

Plastic in bodem

Een niet gezien probleem?

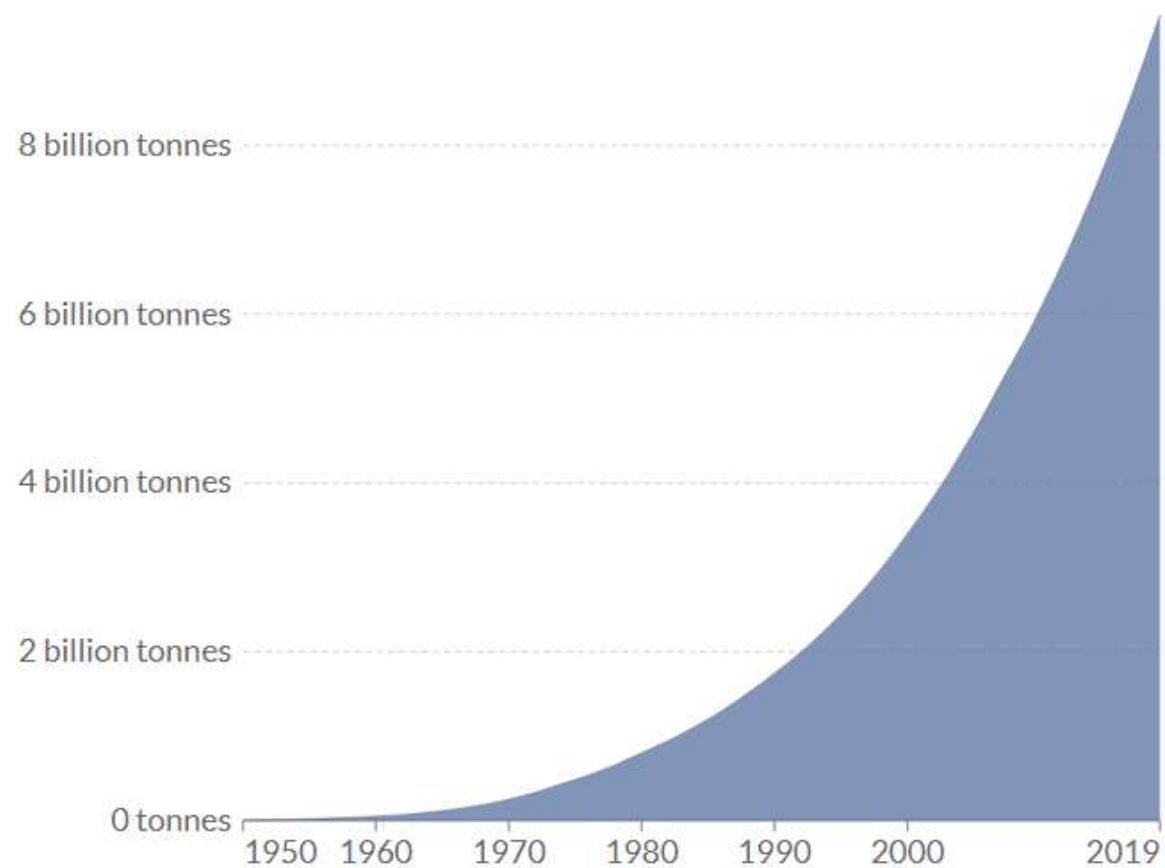
PET	Polyethylene terephthalate: Produceren van voornamelijk flessen frisdrank, vloeibare schoonmaakmiddelen en andere vloeibare producten.
HDPE	Hoge dichtheid polytheen: Produceren van voornamelijk kratten, emmers, speelgoed of onderdelen van auto's. Ook wordt de zachte vorm van HDPE gebruikt voor het maken van plastic tassen en de zwarte afvalzakken.
PVC	Polyvinylchloride: Produceren van voornamelijk buizen in de grond, elektriciteitsbuizen, regenkleding of zelfs vloerbedekking.
LDPE	Lage dichtheid polytheen: Produceren van voornamelijk folie, draagtassen, plasti hoesjes om tijdschriften en landbouwplastic.
PP	Polypropeen: Produceren van voornamelijk tapijten, filtermaterialen, kratten en jerrycans.
EPS	Geëxpandeerd polystyreen: Ook wel piepschuim in de volksmond genoemd. Produceren voornamelijk voor isolatie en bescherming van verzending.
Overig	Diverse soorten plastics, voornamelijk gemaakt voor babyflesjes, plastic bordjes, en voedselbakken.

Materiaal	Afbraaktijd
Petfles	Zon: 5 jaar Schaduw: 10 jaar
PVC	5-10 jaar
Plastic zak	10-20 jaar
Plastic koffiebeker	>1000 jaar
Piepschuim	>1000 jaar
Plastic voor het bij elkaar houden van blikjes	>1000 jaar



Cumulative global production of plastics

Plastic production refers to the production of polymer resin and fibers.



Source: Our World in Data based on Geyer et al. (2017) and the OECD Global Plastics Outlook
OurWorldInData.org/plastic-pollution • CC BY



