SUPPLEMENTAL AGENDA MATERIAL for Supplemental Packet 2

Meeting Date: December 11, 2018

Item Number: E

Item Description: Referral to the Planning Commission to Research and Draft an Urban Forestry Ordinance Requiring Tree Planting Upon Completion of New Construction

Submitted by: Councilmembers Cheryl Davila, Kate Harrison and Susan Wengraf

Revised from Supplemental 1 packet with additional edits. Please see attachments in Supplemental 1 packet.
RECOMMENDATION

Short-term Six-month referral to the Planning Commission and Design Review Committee (DRC) to research and draft an Urban Forestry Ordinance requiring tree planting upon completion of new residential construction, excluding single-family homes and ADUs, as well as construction in High Hazard Fire Zones and certain alterations. The Planning Commission and DRC should consider the following:

- Establishing appropriate tree planting requirements for new construction, with the goal of increasing the tree canopy in Berkeley, e.g., a ratio of trees required per square foot, for new single-family and multi-family construction, as well as qualifying alterations to existing residential buildings.

- Establishing appropriate tree planting requirements for larger projects, including options to plant trees at alternative locations identified by the City and within the City limits. The developer should incur the cost of maintenance of the trees for a defined period of years after planting.

- Appropriate California Natives species requirements. Refer to the California Native Plant Society for a list of eligible trees. [https://www.cnps.org/](https://www.cnps.org/)

- Establishing a Tree Planting Fund to support increased tree planting throughout Berkeley.

BACKGROUND

Across the country, cities are implementing programs to increase urban forestry as a measure that improves air and water quality, absorbs greenhouse gases, improves public health, provides habitat for wildlife and beautifies cities. According to the Guardian, “Trees
can cool cities by between 2C and 8C. When planted near buildings, trees can cut air conditioning use by 30%, and, according to the UN Urban Forestry office, reduce heating energy use by a further 20-50%. One large tree can absorb 150kg of carbon dioxide a year, as well as filter some of the airborne pollutants, including fine particulates.”¹

New York City has an understanding of the importance of increasing trees in urban environments. NYC has a policy to ensure that, “All new buildings and all enlargements exceeding 20 percent of the floor area must provide one new street tree for every 25 feet of building road frontage. These requirements must be satisfied for the builder to obtain a Certificate of Occupancy from the Department of Buildings (DOB)”²

This policy has paid off in environmental and economic gains for New York City: “When the New York City park department measured the economic impact of its trees, the benefits added up to $120m a year. (Compare that to the $22m annual parks department expenditure.) There were $28m worth of energy savings, $5m worth of air quality improvements and $36m of costs avoided in mitigating storm water flooding.”³

Berkeley must take similar actions to mitigate habitat loss of wildlife and the loss of oxygen production and carbon sequestration when trees in our urban forest are lost. The goal of this ordinance is to plant more trees than currently exist in our urban forest. Current building and zoning codes in our City require parking spaces in certain circumstances, yet no trees are required.

The City of Berkeley incorporated the 2016 California Green Building Standards Code (CALGreen) into local Building Codes. Those standards are reserved only for residential projects which increase “the building’s conditioned area or volume”. CAL Green applies to non-residential projects with either a $200,000 or higher valuation or 1,000 square feet of area or more. CALGreen requires that: Trees excavated must be “reused” or “recycled”.

Trees are also an option to address the “cutoff luminaries per Section 132 (b) of the California Energy Code”; a builder can either “Provide trees or man-made screens around perimeter of site.” Even with CALGreen, trees are only an option for builders. Parcels that have trees before a building permit are not being required to have trees upon the completion of a building project. In essence, existing trees on a parcel not under a protected status that are cut down during a build become woodchips and compost. As the tree decomposes, the greenhouse gases stored in the tree are released back into the atmosphere.

CALGreen states that local jurisdictions reserve the right to go above and beyond the requirements of CALGreen. The first “Compliance Method” states: “Determine if a local construction ordinance is in place in your jurisdiction and comply with the more stringent

¹ The Guardian;  https://www.theguardian.com/cities/2016/oct/12/importance-urban-forests-money-grow-trees
³ The Guardian;  https://www.theguardian.com/cities/2016/oct/12/importance-urban-forests-money-grow-trees
requirement or as accepted by the local enforcing agency.” As signers of the Paris Agreement, we urge Berkeley to take stronger action to promote and grow our urban forest.

FISCAL IMPACTS OF RECOMMENDATION
Unknown.

ENVIRONMENTAL SUSTAINABILITY
Trees potentially can absorb almost fifty pounds of carbon dioxide per year and can sequester close to a ton of carbon dioxide (CO2) by the time it reaches 40 years maturity. Trees absorb CO2 into itself, while releasing oxygen. Trees are natural carbon eaters. Our air will be cleaner as the trees grow and mature.

Planting trees reduces our carbon footprint while beautifying our community. Mature trees help reduce runoff, absorb ozone and provide windbreaks which potentially could lower utility bills. Tree planting will assist in achieving our goals for the Climate Emergency Declaration and the Climate Action Plan.

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ATTACHMENTS & LINKS:
- California Urban Forests Council: https://caufc.org/why-urban-forests/
- San Francisco Urban Forest Plan
- Street Tree Planting Standards for New York City 2016