

Environmental Sustainability Board Comments on Artificial Turf Study

October 1, 2025

Executive Summary

Feedback on the Artificial Turf Conceptual Study reflects both recognition of its value as a planning tool and significant caution regarding the artificial turf component. Several comments emphasized that the study addresses a wide range of improvements beyond turf, such as lighting, amenities, parking, and maintenance, and that moving the conceptual study forward should not be delayed. At the same time, concerns were raised about the adequacy of analysis around turf's environmental, health, and financial impacts.

Environmental concerns included the potential for turf to intensify the heat island effect in already hot summer conditions, generate microplastic pollution, and introduce uncertainty regarding toxicity of materials. Questions were raised about gray water use, stormwater infiltration and runoff, and whether current irrigation water would be wasted if fields are converted. Health considerations noted that while turf may reduce some injury risks, research suggests it may increase ACL and other joint injuries. Lifecycle issues were a recurring theme, with requests for more detail on warranties, replacement timelines, disposal costs, and the environmental impact of worn-out turf materials.

Comments also questioned whether the study fully explored alternatives. Suggestions included enhanced natural grass management, gopher control, or using existing fields regionally as potentially lower-cost strategies. Other local concerns included traffic safety near Overlook if field use increases and opportunities to incorporate pollinator gardens in redesigned layouts. While some feedback acknowledged that the report addressed many environmental, health, and cost-related questions, others stressed the need for clearer quantification of benefits, such as how much additional field use turf would realistically provide. Across all comments, there was strong interest in maintaining transparency, keeping ESB and the community informed through implementation planning, and ensuring potential environmental and health risks are addressed before final decisions are made.

Key Findings

- **Study Scope and Use:** Seen as a conceptual planning tool covering more than just turf; some support advancing it while deferring turf-specific decisions.

- **Environmental Impacts:** Concerns over heat island effect, stormwater runoff and infiltration, microplastics, gray water management, VOCs, durability, and UV resistance of turf materials.
- **Health and Safety:** Mixed views—study claims reduced injuries, but comments raised risks of ACL/joint injuries and heat-related safety issues if fields reach unsafe temperatures.
- **Lifecycle and Cost:** Need for greater detail on warranties, usable lifespan, replacement and disposal costs, and maintenance burdens.
- **Alternatives:** Requests to evaluate non-turf solutions such as improved natural grass management, gopher control, or transport to other playable fields.
- **Community Impacts:** Importance of transparency and ongoing engagement, keeping ESB and the community informed; local concerns included traffic safety near Overlook and potential for pollinator gardens.

Comments from Chair Shannon Blair

- I think it would be worth including/considering the "heat island effect" of the turf. Overlook, in particular, gets very warm in the summer, and this is a known problem with turf. Are we really increasing the amount of use we can get if the turf is 100+ degrees? (https://www.sfei.org/sites/default/files/biblio_files/MPSP_Ecology_20_04.pdf, <https://wateruseitwisely.com/saving-water-outdoors/grass-artificial-turf/10-reasons-why-artificial-turf-may-not-be-what-youre-looking-for/>)
- The water that's used for the fields is gray water so we aren't really saving water by replacing them with turf. What would we do with that water? Would it go to waste? Unless there is a plan for it (maybe storage?), I would be worried it would go to waste.
- I appreciate the effort that went into changing the layout of the areas. I think they did a good job with the suggested layout.
 - It would be interesting to consider pollinator gardens while they are doing the new layouts.
- The report states that injuries would lessen with turf; however, there is some evidence that it can increase ACL tears (<https://www.ucsf.edu/news/2025/02/429511/have-acl-or-achilles-injury-your-turf-field-might-be-blame>). Something to consider- especially for youth sports
- The section in table 3.3 about microplastics in the report is very misleading. The table says the microplastics from the turf are comparable to textiles, etc., Installing turf would

be an additive to this problem, even if the amounts of microplastics are the same. The microplastics would not be there UNLESS the turf was installed.