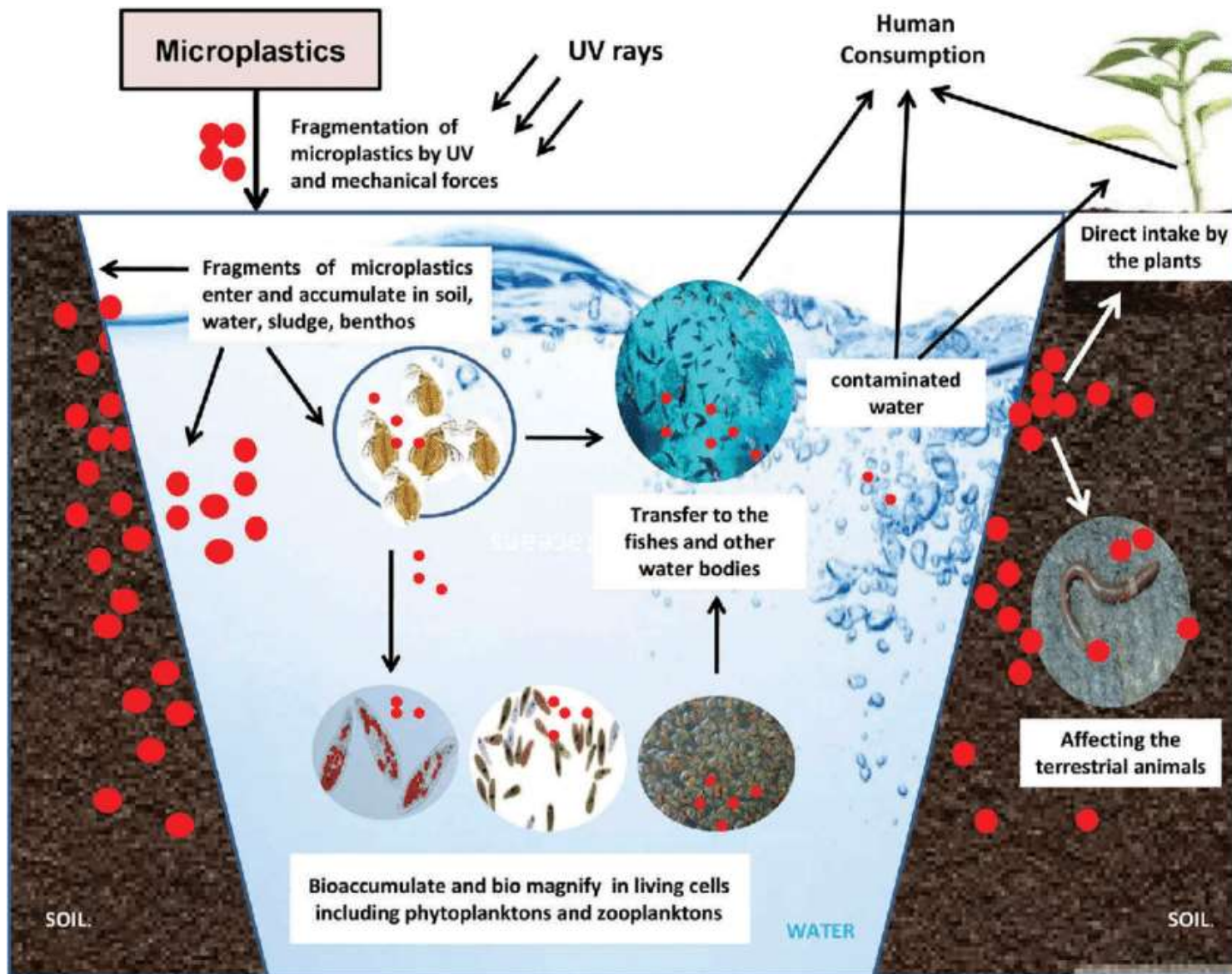
CHART

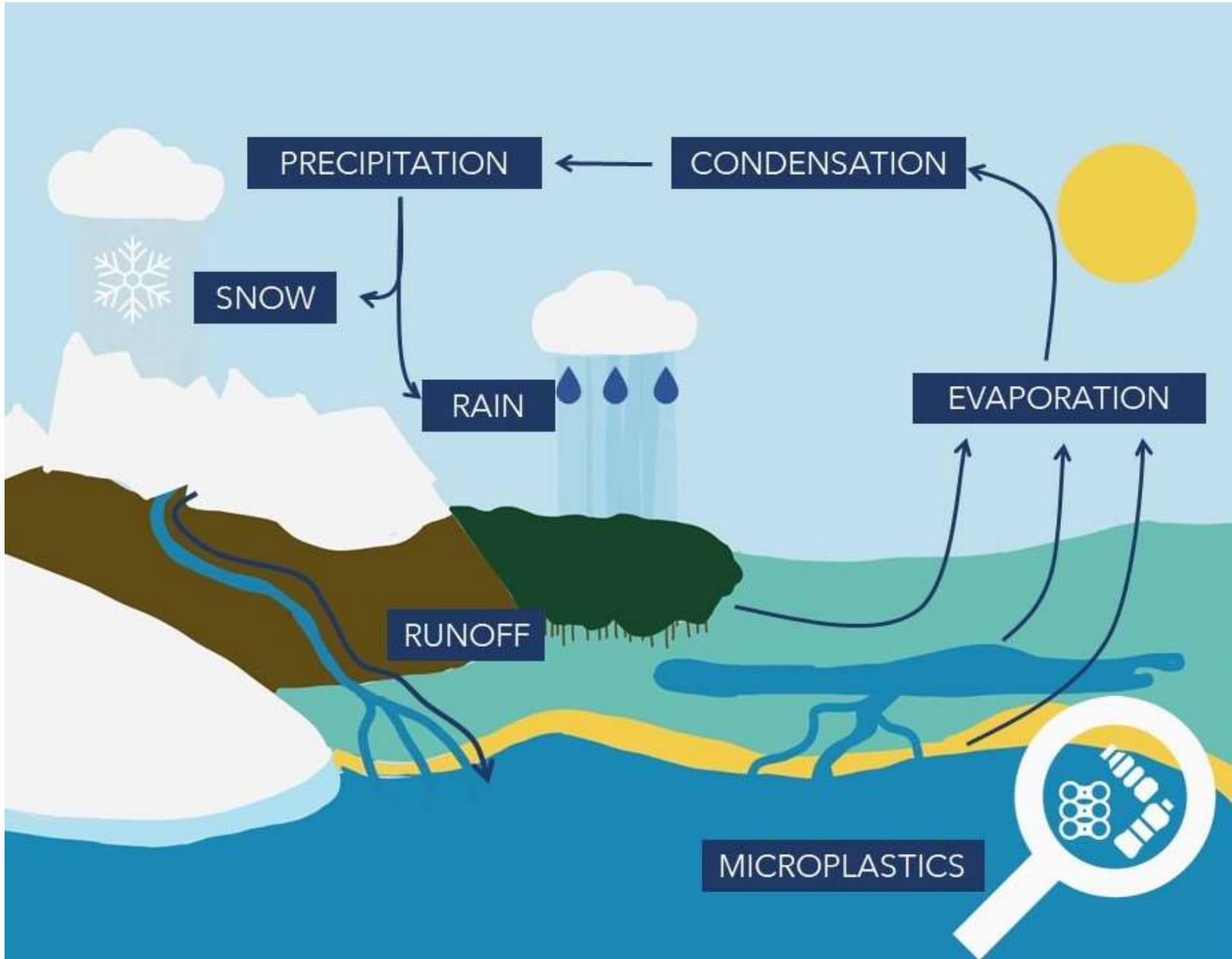
TABLE

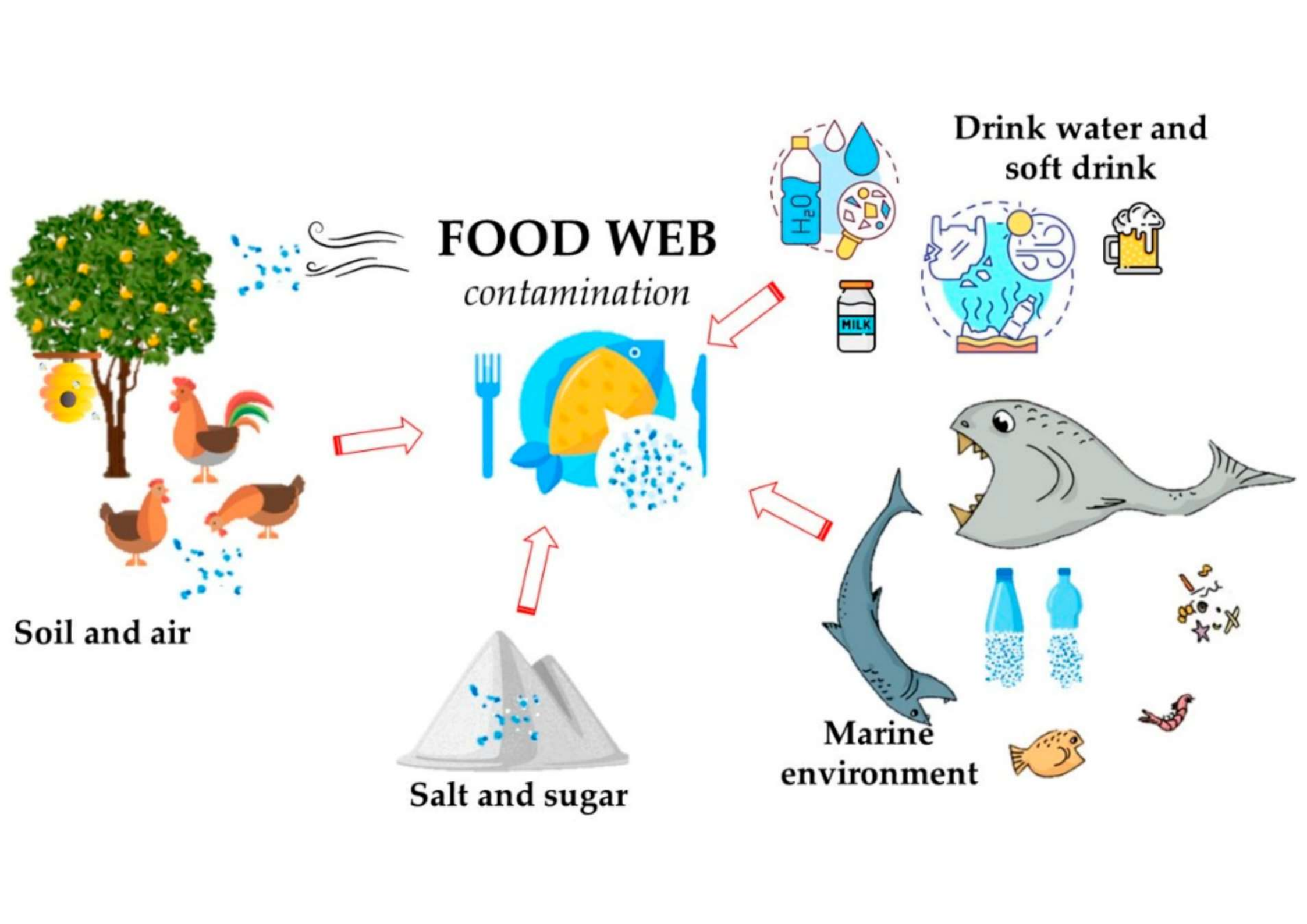
SOURCES

DOWNLOAD











'Plasticosis': Characterising macro- and microplastic-associated fibrosis in seabird tissues

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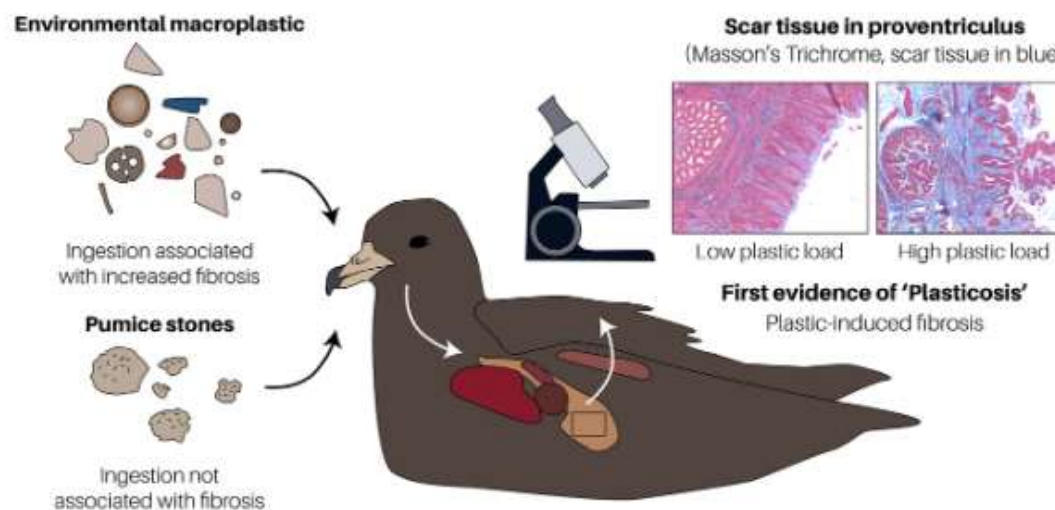
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HIGHLIGHTS

- Extensive scar tissue formation was associated with plastic exposure in seabirds.
- Plastic significantly altered collagen prevalence within stomach tissue structures.
- Pathology was caused directly by plastic, rather than natural items, such as pumice.
- First record of plastic-related fibrosis in seabird stomach tissues.
- Evidence for a new plastic-induced fibrotic disease, 'Plasticosis'.

