeake Bay and Gulf of Mexico watersheds (USGS 2008; Chesapeake Bay Program 2009) Note: urban and population-related sources include urban stormwater and municipal wastewater treatment.