PLASTICS & NATURAL RESOURCES

FACT SHEET

QUICK FACTS

- Plastic pollutes at **all phases** of its life cycle and emits nearly **2 gigatons** of carbon dioxide equivalents per year.[1]
- Over **99%** of plastics are made from fossil fuels.[2]
- There are more than **16,000 chemicals** used in plastics manufacturing, many with unknown personal and environmental health impacts, and these chemicals are known to leach out of plastics and enter the environment.[1,3]
- Plastic production has increased from **2 million metric tons in 1950** to **460 million metric tons in 2019**.[1]
- Less than **10%** of all plastics produced have been recycled, and "chemical recycling" is even less effective and produces harmful fuels and chemicals.[1,4]
- Each year, over **22 million tons** of plastic waste enters the environment.[1]

PLASTICS ARE UBIQUITOUS

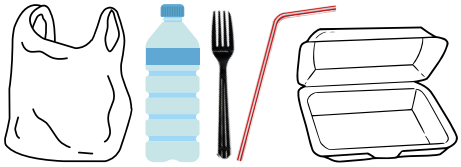
They have been found in...

SOIL, CROPS, AND LIVESTOCK

RIVERS AND LAKES

FISH AND WILDLIFE

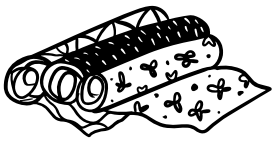
FOOD AND DRINKING WATER



SINGLE-USE FOOD WARE

ROADWAYS

AIR



TEXTILE FABRICS

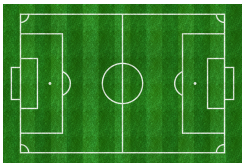
FERTILIZERS

TIRES

PAINTS

ROPE

COSMETICS



ARTIFICIAL TURF

THE HUMAN BODY

... and so much more[5-9]

PLASTICS & NATURAL RESOURCES

ECOSYSTEM IMPACTS

RIVERS & LAKES

- Plastics enter waterways and break into micro- and nanoplastic fragments, impacting aquatic plants and organisms, habitat, and water quality.[10]
- Plastic particles are transported, deposited, and resuspended by water movement.[10]

AIR

- Production and disposal of plastic products emit toxic chemicals into the air, including carcinogens.[1,12]
- Wind is a major pathway for distribution of airborne plastics, including micro- and nanoplastic particles, which are linked to negative human health impacts when inhaled.[6]

SOIL & AGRICULTURE

- Microplastics in agricultural soils influence nutrient availability, decrease seed germination, and inhibit plant growth and productivity.[5,11]
- High concentrations of microplastics in agricultural soils have shown to impair crop yields by up to 25%.[11]
- Large plastic items, such as bags and mulch film, can cause physical harm to livestock through ingestion or entanglement.[11]
- Smaller fragments, such as seed coatings and fragments from degraded plastics, may be ingested by livestock and cause damage to tissues and cells.[11]

FISH, BIRDS, & WILDLIFE

- Plastics accumulate in aquatic and terrestrial organisms and transfer up the food chain.[6]
- Essential biological functions are harmed by plastic pollution.[13]
- Ingestion can lead to obstructed digestion or lacerated intestines and can lead to nutritional deprivation and inflammatory responses.[6]
- Entanglement can cause drowning, choking, or physical injury.[13]

SOLUTIONS

Policy action and management strategies that shift the financial burden of plastic waste management from the consumers to the producers to hold producers accountable for the production of harmful plastics and associated plastic waste.

LEARN MORE

For more information about this project and to view the sources of this information, please visit:

www.streamteamsunited.org/show-me-less-plastic.html
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