



Board and Commission Study Issue Form

The Study Issues process is designed to assist City Council with setting priorities for the coming calendar year. Board and commission members have two roles in this process:

1. To advise Council regarding the identification of policy issues to study, within their relevant area of authority;
2. To advise Council on those issues Council has decided to study.

The study issues process should focus on considering a new or revised ordinance, new or expanded service delivery program, changes to existing Council Policy, or amendments to the General Plan. The Study Issues Form is designed to focus board and commissioner members' ideas on potential policy study issues, and provide the opportunity for staff feedback and guidance in a transparent process. *Board members or commissioners may only fill out a form for study issue ideas within their purview.*

Date Submitted to Staff Liaison:

Board/ Commission: Sustainability Commission

Submitted by:

Study Issue Working Title:

Climate and environmental impacts and potential regulatory actions for living vs artificial turf

1. What are the key elements of the issue? What precipitated this study?

Following many recent years of drought, there has been increased interest in decreasing the city's lawn surface area and potentially replacing it with artificial turf (AT). AT, however, is made of plastics sourced from fossil fuels, contain PFAS (forever chemicals) and as it wears (e.g. sports field uses, sunlight exposure) it will degrade into microplastic particles polluting our air, soil, and waterways, and thus may have a potentially huge negative environmental impact (as well as being less desirable to some athletes).

This study issue will evaluate the following points:

-- environmental impacts of AT as it compares to living grass, including e.g. GHG emissions and water usage from manufacture and use, practical use concerns including wear and tear into microplastics and lifetime maintenance (e.g. replacement rate), and effects on local community resiliency concerns, such as its contribution to the urban heat island effect and surface permeability (impacting stormwater runoff). Of particular interest is a comparison to newer drought tolerant, low-water, low-maintenance bermudagrass turfs now available for high-use conditions.

-- potential city actions that could be taken (e.g. official recommendations, bans on city property, potential reach codes, guidelines, and/or increased education/outreach to residences, businesses, and schools regarding this issue) in order to align with the environmental goals of the city's CAP.

2. Staff Summary of Scope and/or Comments: [Staff Use Only]

[Use attachments if needed.]

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Currently, the City allows the installation of artificial turf (AT). Water conservation is a priority for Sunnyvale, and artificial turf helps residents, businesses and the community save water. New and emerging research is raising concerns around the environmental and health impacts of using AT. The City has not evaluated the research to develop a full scope of the benefits and potential issues regarding the installation and use of AT, and this study would facilitate staff conducting such an evaluation.

This study would include a comparative analysis based on review of existing studies of the environmental and health impacts of artificial turf (AT) to living grass, such as wear and tear resulting in microplastics, stormwater runoff pollution, and urban heat island effect. The study will also include a comparative analysis of the operational and maintenance costs of the lifetime of AT and living turf. The study will support the City in establishing a position on the installation of AT and include next steps for the City to take regarding policy, operations, and education. Staff recommend that the title of this study be shortened, one option being "Use of Artificial Turf versus Living Grass".