



April 9, 2025

Dear Director Stowers and members of the Common Council Rec & Parks Committee:

I am writing on behalf of the Norwalk River Watershed Association members in response to the proposal to consider installing artificial turf fields at Broad River Park. I want to re-iterate the points made in a November 2022 letter from the NRWA, Norm Bloom at Copsps Island Oysters and the Mayors Water Quality Committee.

Our concerns then and now are:

**PFAS contamination.** PFAS, the “forever chemicals” which persist in the environment and our bodies forever, move easily into fresh and marine waters, and can bio-accumulate. When PFAS leaches into drinking water and the environment, it is known to harm aquatic life and to cause cancer and a host of other human health problems.

The proposed site for the Broad River fields is approximately 700 feet from the Norwalk River and the Deering-Kellogg wellfields which the First Taxing District uses to supply drinking water. At least one of the wells is already closed due to the presence of PFAS. In June 2022 the EPA issued interim health advisories stating there is essentially no safe level of PFAS in drinking water. Bringing more PFAS to this area poses a direct threat to Norwalk’s drinking water supply and to the health of the Norwalk River.

There is ample evidence that despite claims made by marketers of turf fields they are not PFAS free. Academic studies and real-world examples show water around turf fields quickly becomes contaminated. An example of a situation like the one Norwalk potentially faces occurred in the town of Easton, Massachusetts, where fields were installed near a drinking water source. That town is currently paying \$9 million in remediation costs to address PFAS found in drinking water since the fields were installed. Kyla Bennett, a town resident and expert on this issue, is available to speak to you directly about the work required in Easton at [KBennett@peer.org](mailto:KBennett@peer.org).

In Portsmouth, NH a group of concerned citizens cut off a section of the new “Field Turf” field that was being installed in their town, and which was advertised as being PFAS-free, and had it tested for PFAS. The tests showed a substantial presence of the chemicals. That community also found over 40ppt of 6 PFAS chemicals in a stream downgradient from the high school turf field after installation. Similar tests have been done with similar results in Woodbridge, CT; Franklin, MA; Martha’s Vinyard, and by NRWA and East Norwalk Blue in Wilton. I am happy to work on getting the emails of spokespeople from those towns, too, though if that would help.

Physics Professor Graham Peaslee of the University of Notre Dame has conducted a study of dozens of different new and used turfgrass samples for total fluorines and found the presence of the chemicals in all of them. Testing for fluorines is a way to test for the presence of PFAS. The industry has claimed the PFAS chemicals used are not 'a contaminant,' but admits their presence as a slip agent added intentionally to improve the uniformity of the extruded blades of grass. Similarly, the machines making the other layers of the field often contain PFAS used as a lubricant. The result is a PFAS presence that has been shown to leach into nearby waterways. An overview of these findings is available in the attached PowerPoint presentation from Dr. Peaslee. Findings include, for example, 12 ppt of 6 types of PFAS leaching off a new field in Martha's Vineyard, and that amount increasing as the field ages.

The 3M safety data sheet shown in the powerpoint lists ingredients for turf fields and shows PVDF-HFP, which is a PFAS chemical. That safety sheet which also lists hazardous decomposition products as including:

- carbonyl fluoride
- formaldehyde
- carbon monoxide
- carbon dioxide
- hydrogen fluoride
- toxic vapor, gas, particulate
- hydrogen fluoride at high temperatures

Certainly Norwalk should ask for an updated safety sheet from the manufacturer of any product being considered and our health department should consider the impacts these chemicals pose to children using the fields and to the drinking water source nearby. The runoff from the field is piped directly to the river next to the well fields.

**Turf fields shed microplastics** over the course of their 8-10-year lifespan. These can be inhaled by players on the field, and they will wash into storm drains, the Norwalk River and Long Island Sound. Studies show that one field sheds 480 pounds of microplastics a year.

**Disposal costs.** The presence of PFAS also makes these fields, which last 8-10 years (most warranties are for 8 years), impossible to safely dispose of. From landfills, the PFAS will enter ground water. When incinerated, PFAS remains intact and enters the air for us to breathe. Some companies claim that parts of their fields are recyclable, but there are no facilities for this in the US, and, so far, no fields in this country have been recycled.

**Other chemicals.** PFAS in fields is not the only chemical problem. Most fields contain other chemical carcinogens and also may contain neurotoxins and reproductive toxicants including lead, zinc, phthalates and plasticizers as well as respiratory irritants, like silica, making asthma worse. Many of these chemicals also have been shown to harm aquatic and marine life.

**Extreme heat conditions** are also a health hazard and contribute to urban heat island effect and climate change. Instead of absorbing carbon dioxide the way grass does, these fields release

CO2, methane, and a host of other chemicals. The life of one field from manufacture to disposal generates 55.6 tons of CO2. Plastic turf absorbs solar radiation and there is no chance for evaporation, as with natural fields, so surface temperatures have been shown to reach up to 200 degrees F. On average, fields are 50 degrees hotter than grass and air temperature at head height is 70 degrees hotter. Watering is used to cool the fields, so watering systems are absolutely necessary. Heat illness is the number one cause of death in high school athletes.

We need to hear from impartial experts on environmental, human health, and cost issues. The mistake many cities have made have has been to rely on safety and cost information from the companies selling and installing these fields.

Thank you for your time and patience with this long letter.

We recognize you are under pressure from parents to improve playing conditions. [This webinar](#) outlines an alternative to turf for keeping fields dry using sand layering on playing fields the way golf courses do, which you may know about— its cheaper than turf! The speaker, Dr. JN Rogers, Professor of Turf Grass Research at Michigan State University is a key consultant for the 2026 FIFA world cup fields and consulted on the 2004 and 2008 Olympics. If this might be at all helpful, his part starts at 35:38 of [this video](#) he does also talk about field conditions in CT. The first speaker is also very good if you have time.

Thank you for the chance to comment,  
Louise Washer  
NRWA