

Figure 2: World plastics production 1950-2012
Includes thermoplastics, polyurethanes, thermosets, elastomers, adhesives, coatings and sealants and PP-fibers. Not included PET-, PA- and polyacryl-fibers
Source: Plastics Europe (PEMRG) / Consultic

With continuous growth for more than 50 years, global production in 2012 rose to 288 million tonnes – a 2.8% increase compared to 2011.

However in Europe, in line with the general economic situation, plastics production decreased by 3% from 2011 to 2012.







# Microplastics







Source: EPA Office of Multimedia







### **EPA'S "PB5" WORKGROUPS**

BOTTLES BAGS CIGARETTE BUTTS FOOD SERVICE BOXES MICROBEADS/MICROPLASTICS













### MICROBEAD-FREE WATERS ACT OF 2015

President Obama signed the Microbead-Free Waters Act into law in December 2015. The Act will prohibit the sale of personal care products containing plastic microbeads by July 1, 2018.

How will this law affect you?

#### Microbeads



Microbeads are tiny (< 5mm) plastic beads found in face washes, body scrubs, and toothpastes for abrasive and decorative purposes. Microbeads are too tiny to be filtered by wastewater treatment processes, so they end up being directly discharged into waterways, causing pollution and harm to marine life.

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#### Law

The Microbead-Free Waters Act bans RINSE OFF cosmetic products, such as scrubs and toothpaste. The law does not ban products such as creams, fillers, and cleaning products.

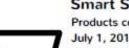
#### Issues

The federal law preempts bad state laws, the ones that contain the "biodegradable loophole." However, the preemption may raise issues for municipalities with more aggressive implementation timelines.



#### Environment

Banning microbeads will reduce plastic pollution in the marine environment. While this law will not solve the entire problem, it is a great start to eliminating other sources of microplastic and plastic pollution.



#### Smart Shopper

Products containing microbeads will remain on the shelf until July 1, 2018. Microbeads will remain in creams, fillers, and cleaning products. Read the ingredients list on the box carefully, if you see polyethylene or polypropylene then that product contains microbeads. Shop for natural alternatives and spread the word! BE A SMART SHOPPER!

#### Created by the Trash Free Waters Program

For more information about getting involved, contact Josh Kogan, TPW Program Coordinator, at Kogan Joshua@epa.gov

Ingredient list for a 'natural daily scrub with gentle microbeads'.....



nots-to leave your sin

### Ingredients:

Water, Glycerin, Sodium Laureth Sulfate, Polyethylene, PEG-16 Soy Sterol, Laur, I Glucoside, Acrylates/C10-30 Alkyl Acrylate Crosspolymer, Phenoxyethanol, Glycological Distearate, Cocamidopropyl Betains

These microbeads are made from plastic and don't get filtered out by sewage plants after they go down a drain. SAY NO TO polyethylene beads!











## The best way to reduce trash?





Source: EPA Office of Multimedia







