

Los Angeles  Department of Water & Power

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January 20, 2015

The Honorable City Council
c/o Office of the City Clerk
Room 395, City Hall
Mail Stop 160

Attention: Councilmember Felipe Fuentes
Chair, Energy and Environment Committee

Honorable Members:

Subject: Council File No. 14-1197-S1 – Council Motion (LaBonge/Fuentes) on the
Potential Benefits of Artificial Grass for Home Installations

This report was prepared in response to Los Angeles City (City) Council Motion 14-1197-S1 (Motion). The Motion requests the Los Angeles Department of Water and Power (LADWP) report the potential benefits of implementing artificial grass for home installations and the impact during the current drought conditions.

BACKGROUND

California's Water Year 2014, which ended on September 30, 2014, was the third driest in precipitation on record. Per the California Department of Water Resources (DWR), the State received less than 60 percent of average precipitation, and after three years of drought conditions, the State's major reservoirs are at about 36 percent of capacity. DWR Director Mark Cowin stated: "The immediate certainty is that day-to-day conservation -- wise, sparing use of water -- is essential as we face the possibility of a fourth dry winter."

The City has been a leader in water use efficiency and conservation for nearly 40 years. LADWP's Water Conservation Program began in 1977 and has achieved over 110,000 acre-feet per year of savings through rebate and incentive programs. This success with conservation has kept water demand flat despite a population increase of one million. The City will continue to lead the statewide effort to conserve water as it works to comply with a new goal set by Executive Directive No. 5 (ED5) issued by Mayor Garcetti on October 14, 2014, to reduce per capita potable water use by 20 percent by 2017.

LADWP has expanded efforts on the California Friendly Landscape Incentive Program for residential and commercial customers, which is also called the "Cash-in-Your-Lawn" program. Because 40 to 60 percent of residential water use is outdoors, LADWP sees a high-conservation potential in replacing turf lawns with water saving landscaping, such as California Friendly plants and mulch or artificial grass.

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CALIFORNIA FRIENDLY LANDSCAPE INCENTIVE PROGRAM

In 2009, LADWP launched the Landscape Incentive Program, which involves replacing turf grass with California Friendly plants, mulch, permeable pathways, and artificial grass. Since turf grass is very expensive to maintain, and requires heavy water use and attention, the California Friendly Landscape Incentive Program is a great way for residential LADWP customers to save money and, more importantly, save water. California Friendly landscaping can help enhance a yard or parkway with the use of colorful options that includes green plants, brightly colored flowering shrubs, trees, ground cover, and vines. In addition, the California Friendly plants are attractive, non-invasive, and easy to maintain, and provide a habitat for native wildlife. In November 2014, LADWP increased the turf replacement incentive from \$3 to \$3.75 per square-foot for the first 1,500 square-feet of turf removed and replaced with water-reducing landscaping such as low-water-using plants, mulch, permeable hardscapes, and artificial grass.

ARTIFICIAL GRASS

In addition to California Friendly plants, artificial or synthetic grass is an alternative to an existing turf grass lawn. Artificial grass is suitable for the City's desert climate, which consists of hot and dry weather for the majority of the year. Artificial grass does not require any water, except for the occasional cleaning or rinsing, as needed. The other benefit of artificial grass is the lack of required maintenance. Elderly homeowners and vacation property owners may find it difficult to care for their own lawns. Artificial grass provides the aesthetic look of turf grass, but removes the need for turf-related maintenance activities such as mowing, weeding, patching, and aerating to provide a consistent all year round weather surface. The use of artificial grass also eliminates the need for chemical pesticides and fertilizers. Concerns have been raised regarding potential impacts associated with widespread use of artificial turf. Artificial turf tends to get very hot in the sun, particularly with the use of ground black rubber "pellets" as infill to vertically support the grass blades. Because of this, artificial turf has the potential to create a heat island effect, which depending on its proximity to structures, might have impacts on air conditioning and other energy uses. In addition, while there are some questions about potential impacts to runoff water quality coming off artificial turf, it is known that the rubber infill can be washed off the turf surface and enter waterways that the City is directly responsible for. Also, the ability to infiltrate runoff is a key consideration in selecting the material to be used. In collaboration with the City's Department of Public Works (DPW) Bureau of Sanitation, it is recommended that if artificial turf is desired, then consideration be given to its impact on water quality and proper drainage in order to protect runoff water quality and avoid potential downstream environmental impacts.

CITY STANDARDS FOR ARTIFICIAL GRASS

Standards for the use of artificial grass in parkways are being developed by the City's DPW Bureau of Engineering (BOE) per a council action adopted on October 14, 2014, (Council File No. 14-1197 [Blumenfeld/O'Farrell]). Currently, the standard guidelines for the conventional city parkways are for turf grass and/or drought tolerant, turf-substitute groundcover plants that provide the same characteristics as turf grass. Any other non-standard material such as artificial grass requires an "A" or "B" permit from BOE because it may affect the surrounding public

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features such as storm drains or sidewalks. With the new standards for artificial grass, homeowners will still be required to obtain a permit, but at a significantly reduced cost.

CONCLUSION

LADWP has been actively encouraging City residents to replace their turf grass lawns with water-saving landscaping, especially during the current drought conditions. LADWP's California Friendly Landscape Incentive Program provides customers a variety of water-efficient landscaping options to replace the traditional turf grass that is well suited for the residents' lifestyle, needs, and temperature zones. The use of California Friendly plants and artificial grass requires less water than the conventional turf grass lawns because they are adaptable to the dry and arid climate.

Since the implementation of the California Friendly Landscape Incentive Program, more than 9 million square-feet of turf grass have been replaced with low-water-using landscape, resulting in over 300 million gallons (920 acre-feet) of water saved. The success of this program will help ensure a sustainable water supply for the future of the City.

If you have any questions or if further information is required, please call me at (213) 367-1338, or have your staff contact Ms. Winifred J. Yancy, Director of Intergovernmental Affairs and Community Relations, at (213) 367-0025.

Sincerely,



Marcie L. Edwards
General Manager

PMF:yrg/ar

c: Councilmember Bob Blumenfield, Vice-Chair, Energy and Environment Committee
Councilmember Tom LaBonge, Member
Councilmember Jose Huizar, Member
Councilmember Paul Koretz, Member
Mr. Adam Lid, Legislative Assistant

Ms. Winifred J. Yancy

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MOTION

As drought conscious residents of the City of Los Angeles look for ways to reduce their water consumption, business is booming for the synthetic turf industry. A recent study revealed that the annual amount of water needed to maintain the average lawn each year is about 34,000 gallons or about 670 bathtubs full of water.

The quality and appearance of synthetic turf has gained popularity, and especially with the drought, turf has become more accepted. Residential turf is growing exponentially in Southern California, but home installation still accounts for less than 13% of the total turf installations.

With rising water rates and with the current lawn removal rebate programs that are offered to residents of the City of Los Angeles, there is a need to look at options such as artificial turf as an alternative for drought friendly landscaping.


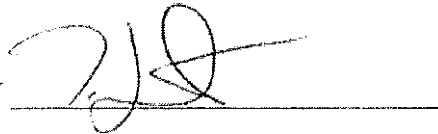
I THEREFORE MOVE that the Department of Water and Power be requested to report back with a study on the potential benefits of implementing artificial grass for home installations and how it can make an impact in the current drought conditions.

PRESENTED BY



TOM LABONGE
Councilmember, 4th District

SECONDED BY


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