AGENDA DATE: November 19, 2014

TO: Parks and Recreation Commission

FROM: Administration Division, Parks and Recreation Department

SUBJECT: Street Tree Infrastructure Conditions Project

RECOMMENDATION:

That the Commission receive a report on the Street Tree Infrastructure Conditions Project.

BACKGROUND:

Trees in an urban environment face a number of challenges, one of which is the conflict between mature tree canopy and overhead high voltage utility lines. This conflict can result in hard pruning techniques, employed by Southern California Edison (SCE), to clear tree canopy from high voltage lines and reduce the threat of fire. At times, this leaves the tree aesthetically unappealing, can reduce the function of the tree, and leave the tree vulnerable to disease and failure. SCE generally limits its tree work to canopy within 4 feet of high voltage lines.

This issue has been a concern for a number of years. It was most recently raised by City staff, the public, and City Council, as well as Board and Commission members during the development of the Urban Forest Management Plan. In order to begin to address this issue, in June 2013 the Parks and Recreation Department (Department) initiated the Street Tree Infrastructure Conditions Project (Project). The purpose of the project was to better understand, characterize, and document the conditions of trees located under high voltage utility lines, the proximity of tree canopy to the lines, as well as characterize the parkway conditions and tree growspace. Information was also gathered on vacant sites located under utility lines, or within the surrounding area, to better understand the number of suitable vacant planting sites and the parkway and grow space conditions.

DISCUSSION:

Seven neighborhoods (30% of General Plan designated residential land) containing the majority of the City’s high voltage overhead utility lines were surveyed and include: West Downtown, Westside, Laguna, Oak Park, Eastside, Upper East, and Lower East.
Other neighborhoods not surveyed include those with very few streets with overhead utility lines, and therefore, utility line and tree conflicts were considered lower priority.

**RESULTS:**

A complete breakdown of the information gathered is available in Table 1 on page ten of the attached report. Sites surveyed include the following:

- A total of 5,157 sites were surveyed.
  - 3,843 (75%) have trees
  - 1,314 (25%) are vacant

- Of the 3,843 trees, 3,688 (96%) are located under high voltage lines (or a combination of high and low voltage).
  - 9 (<1%) under low voltage only lines
  - 146 (4%) do not have overhead utilities

- A total of 612 (16.5%) trees located under high voltage lines are visually hard pruned.

- Of the 1,314 vacant sites inventoried, 1,066 (81%) are suitable for replanting. Half are located under high voltage lines and the others do not have overhead utilities.

Parkway conditions were noted for each site inventoried:

- 1,979 (38%) sites are located in grass parkways
- 1,375 (27%) sites are located in bare soil
- 887 (17%) sites are located in cement/hardscape
- 716 (14%) sites are landscaped parkways
- 200 (4%) sites are in rock parkways

**MANAGEMENT OPTIONS:**

Based on the information gathered, there are several management options to address existing trees located beneath high voltage utility lines, enhance parkway growing conditions, and replant trees in vacant sites. These include the following six options:

1. Proactively prune trees not currently hard pruned by Southern California Edison, but that are nearing the line clearance zone.
2. Develop a young tree training program alongside SCE to train young trees to grow away from high voltage lines.
3. Permanently remove, or remove and replace, trees that are in high conflict (palms are an example) or are performing poorly or at risk of failure.
4. Remove hardscape around existing trees to improve growing conditions, increase root access to oxygen and water, and support trees during times of drought.
5. Remove hardscape in parkways with no current growing space.
6. Plant trees in vacant sites that are suitable for replanting.

These options are consistent with the objectives of the City’s adopted Urban Forest Management Plan.

NEXT STEPS:

The next steps include evaluating resource needs, prioritizing actions and securing funding for implementation. The proposed FY 2016-2021 Capital Improvement Program (CIP) includes implementation funding for the Urban Forest Management Plan, including street tree planning, additional tree care, parkway removal projects and tree planting. Staff is developing preliminary cost estimates to address the tree and tree planting sites evaluated in the report. Given the current drought, it may be that the Department’s priority is to remove hardscape, beginning with sites where trees currently exist, and then moving to vacant sites in order to prepare the site for a future planting.

ATTACHMENT: Street Tree Infrastructure Conditions Project Report
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