GRAPHICAL ABSTRACT



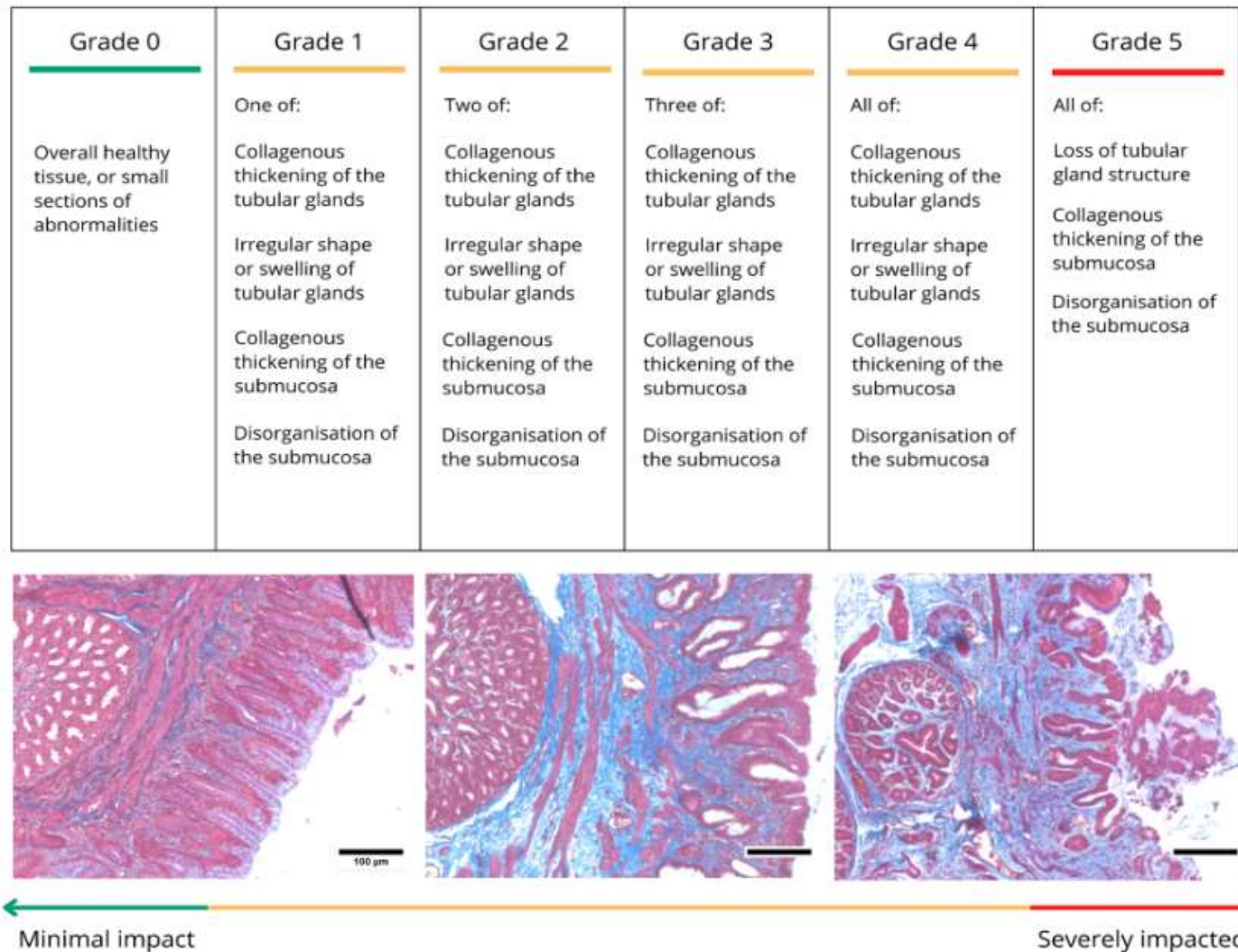


Fig. 1. Grading scheme used to assess the prevalence of collagen formation or tissue damage in Flesh-footed Shearwater proventriculus samples from Lord Howe Island. From left to right, examples of a Grade 0 image, a Grade 3 image, and a Grade 5 image, least to most impacted, respectively. Images taken at 20 \times magnification, scale bar = 100 μ m.

Abstract: **Plastic Rain in Protected Areas of the United States**

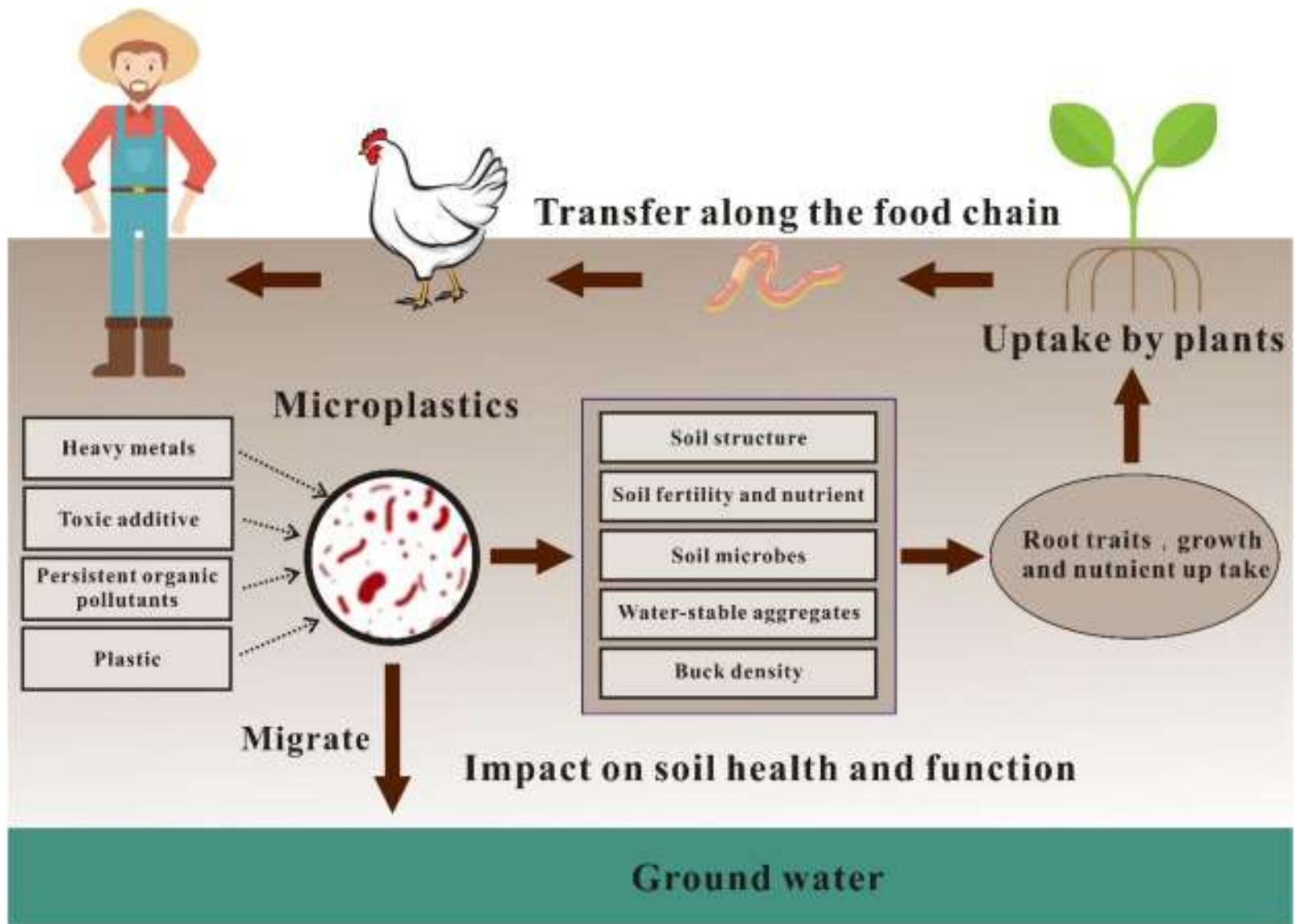
Eleven billion tons of plastic are projected to accumulate in the environment by 2025.

