NORTHWEST BIOSOLIDS
Unearthing Sustainable Solutions

PFAS Communication Factsheet

Biosolids are a product of the wastewater treatment process, which uses microorganisms to remove pathogens and nutrients from wastewater. Most municipalities recycle their biosolids through land application. This puts the nutrients and soil-building organic matter back into the ground, where they can support long-term plant growth. When land application isn't an option, municipalities can either burn or landfill their biosolids. Both practices harm the environment and ratepayers.

BENEFITS OF BIOSOLIDS

Washington State has an excellent, pro-environmental biosolids program that has resulted in healthier soils and higher yields across the state. For example, In Washington:

- Dryland wheat farmers can increase their yields up to 40%, with an average increase of 16%. Right now, that represents up to **$200 extra dollars per acre** for a wheat farmer, which can make or break that year's profit.
- Foresters can increase their lumber yields by as much as 25% in areas where biosolids are applied. That's a **$110 increase in log value** per ton of biosolids applied in our working forests. In King County, biosolids are increasing the value of one forest by as much as $550,000 dollars a year.
- Community gardeners can grow anywhere from **15% more food to almost 4000% more food** by using biosolids products, depending on the quality of their soil. If they're gardening in poor soil, commercial fertilizers might get them one salad; biosolids can get them forty.

Decades of research and use have demonstrated the importance of biosolids economically and environmentally. The land application of biosolids in Washington results in the sequestration of at least 80,000 tons of CO_2 per year. That's like taking over 17,000 cars off the road! Biosolids reduce the use of synthetic fertilizers, while improving soil health. Biosolids increase our food security. Biosolids help keep our farmers in business. Biosolids make our working forests work better.

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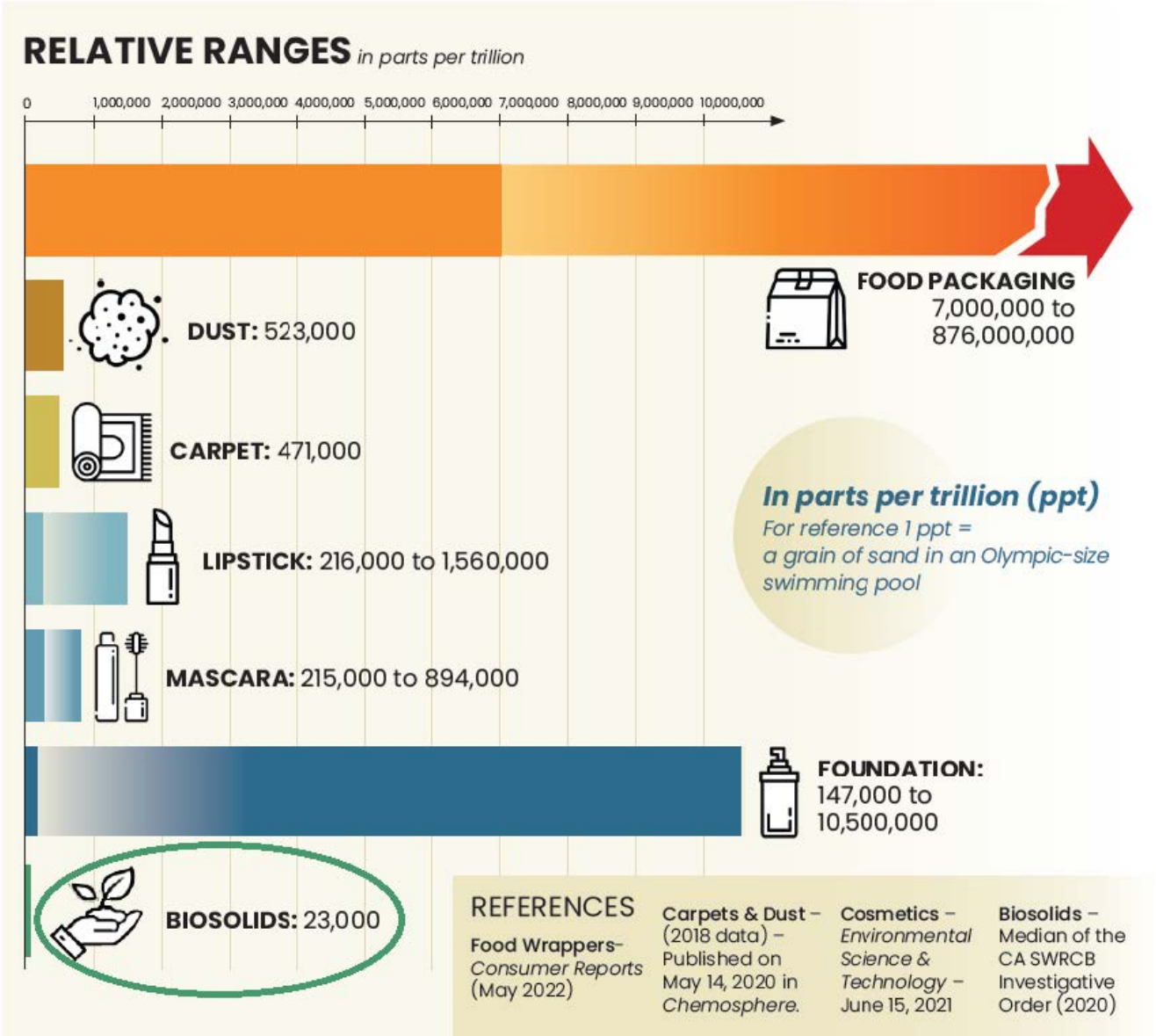
PUTTING PFAS IN CONTEXT

Per- and polyfluoroalkyl substances (PFAS) are a class of manufactured compounds found throughout the world. They are in common household products and are widely used in industrial processes. They have earned the nickname “forever chemicals” because they are extremely difficult to break down.

Biosolids typically contain low, but measurable concentrations of PFAS. Most of the PFAS in wastewater treatment plants come from people’s homes; our wastewater reflects our lives. Areas with industrial users and manufacturers of PFAS will likely have higher levels of PFAS in their biosolids.

PFAS are not created in wastewater treatment plants. Detectable concentrations of PFAS in biosolids are a symptom, not a cause, of PFAS in the environment. Concentrations of PFAS are orders of magnitude larger in everyday materials such as carpets, cosmetics, and food packaging than in biosolids.

The only way to reduce PFAS contamination is to reduce their manufacture and use. Limiting the land application of biosolids will not impact human exposure to PFAS or the amount of PFAS entering the environment.



Above PFAS Infographic provided by California Association of Sanitation Agencies.