

Senator Tepler, Representative Doudera, and members of the Environment and Natural Resources Committee. My name is Karen Talentino, and I am from South Portland. I am here to testify in support of LD 1177.

As an environmental scientist I am acutely aware of the documented impact of the nearly 15,000 synthetic turf athletic fields in the United States.

- They destroy natural habitat needed for carbon capture, biodiversity, soil health, and water drainage.
- They create Heat Island effects on the fields and surrounding areas and have been shown to increase heat-related conditions in young athletes.
- They release large amounts of Greenhouse Gases and impact climate throughout their lifespan, from their petroleum-based creation to their energy-demanding disposal.
- They pollute waters, soil and air with hazardous chemicals, such as PFAS, phthalates, toxic metals, and of course plastic. An 80,000 sq ft synthetic field has about 40,000 pounds of plastic carpeting. I will focus my comments on plastic pollution.

Plastic never goes away. It just breaks down into smaller and smaller pieces. As much as 10% of plastic turf fibers are lost from a field every year.

- Turf fibers can be identified uniquely, and studies have found they can make up over 15% of all plastics in nearshore waters near large urban areas.
- Microplastics in soil can accumulate toxins that harm soil, plants and animals. The chemical components of turf plastic can be taken up by plants, leading to stunted growth and reduced photosynthetic efficiency.
- Wildlife have been found to have multiple health effects from microplastic intake.

For years, industry has said that synthetic turf is completely recyclable. However, most synthetic turf has ended up in landfills or illegal dumping grounds, where it continues to do its damage for decades.

- There are several U.S. “chemical recycling” plants that use very high heat, toxic solvents, or high pressure to break down turf plastic, to create fuels as the major by-product. This solid waste disposal process is extremely energy dependent, does not produce very much recycled plastic, and has toxic by-products.
- A few newer facilities are said to truly recycle the synthetic turf components, but we do not yet have objective, scientific documentation of the environmental and financial outcomes of these facilities, as well as accurate plastic recycling success rates.

It is true that synthetic turf is an exceedingly small contributor to the many sources of plastics and other toxins in our environment. But we need to be cautious and carefully consider alternatives to decisions that will have a tremendously high fossil fuel investment and put even more plastic and other synthetic chemicals into the environment.

Maine can continue to be a leader in fighting plastic pollution by enacting this moratorium.