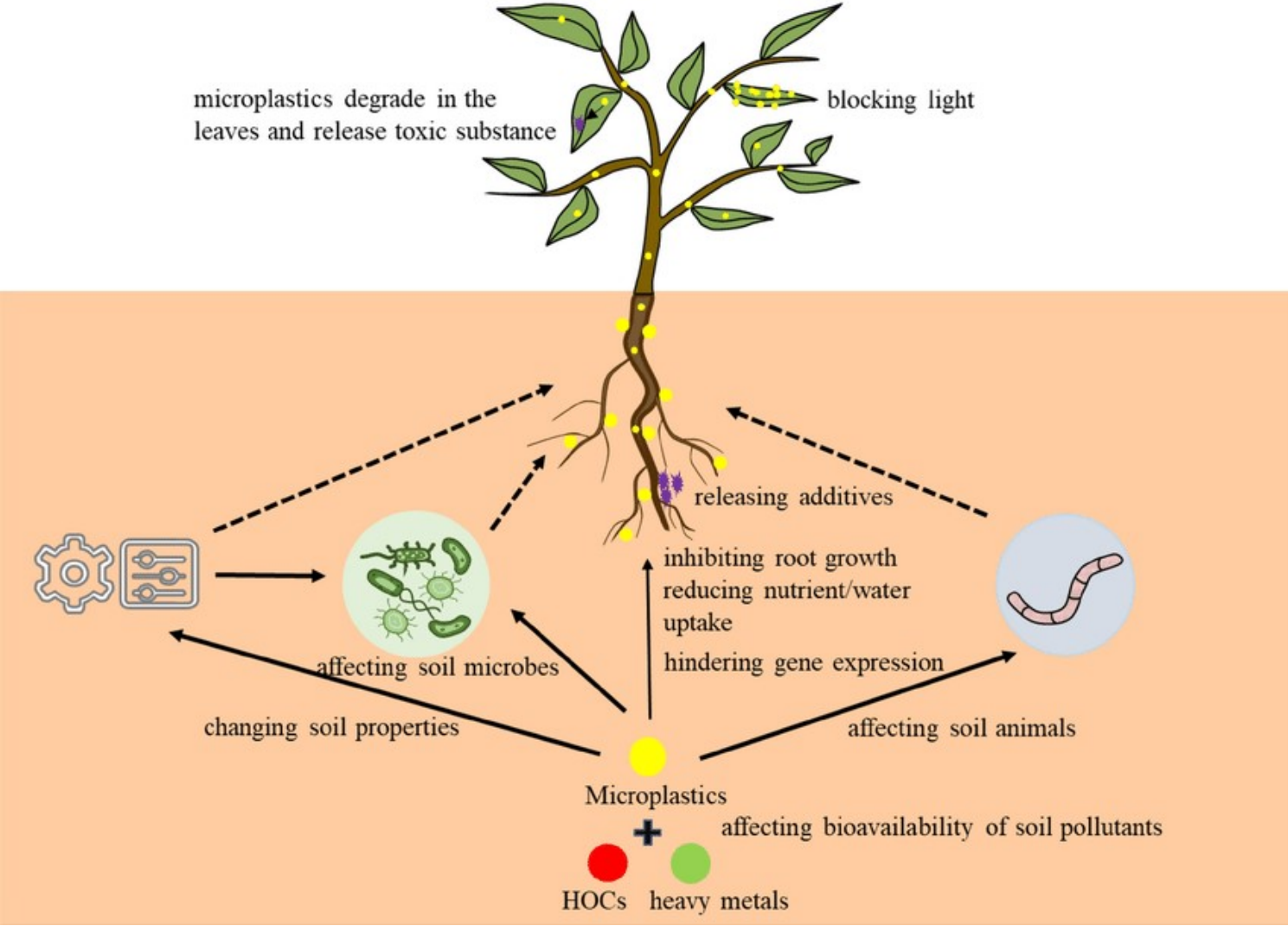
Because plastics are persistent, they fragment into pieces that are susceptible to wind entrainment. Using high resolution spatial and temporal data we tested whether plastics deposited wet versus dry have unique atmospheric life histories.

Further, we report on the rates and sources of deposition to remote U.S. conservation areas. We show that urban centers and 15 resuspension from soils or water are important sources for wet deposition.

In contrast, plastics deposited dry were smaller in size and rates were related to indices that suggest longer range or global transport.

Deposition rates averaged 132 plastics m⁻² day⁻¹ amounting to > 1000 tons of plastic deposition to western U.S. protected lands annually.