- This might be a out of context but its been on my mind anyways
 - I would imagine that if turf is installed at Overlook that there might be more use of the fields. If there is more use of the fields, I would strongly suggest the county look at ways to enforce the speed limit on Meadow going to Overlook. I am a homeowner off of Meadow, and anytime there are softball games or big events at Overlook, people drive very fast down Meadow, and it is very unsafe.

Comments from Vice Chair Sue Barns

I watched (via Zoom) the presentation of the "Artificial Turf Conceptual Study," and subsequent questions and discussions, at the Parks and Recreation Board meeting on Sept. 11, and have read the Study provided in the agenda packet. I very much appreciate the Board's and Staff's willingness to have the ESB review this study before voting on a recommendation! This courtesy, and the proceedings of the meeting, have clarified several things for me, and made me comfortable with approval of this Study at this point. Briefly, these considerations are:

- The "Artificial Turf" (AT) Study actually covers diverse improvements to playing fields, including parking, lighting, amenities, maintenance, and artificial turf (AT). **It is a "conceptual study", a "planning tool," with recommendations, not a plan with imminent implementation.** Because of this, I do not want to hold up the study moving forward, as it proposes many upgrades that the County may want to implement, aside from AT.
- Happily, there is quite a bit of discussion of environmental and human health impacts and concerns in the study report. I recognize that there are many potential issues with many/most of the possible upgrades, even beyond AT issues. I think it would be good to consider many of these, but this will take quite a bit of time and attention, and again, I don't want to hold up the study at this time.
- Because we (and CSD) have fielded concerns from the public, I would like to be sure that the ESB and our Community are "kept in the loop" about implementation plans going forward. **How do we set up a plan to be kept abreast of this project, and ensure that we and the community have adequate time and resources to understand the issues, and fully vet them before implementation plans are made?** I hope such strategy can result from tonight's meeting.

In conclusion: I, personally, have no problem with this study being forwarded to Council, if the PRB decides that is the best course of action.

Comments from Member Joseph Chandler

- The study presented only seemed to explore one option for the county regarding the fields. If there is an issue of managing gophers to maintain field integrity, it feels like that could be conducted for much less than the cost of any of the outlined proposals. An initial pass study should include other options and alternatives to achieve desired wants from the community.
- I do not see a good deal of documentation to show warranty on field materials to be used to ensure usable life in line with project assumptions. Project costs should include a section on end of life or replacement costs when materials wear out and how they will be disposed of.
- Information on toxicity of materials to be used seemed very broad. It would be good to see specific information related to 1st and 2nd choices to be used and toxicity and disposal considerations.
- It seems like the only argument for installing turf on a few fields is to allow school and competitive leagues to have a longer season. This should be quantified in how many games or months it could potentially add to the season. It feels like this could be done at lower cost providing kids transport to other fields in the area that might not be as susceptible to harsh winter weather conditions.

Given the costs and uncertainty on maintenance, disposal costs, injury reports and possible toxicity I would say this proposal is not ready to move forward and other alternatives should be explored.

Comments from Member Erik Loechell

Overall I like the content of the report. A lot of my environmental, health, and cost related questions were answered.

But here are a few outstanding items I have questions on:

What I would really like to know more about are the methods the turf is installed (matrix of material installed below the turf to ensure proper stormwater/watering)? With enough stormwater you could overwhelm its infiltration capability so what type of secondary stormwater detention is built in to capture run-off? Asking from an MS4 permit perspective.

How much water is required to cool the turf down to a comfortable/safe temperature in an arid climate if temperatures are in the 90s which they often reach in the summertime? Says it can reach up to 160 degrees so are there going to be a bunch of days in White Rock where the field

simply can't be used due to burn risks and will there be methods to close off the fields to ensure kids don't play on the field when it is too hot?

What types of turf are out on the market that have the lowest VOC concentrations, durability, and UV resistance?