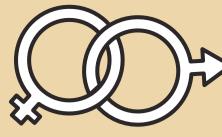
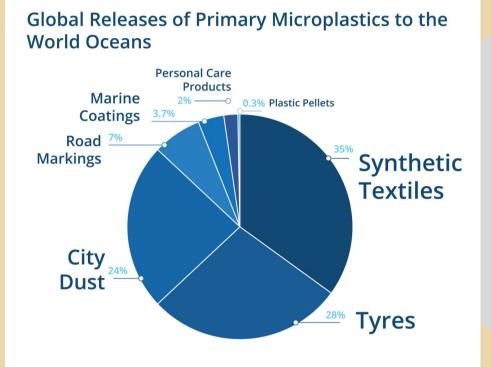
MICRO-PLASTICS AND TURTLE SURVIVAL



Sex determination of turtles depends on the temperature of its surroundings. Micro-plastics conduct lots of heat, creating higher sand temperatures. This promotes more female offspring than males, threatening the species' survival.



HOW ARE MICROPLASTICS FORMED?



Major contributors:

- Broken down larger plastic
- Personal care products
- Clothing fibers
- Tires

THE PROCESS:

80% of

FACT: Nearly 52% of all sea turtles have ingested microplastics, harming the survival of the species.

COMMUNITY SOLUTIONS:



Shade tents are the most effective method to combat hotter sand temperatures that can impact the birth ratios of turtles. Not incredibly labor intensive or expensive, and the local communities can easily get involved.

microplastics **Poor water** filtration leads come from to microplastic urban, landwaste in based waterways sources Microplastics **Escapes** water filters, then wash up on enters shores due to waterways, ocean current, degrading it into polluting



Microplastic Sifting: By removing microplastics from sand, it lowers overall heat density of the surroundings, which promotes equal birth ratios.

Hotter sand temperature leads to more female hatchlings than male

smaller pieces

<u>Growing concerns:</u>

beaches

- Without major changes, microplastic pollution will <u>double</u> by 2040
- Climate change is contributing to higher sand temperatures
- Impact of plastic pollution on oceans is at least \$13B per year

QUICK AND EASY SUSTAINABLE SOLUTIONS:

• <u>REDUCE single use plastic!</u>

• LIMIT dryer use.

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- <u>AVOID products containing plastic</u> <u>microbeads.</u>