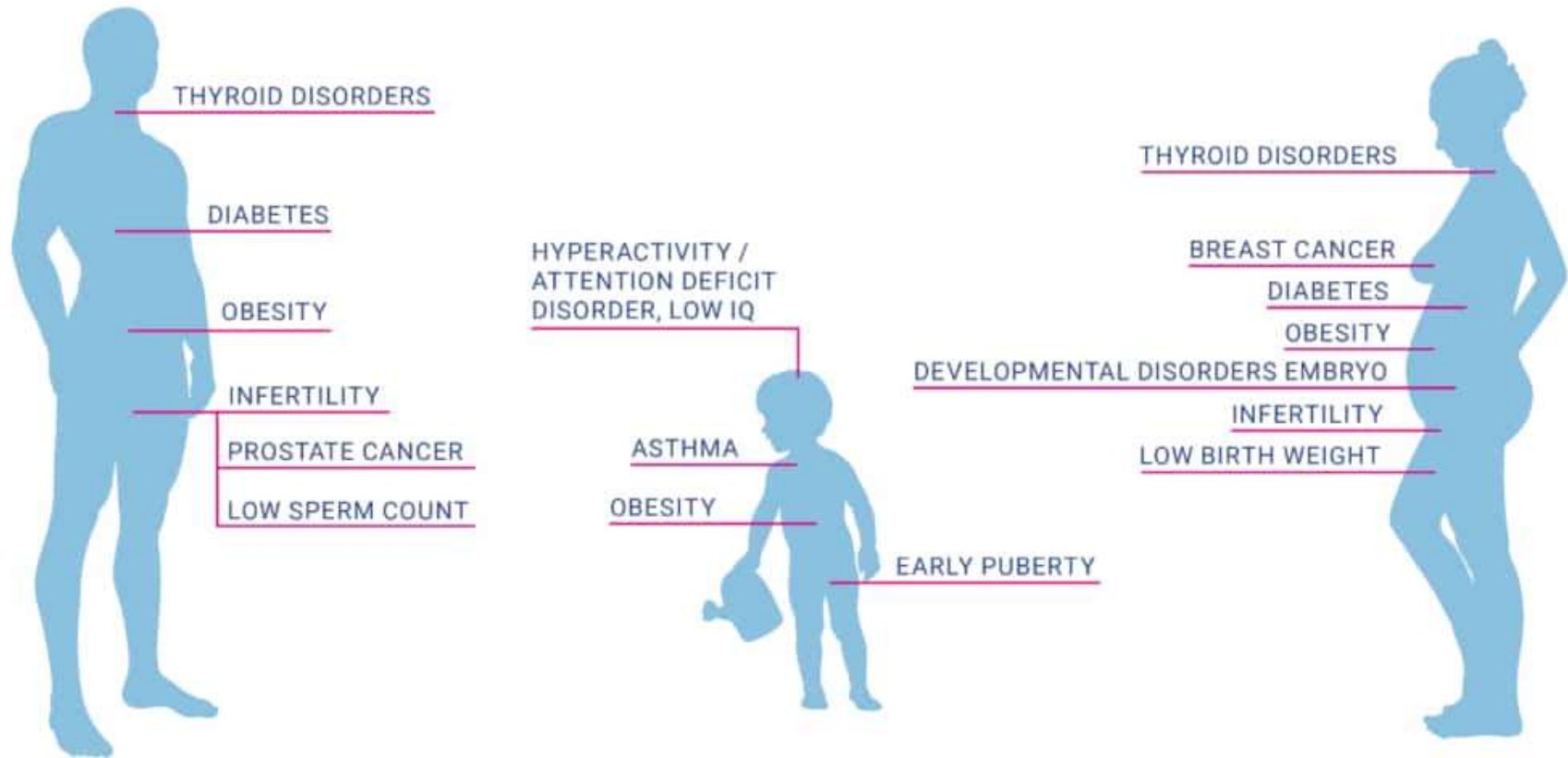


Fotocredits: 'A matched set', Tony Alter

De chemicaliën in plastic verpakkingen en de nanodeeltjes van verkruid plastic worden teruggevonden in het goedbeschermde binnenste van organismen. Spookchemicaliën, maar ook bekende boosdoeners als PFAS, DDT, PVC, Bisfenol A en ftalaten, verstoren de werking van hormonen en jagen de vetopslag aan. De gevolgen zijn nog niet te overzien, maar de impact van al dat plastic afval is immens en alom aanwezig.

PLASTIC & HEALTH

Possible health consequences of day-to-day contact with hormonally active substances in plastics.





The fish are trying to quit cigarettes, give them a hand and recycle your butts.

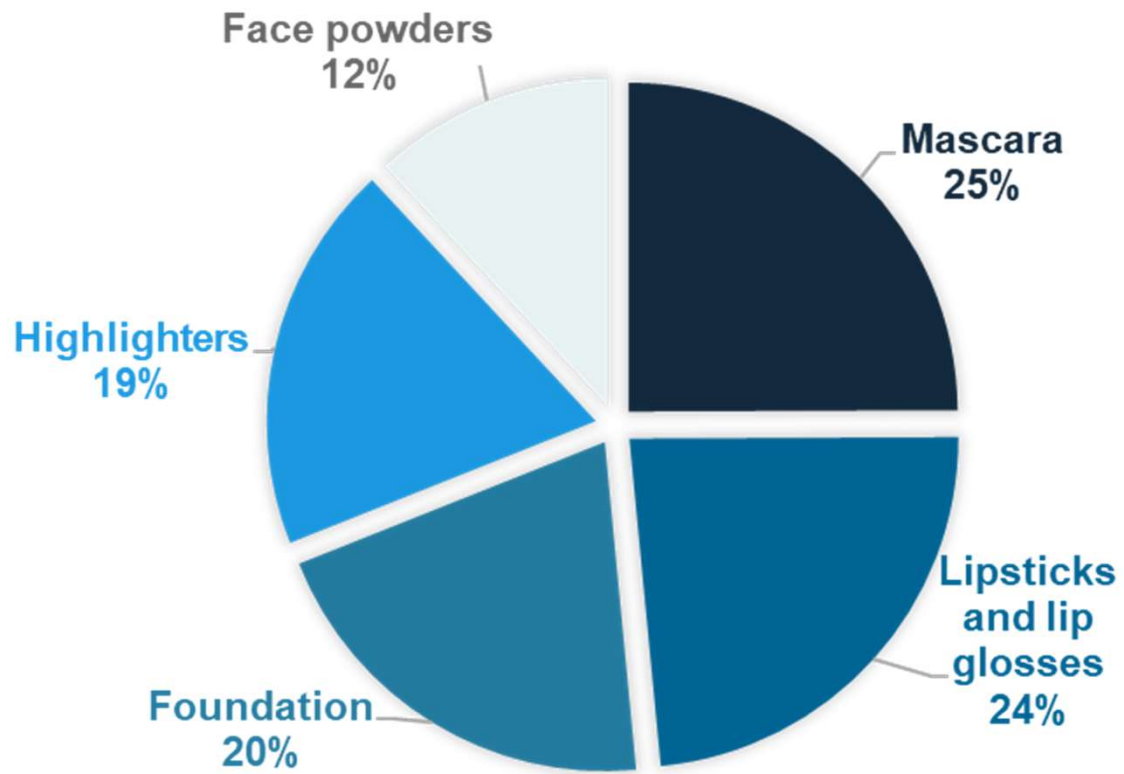
Cigarette butts are plastic too!

