Subject: DPR-Forestry

FY 2022 Proposed Budget Budget Work Session Follow-up

4/9/2021

The following information is provided in response to requests made by Mr. Karantonis and Ms. Garvey at the work session on 3/16/2021, regarding the following question: What are the benefits of tree pruning and maintenance? What more additional forestry work could be done in FY 2022?

The Department of Parks and Recreation (DPR) is directly responsible for approximately 19,500 street trees and 100,000 park trees. DPR's Urban Forestry team is dedicated to planting and maintaining trees, implementing strategies to conserve and enhance the tree canopy, and reviewing the impact of development for compliance with tree preservation efforts. These efforts have helped to reverse tree canopy loss on public property and to help partially offset great losses on private property in the last decade with parks overall showing a growth in tree canopy of 9% since 2011.

Below is more information regarding options to expand forestry work that could be implemented in FY 2022. Additional options can be explored for FY 2023 and beyond such as changes to the current tree watering program.

Tree Conservation

In Calendar Year 2019 alone, the County lost just over 900 trees on County property and rights-of-way and nearly 2,900 trees on private property as a result of private development. To address this loss, ensuring development reviews are done timely and accurately to replace tree loss on public and private property is critical.

In FY 2020, DPR conducted nearly 1,200 development plan reviews, more than a 55% increase from the number of plans the Department was reviewing just five years earlier in FY 2015. This development pressure is expected to continue, and potentially increase, after the pandemic, requiring additional support to best conserve and improve our tree canopy.

An additional Urban Forester position would help assist in proper review and oversight of all development. Specifically, this additional position would allow the Urban Forestry Unit the capacity to focus on projects within the expedited timeline anticipated for the upcoming site plan reviews and for oversight of planning, design, and implementation of public space infrastructure projects associated with Amazon HQ2's development.

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The cost of an additional Urban Forester includes personnel (\$125,000) as well as one-time funding for a vehicle and other start-up equipment and supplies (approximately \$55,000) and ongoing funding for annual vehicle maintenance (approximately \$10,000).

Improve Street Tree Pruning Cycle

Trees, as part of their natural cycle, get damaged, diseased, or dying branches, or may decline as a whole tree. These trees then need pruning to maintain the tree's health, or removal, to reduce risk to the public from falling branches or entire trees. Approximately every 5 years, trees need additional pruning as part of this natural cycle. The current funding level supports the pruning of approximately 1,100 to 1,200 trees annually, equating to a 17-year pruning cycle.

Recent storms and the effects of climate change have exacerbated needs for pruning and stressed existing maintenance resources. Shifts in weather patterns have caused increased root rot during higher, extended rainfall and flood events, and extended dry weather periods have intensified tree stress. These factors may cause safety concerns with the County's street trees, which when dead or compromised are most likely to damage property. Improving DPR's pruning cycle will allow staff to identify and address potential risks earlier, enhancing the safety of the community and improving the health of existing street trees.

The addition of up to \$600,000 to the budget would allow DPR to improve from a 17-year pruning cycle to a 5-year pruning cycle, the industry standard, or somewhere in between, based on the amount of funding provided, as demonstrated in the table below.

	Amount of Additional Funding					
	\$100,000	\$200,000	\$300,000	\$400,000	\$500,000	\$600,000
Additional Trees Pruned (above 1,100 base)	475	950	1,425	1,900	2,375	2,850
Estimated Cycle	12.5 years	9.5 years	7.8 years	6.5 years	5.6 years	4.9 years

While not directly related, it needs to be considered that the existing Urban Forestry Unit staff cannot respond to both the increased number of plan reviews and a more robust tree pruning cycle without addressing the current staffing levels of the unit.