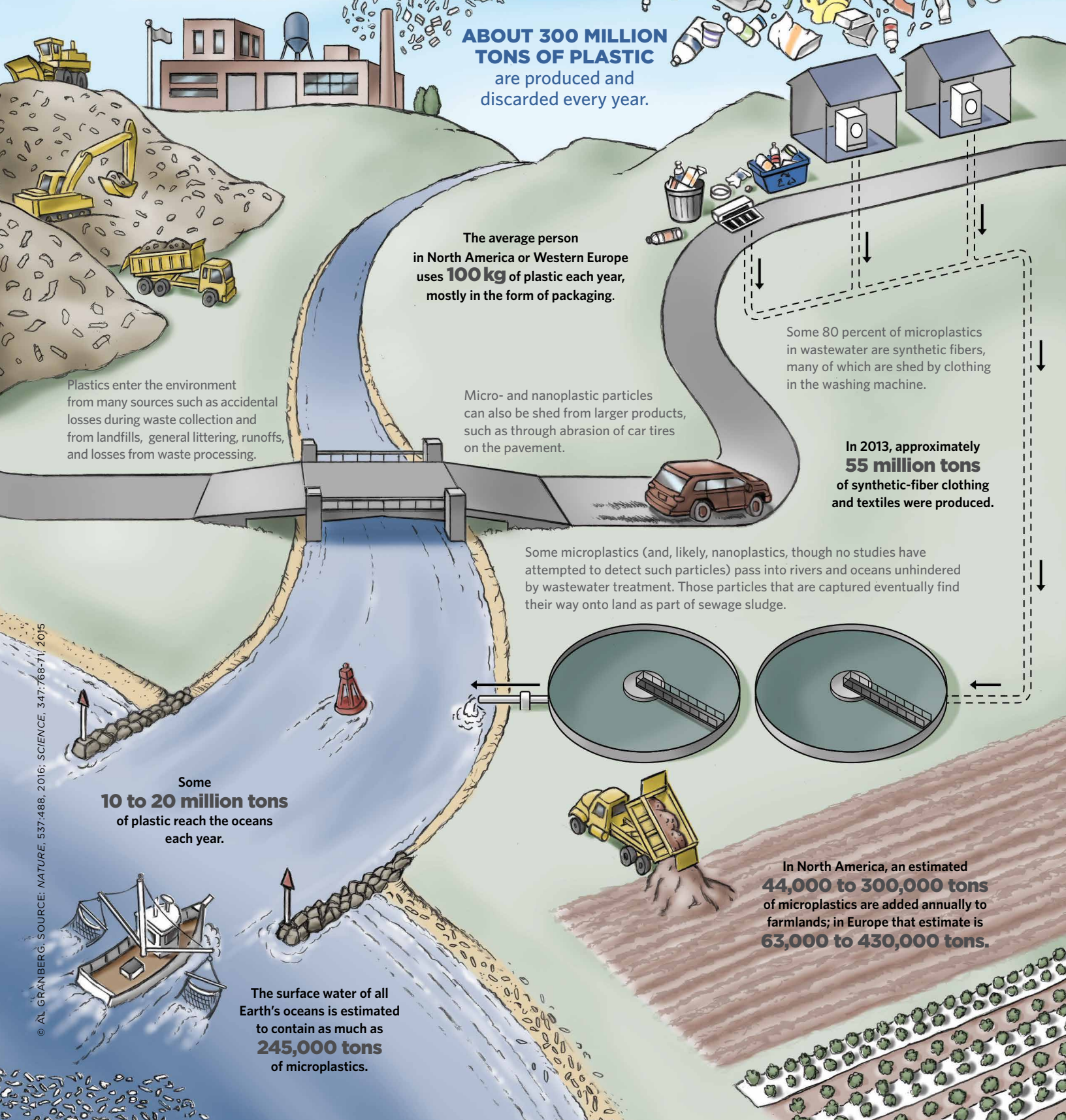


PLASTIC POLLUTION

Both macroplastic items, such as bags, bottles, and other packaging, and products containing micro- and nanoplastic particles—from cosmetics to paints—contaminate the Earth's ecosystems.



ABOUT 300 MILLION TONS OF PLASTIC are produced and discarded every year.



The average person in North America or Western Europe uses **100 kg** of plastic each year, mostly in the form of packaging.

Some 80 percent of microplastics in wastewater are synthetic fibers, many of which are shed by clothing in the washing machine.

In 2013, approximately **55 million tons** of synthetic-fiber clothing and textiles were produced.

Micro- and nanoplastic particles can also be shed from larger products, such as through abrasion of car tires on the pavement.

Some microplastics (and, likely, nanoplastics, though no studies have attempted to detect such particles) pass into rivers and oceans unhindered by wastewater treatment. Those particles that are captured eventually find their way onto land as part of sewage sludge.

Plastics enter the environment from many sources such as accidental losses during waste collection and from landfills, general littering, runoffs, and losses from waste processing.

Some **10 to 20 million tons** of plastic reach the oceans each year.

In North America, an estimated **44,000 to 300,000 tons** of microplastics are added annually to farmlands; in Europe that estimate is **63,000 to 430,000 tons**.

The surface water of all Earth's oceans is estimated to contain as much as **245,000 tons** of microplastics.