#NoMoreButts

Learn more at
theterramarproject.org/no-more-butts/



PRODUCT CATEGORIES WHERE THE PRESENCE OF MICROPLASTICS WAS MORE FREQUENT:



health

PRODUCTS CONTAINING MICROPLASTICS*

Neutrogena
Daily Scrub



Covergirl
Clump Crusher
Mascara



Every Man Jack
Mint Face Scrub



Cetaphil
Moisturizing
Lotion



Soft Soap
Juicy Pomegranate
Body Scrub



Dove
Advanced Care Anti-
Perspirant



The Body Shop
Satsuma
Body Scrub



Clean & Clear
Morning Burst
Facial Cleanser



Olay Regenerist
Detoxifying
Pore Scrub



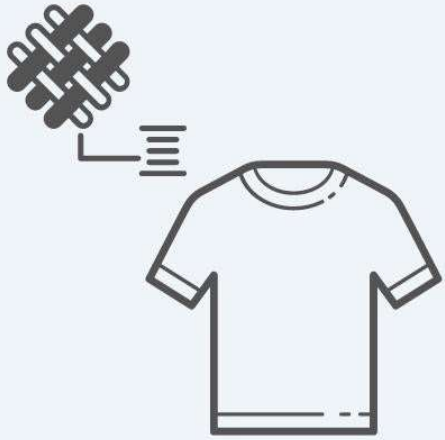
Crest Pro-Health
For Me



*Source: <https://www.beatthemicrobead.org>



@MeghanTelpner // MeghanTelpner.com



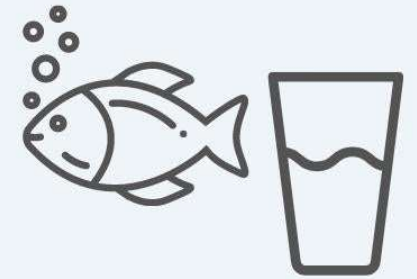
60%

of textiles today
are made from
plastic fibers.



700,000

plastic microfibers
get released during
an average load of
laundry.



Microplastic has
been found in our
food and drinking
water.

Three causes of microplastics when washing synthetic clothes



Abrasion



Heat



Chemicals

TOP 10 TIPS VOOR WINST IN JE KLEDINGKAST



Slimmer
kopen



- 1 Koop alleen wat je nodig hebt
- 2 Koop tweedehands, leen of huur
- 3 Kies herbruikbaar of gerecycled



Langer
gebruiken



- 4 Geef door, ruil of verkoop
- 5 Repareer kapotte kleding
- 6 Maak het weer als nieuw
- 7 Maak er nieuwe kleren van
- 8 Maak er iets anders van



Beter
wegdoen



- 9 Lever in voor hergebruik en recycling
- 10 Pas als niets anders kan, is het afval

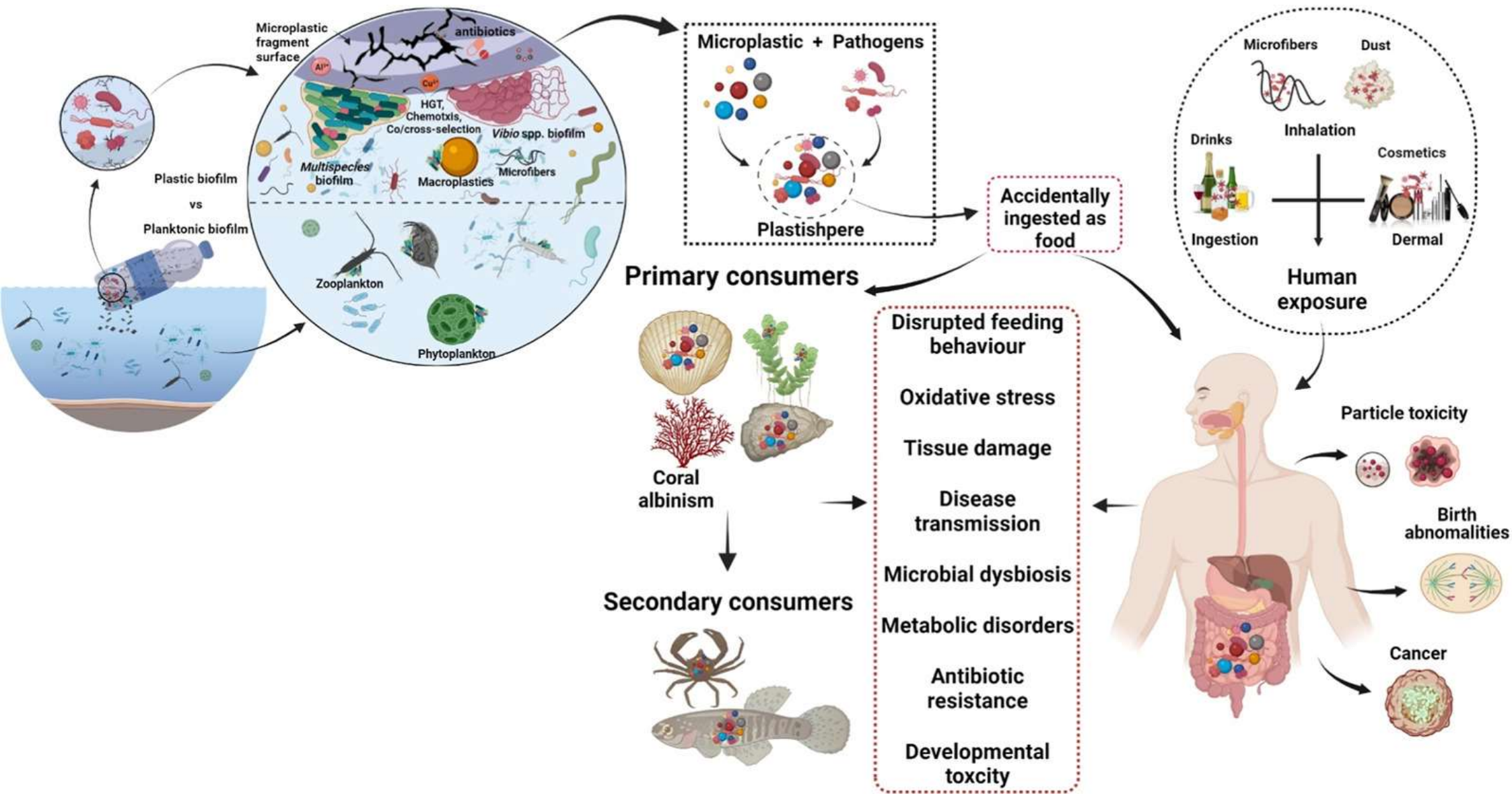
What textiles to choose to avoid Microplastics



