Date: June 4, 2018
To: Patrick H. West, City Manager
From: Stephen P. Scott, Interim Director of Parks, Recreation and Marine
For: Mayor and City Council
Subject: Parks, Open Space and Median Drought Impacts

Water is critical for thriving landscape in parks, open space, and medians. Properly irrigated landscaping results in safe playing fields, healthy trees and plants, and cultivates the aesthetic Long Beach residents have come to expect. The City's water supply to support this landscape is dependent on a combination of annual rainfall and potable and reclaimed water. Without the appropriate level of water, the Department of Parks, Recreation and Marine (Department) must prioritize irrigation water use to focus on the landscaped areas most used by the community, which has significant impacts on the aesthetic of parks, open space, and median landscaping citywide.

Park Water Needs

Long Beach’s parks, open space, and median landscape are nourished through a combination of annual rainfall and potable and reclaimed water. The Department is responsible for the care and maintenance of 996 acres of irrigated landscape in parks, open space, and medians throughout Long Beach. According to the California Department of Water Resources Irrigation Management Information System (CIMIS), on average, 47 inches of water is needed to sustain the vegetation in our Southern California climate.

During the drought years of Fiscal Years 2012-2016, Long Beach received annual rainfall amounts between 3.5 – 7.9 inches, which leaves a gap of between 39.1 – 43.5 inches each year to meet the 47-inch water need. By comparison, Long Beach received close to 18.8 inches of rain in FY 2017. To date in FY 2018, only 1.9 inches of rainfall has been received (4 percent of the total water needed from rain), which has only worsened the condition of landscaping. The balance of water is reliant on the Department’s irrigation budget.

Park, Open Space and Median Irrigation Resources

The Department’s approximate $2 million General Fund budget for landscape irrigation provides approximately 45 percent of the vegetation’s water needs (21 inches of water). The budget is currently not adequate to irrigate all 996 acres of landscaped areas. The continued drought has placed a greater burden on Department resources to try to fill the water gap. At current budgeted levels, and year-to-date rainfall, the landscaping will receive around 23 inches of water this fiscal year (1.9 inches of rain and 21 inches of irrigation), representing approximately 49 percent of water need. By comparison, last year, when Long Beach received 18.8 inches of rain, plus the 21 inches of irrigation, the vegetation received close to 40 inches, or 85 percent of water need. The following chart depicts the landscape water needs for the past seven fiscal years.
Department Actions

Each year, when annual rainfall and the Department’s water resources do not provide the necessary amount of water for landscape irrigation, the Department prioritizes where to utilize the limited water and evaluates spending to identify budget savings across Department operations to help offset water needs. The Department tiers irrigation, with a focus on providing irrigation to high use/active turf areas and sports fields first, then to moderately used park areas, and finally to low use areas, such as backup lots. When water is tiered, many landscaped areas go with less, resulting in a browning of grass and potentially further compromising trees. The evidence of this “browning” is already present in parks and has significantly impacted their aesthetic, which becomes increasingly noticeable as daylight savings time adds additional hours of sunlight and the summer season begins.

The Department also identifies operational budget savings to help contribute to an investment in water until a long-term solution can be determined. While this may lead to operational impacts in other areas of the Department, it is necessary to enhance irrigation for the sustainability of landscape areas and safety of park visitors, as much as possible. The Department has successfully identified some operational savings to apply to our existing water budget, which will enable us to apply more water to our park grounds and open spaces. While the result will ensure some greening over the next few weeks of our parks citywide, it is important to note there will still be some brown areas in the lesser used areas of parks and in medians and back-up lots.

The Department continues to pursue conservation measures, but these changes take time to complete. The Department is currently engaged in a project to automate parks, open space and medians irrigation systems on a centralized computer system. Programming irrigation controllers can then be done automatically on a computer or handheld device, in hours versus weeks as in the current manual process, and frequent adjustments can be made to match supply with demand.
The Department will continue to work through the annual budget development process to request enhancements that structurally supplement the current water budget. To adequately irrigate all 996 acres, assuming minimum rainfall during drought conditions, the Department would need a minimum budget of $4 million. Until adequate water resources are identified, or sufficient annual rainfall is realized, the irrigation need will continue to exceed annual rainfall and budgeted water sources. The Department continues to do its best to focus limited water resources on usable areas and commit available Department savings to irrigating City parks.

Should you have any questions, please feel free to contact me at 570-3170 with questions.

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