## THE URBAN WILDLANDS GROUP, INC.

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September 30, 2014

Councilmember Joe Buscaino, Chair Public Works and Gang Reduction Committee Los Angeles City Council 200 North Spring Street, Room 410 Los Angeles, California 90012

Re: Council File No. 14-1197 – Artificial Turf in Parkways / Standard and Proposed Implementation

Dear Chair Buscaino and Committee Members:

The Urban Wildlands Group opposes the motion by Councilmember Blumenfield that proposes the development of a standard for use of artificial turf in parkways, an approach that presupposes that artificial turf is environmentally beneficial. Councilmember Blumenfield makes many unsubstantiated assertions about the relative benefits of artificial turf in his motion but does not acknowledge that artificial turf has significant environmental downsides.

First and foremost, artificial turf is not alive, does not photosynthesize, and does not provide habitat for other species. Although it would be far preferable to use low-water varieties of turf or native plants, even conventional turf, if managed responsibly — that is, without pesticides — is a habitat for insects (for example, for skippers, the small orange-colored butterflies that are found throughout Los Angeles). Pesticide-free turf is also used as a site for foraging by resident and migratory birds. Replacing a living landscape with an artificial one has consequences for these and other species and diminshes the degree to which the urban environment is full of life and beauty.

Second, artificial turf poses potential adverse health effects, especially on children. Synthetic turf is often installed on a rubber base. The rubber crumbs used for the base can become airborne, then inhaled and tracked into homes. Small bits of rubber can also have ecosystem consequences as they are washed into the storm drain system and out to the ocean where they are consumed by fish and other marine organisms. Crumb rubber contains many chemicals toxic to humans, including lead (a neurotoxin at any dose), polyaromatic compounds (PAHs) and volatile organic compounds (VOCs) (Claudio 2008).

Third, the motion assumes that no water will be used on artificial turf. Councilmember Blumenfield apparently assumes both that no water is used in the manufacturing of artificial turf (it is) and that no water is used to maintain it. To the contrary, water is regularly used to wash

down artificial turf when it becomes dirty or dusty. This is necessary because artificial turf can harbor high levels of bacteria and waste if not cleaned.

Fourth, Councilmember Blumenfield does not acknowledge the lifecycle costs of production of artificial turf. Throughout the lifecycle from production to disposal, artificial turf contributes three times the amount of greenhouse gases as does turfgrass (Stahl and Schüler 2009). In fact, turfgrass scored better than synthetic turf on lifecycle assessments of releases of photooxidants, pollutants, biodiversity, and temperature (Stahl and Schüler 2009).

Finally, artificial turf gets extraordinarily hot in the sun, far hotter than turfgrass. The surface temperature of artificial turf can reach 160°F on a summer day of 78°F (Claudio 2008). This is dangerously hot for children and pets. It is also the reason that artificial turf sports fields are wetted down before use by teams, as a means to reduce the surface temperature for the safety of the athletes (Claudio 2008).

This letter is not meant to be a defense of turfgrass and the excessive use of water and fertilizers. Greater tree and shrub cover should be strongly encouraged in the City as a means to mitigate the urban heat island effect and both trees and shrubs perform better than turfgrass in that regard. Nevertheless, artificial turf is worse than turfgrass in many environmental respects when the entire lifecycle of the product is considered. Natural turf management (e.g., switching to electric mowers, selecting low-water turf varieties) can reduce or eliminate many of the environmental impacts of turfgrass described in the motion and can do so in a manner that retains the benefits of a living landscape (Morris and Bagby 2008).

The City will be a lifeless and desolate place if parkways are replaced with artificial turf made of fossil fuels or replaced with rocks and gravel in place of a lawn or other living groundcover. Los Angeles is not a desert, but has a Mediterranean climate that can support a range of beautiful vegetation without having to resort to a commercial product with a finite lifecycle and adverse health and environmental consequences.

Sincerely,

Travis Longcore, Ph. D.

Science Director

## Literature Cited

Claudio, L. 2008. Synthetic turf: health debate takes root. Environmental Health Perspectives 116:A116–A122.

Morris, J., and J. Bagby. 2008. Measuring environmental value for natural lawn and garden care practices. International Journal of Life Cycle Assessment 13:226–234.

Stahl, H., and D. Schüler. 2009. Ökobilanzieller Vergleich der Umweltauswirkungen von Kunstund Naturrasenspielfeldern [Life cycle comparison of the environmental impact of artificial and natural turfs]. European Journal of Turfgrass Science 40:94–100.