Tencel®
Modal
Lyocell
Cotton
Hemp
Linen
Jute
Bamboo
Flax
Wool
Cashmere
Silk



Polyester
Elastane (LYCRA®)
ECONYL®
Nylon
Acrylic
Viscose
Rayon
Fleece
Microfleece
Spandex
Rayon
Acetate



Ecological and human health impacts of plastisphere



Clothes



Medicine



Dust



Cosmetics



Food



Ingestion



Inhalation



Dermal



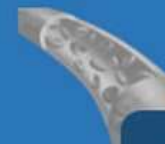
Particle Toxicity



Oxidative Stress



Inflammation



Translocation



Cancer

Human Health Effects of Microplastics

The pathway by which plastic enters the world's oceans

Our World
in Data

Estimates of global plastics entering the oceans from land-based sources in 2010 based on the pathway from primary production through to marine plastic inputs.

Global primary plastic production:
270 million tonnes per year

Global plastic waste:
275 million tonnes per year

It can exceed primary production in a given year since it can incorporate production from previous years.

Coastal plastic waste:
99.5 million tonnes per year

This is the total of plastic waste generated by all populations within 50 kilometres of a coastline (therefore at risk of entering the ocean).

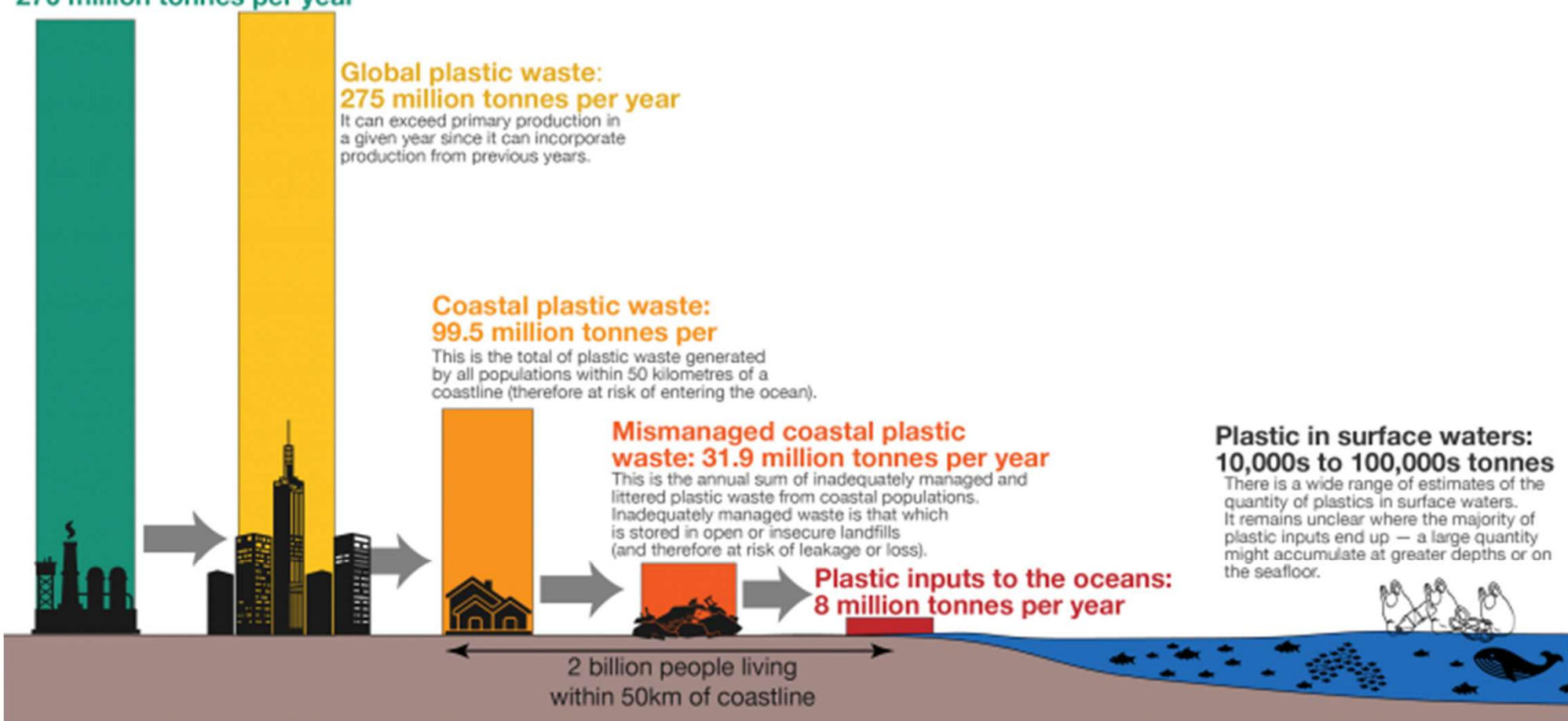
Mismanaged coastal plastic waste:
31.9 million tonnes per year

This is the annual sum of inadequately managed and littered plastic waste from coastal populations. Inadequately managed waste is that which is stored in open or insecure landfills (and therefore at risk of leakage or loss).

Plastic inputs to the oceans:
8 million tonnes per year

Plastic in surface waters:
10,000s to 100,000s tonnes

There is a wide range of estimates of the quantity of plastics in surface waters. It remains unclear where the majority of plastic inputs end up — a large quantity might accumulate at greater depths or on the seafloor.



Source: based on Jambeck et al. (2015) and Eriksen et al. (2014). Icon graphics from Noun Project.

Data is based on global estimates from Jambeck et al. (2015) based on plastic waste generation rates, coastal population sizes, and waste management practices by country

This is a visualization from OurWorldinData.org, where you will find data and research on how the world is changing.

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