

Charlotte Conservation Commission

May 29, 2026

To: CVSD Board

Re: Letter of Concern Regarding Proposed FieldTurf Artificial Athletic Field

Dear Members of the CVSD Board,

The Charlotte Conservation Commission is writing to express concern regarding the proposed installation of a synthetic athletic field manufactured by FieldTurf at Champlain Valley Union High School.

We recognize the important role that athletic facilities play in supporting student wellness, recreation, and community activities. However, we believe the environmental and public health implications associated with artificial turf fields, particularly large-scale plastic-based systems, deserve careful scrutiny before any final approval is granted.

In recent years, increasing attention has been directed toward the environmental impacts of artificial turf systems, including products manufactured by FieldTurf and similar companies. While manufacturers have promoted newer systems as safer and more sustainable, substantial concerns remain regarding long-term impacts, material transparency, and lifecycle management.

Our concerns include the following:

1. PFAS and Synthetic Chemical Concerns

Artificial turf systems may contain or be associated with PFAS (“forever chemicals”), microplastics, heavy metals, and other synthetic compounds in backing materials, fibers, coatings, adhesives, or infill products. Although FieldTurf may state that their products are PFAS-free, independent verification and long-term environmental testing are often limited. Given the persistence and mobility of PFAS compounds in the environment, the precautionary principle should apply.

2. Microplastic, Stormwater, and Wildlife Impacts

Synthetic turf fields shed plastic fibers and infill over time. These materials may migrate into surrounding soils, drainage systems, wetlands, and waterways through runoff, snow removal, wind, and regular wear.

The ecological impacts of this pollution on wildlife are of particular concern. Microplastics and infill such as crumb rubber can be ingested by birds, amphibians, fish, and aquatic invertebrates, potentially affecting feeding, reproduction, growth, and survival. Small plastic particles and chemical additives may also accumulate within food webs over time. Amphibians and aquatic organisms are especially vulnerable to changes in water quality and chemical contamination, making watershed protection an important consideration for Hinesburg and nearby communities within the Lake Champlain Basin.

In addition, replacing living vegetation with synthetic plastic surfaces creates ecological dead zones diminishing the ecological functions naturally provided by soil and vegetation.

3. **Surface Heat and Climate Resilience**
Artificial turf fields can reach temperatures significantly higher than natural grass during warm weather conditions. Elevated surface temperatures may create safety concerns for students and athletes and contribute to localized heat island effects. Increased heat can also negatively affect nearby vegetation and habitat conditions for wildlife species sensitive to temperature changes.
4. **Lifecycle and Disposal Impacts**
FieldTurf systems generally require replacement within approximately 8–12 years. Disposal of worn synthetic turf materials presents an ongoing environmental challenge, as these systems are difficult to recycle and frequently end up in landfills. While FieldTurf claims to have a recycling program for both carpet and infill, it may not be available everywhere. We encourage the school board to demand full disclosure of anticipated replacement schedules, disposal plans, and total lifecycle costs to taxpayers before proceeding.
5. **Loss of Ecological Function**
Natural grass fields provide ecological benefits that synthetic systems cannot replicate, including groundwater infiltration, carbon sequestration, temperature moderation, and living soil function. Natural landscapes also contribute to habitat connectivity and ecological resilience across developed areas. Improved natural turf management practices may offer a more sustainable long-term alternative while still meeting athletic needs.
6. **Maintenance and Hidden Costs**
Synthetic athletic fields are not maintenance free. They require regular cleaning, brushing, fluffing and leveling of infill materials, as well as periodic disinfection and repairs. Watering may also be necessary during hot weather to reduce surface temperatures. We encourage the school board to request a full and transparent breakdown of anticipated maintenance, operational, and long-term replacement costs associated with the proposed field system.

Accordingly, the Charlotte Conservation Commission respectfully requests that the district:

- Conduct a comprehensive and transparent environmental review of the proposed FieldTurf installation;
- Require independent testing and full disclosure of all field materials and chemical components;
- Evaluate impacts related to PFAS, microplastics, runoff, wildlife, and heat;
- Consider enhanced natural grass alternatives and lower-impact field management strategies; and
- Ensure meaningful public engagement before any final decisions are made.

We appreciate the district's commitment to students and community recreation and urge decision-makers to carefully weigh the long-term environmental, wildlife and health implications associated with artificial turf installations.

Thank you for your consideration.

Sincerely,

Charlotte Conservation Commission
Charlotte, Vermont