

## Update on Artificial Turf Ban Investigation

Climate Action Subcommittee
October 4, 2023

## CITY OBJECTIVES AND DRIVERS

Council Work Plan FY 2023/24: Directs city staff to investigate of the feasibility of additional city-wide restrictions of artificial turf installations



### SYNTHETIC TURF



- A surface cover for residential, sports fields and commercial settings, that is made of synthetic fibers specifically to resemble/mimic grass or turf
- Polyethylene, nylon or a mixture of polyethylene and nylon
- Large applications have evolved; including filler granules, vertical drainage design elements

## SYNTHETIC TURF BENEFITS



- Durable, easy to maintain, and uses significantly less water
- No fertilizer requirements and significantly less pesticide and herbicide application than natural turf grasses
- Allows for year round and heavy use in sports applications
- Less maintenance

## SYNTHETIC TURF CONCERNS



- 8 20 year lifespan: waste recovery options are very limited
- Manufacturing and environmental chemicals contributions
  - CA Legislation AB 1423 (2023)
- Heat island effects displaces living soil cover which counteracts the benefits of natural turf and exposed soil
  - Researching ways to reduce heat island effects
- Most large applications utilize synthetic "crumb"
  - Environmental pollution and health concerns

## **HUMAN HEALTH AFFECTS**

- Rubber crumb infill and other plastic constituents include chemicals in their manufacturing that are known carcinogens
- 2019 US Environmental Protection Agency Report regarding the evaluation of human exposure to synthetic turf fields and crumb rubber infill
  - In general, the findings from the report support the premise that while chemicals are present as expected in the tire crumb rubber, human exposure appears to be limited while using the play facilities
  - More comprehensive data for human health risks assessments is needed (US EPA)

## **ENVIRONMENTAL EFFECTS**

- Staff found that there is a lack of quality research into quantifying the effects caused by synthetic turf on hydrological processes, such as stormwater runoff, retention and drainage
- It is assumed that over time that aerial deposition on these surfaces and the breakdown of synthetic and infill materials present risk without engineered controls



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## CALIFORNIA CODE RESTRICTIONS

#### California Code, Government Code - GOV § 53087.7

- Cities, charter cities, and counties can not enact any ordinance or regulation, or enforce any existing ordinance or regulation, that <u>prohibits</u> the installation of drought tolerant landscaping, synthetic grass, or artificial turf on <u>residential</u> property.
- May impose reasonable restrictions on the type of drought tolerant landscaping, synthetic grass, or artificial turf that may be installed on residential property
  - Specify that that those restrictions do not do any of the following:
    - (1) Substantially increase the cost of installing drought tolerant landscaping, synthetic grass, or artificial turf.
    - (2) Effectively prohibit the installation of drought tolerant landscaping, synthetic grass, or artificial turf.
    - (3) Significantly impede the installation of drought tolerant landscaping, including, but not limited to, a requirement that a residential yard must be completely covered with living plant material.

## OTHER JURISDICTIONS

- Several jurisdictions in California have instituted restrictions through building codes and turf replacement rebate incentives
- Some of these restrictions include:
  - Percentage of landscape that can be comprised of artificial turf
  - Slope restrictions
  - Design review
    - Standards for installation
    - Permeability considerations



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## OTHER CONSIDERATIONS

- Staff have not conducted outreach to schools or other facilities/agencies that operate within Santa Rosa and have/may be considering artificial turf
- The organized sports community has advocated for artificial turf surfaces at city facilities and parks
  - Sports tournaments
  - Use of existing park's facilities currently limited
  - Unavailable during certain weather conditions



# EXISTING SANTA ROSA POLICIES AND ORDINANCE

- Water Efficient Landscape Ordinance (WELO)
  - Compliance with landscape standards for all new and rehabilitated landscapes (tied to building permits)
  - Does not specifically prohibit synthetic turf
  - Building Code, Weed Abatement Ordinance, Firewise WUI Landscape Guidance (no restrictions on artificial turf)
- Santa Rosa Water Turf Replacement Rebate Programs
  - Does not rebate the installation of artificial turf, discouraged in general when auditing landscapes

## SANTA ROSA LANDSCAPE ENFORCEMENT MECHANISMS

- Current landscape design oversight within the City jurisdiction is limited to:
  - those projects that require a building permit



# DIRECTION FROM CLIMATE ACTION SUBCOMMITTEE

- What are the subcommittee's concerns regarding artificial turf?
- What additional information would be helpful to form a recommendation?



## QUESTIONS?