AGENDA DATE: August 27, 2014

TO: Parks and Recreation Commission

FROM: Administration Division, Parks and Recreation Department

SUBJECT: Parks and Recreation Department Historic and Specimen Tree Drought Action Plan

RECOMMENDATION:

That the Commission receive a report on the Parks and Recreation Department Historic and Specimen Tree Drought Action Plan and progress on implementation of other urban forest drought response efforts.

DISCUSSION:

The Parks and Recreation Department (Department) developed a number of urban forestry actions to provide appropriate tree care and management given the current drought conditions. Some of these actions were presented to the Commission in July as part of the Parks and Recreation Strategic Drought Response Plan and include:

1. Continue to water young un-established trees
2. Provide water to historic and specimen trees where feasible
3. Provide water, where necessary, to drought intolerant trees that are also rare
4. Make adjustments in pruning practices for tree health and public safety as necessary
5. Apply mulch in parkways where needed
6. Postpone new plantings
7. Implement outreach and education initiatives

In addition to these drought response action steps, the Department developed a focused plan for historic and specimen trees. Recognizing the social, cultural and environmental value of these trees, the Historic and Specimen Tree Drought Action Plan (Plan) documents current tree health and grow space conditions and constraints, and outlines action steps and opportunities that can be implemented to support tree health and longevity. The Plan is attached to this staff report. The Plan is a working document that will be modified, as needed, depending on outcomes, changed drought
conditions, and/or revised priorities. All actions are also supported by the City’s April 2014 Urban Forest Management Plan.

Actions developed as part of Historic and Specimen Tree Drought Action Plan include:

Water management
- Providing water in parkways where feasible.
- Contacting individuals where historic trees exist on private property to support their knowledge in proper tree care and watering needs.
- Providing mulch to trees where feasible to decrease evaporation.

Pest and disease management
- Providing pest management solutions as is necessary to support tree health.

Grow Space Improvement Options
- Evaluating hardscape removal or permeable paver installation where feasible.
- Expanding planter space where feasible.

Outreach and Education
- Distributing door hangers and making personal contact with homes/businesses adjacent to historic and specimen trees to solicit assistance with tree watering.

IN PROGRESS:

Since developing the Plan, several actions have been implemented. These include:

- Water meters installed on the Forestry water truck and trailer.
- Documentation and analysis of water use.
- Supplemental watering of the East Anapamu historic Italian Stone Pines and distribution of door hangers to solicit watering assistance by neighbors.
- Inspections of all historic and specimen trees for overall tree vigor, foliage health, signs of pests, and any defects to the roots, collar, and branches.

In support of the broader approach to address tree care during the drought, the Department has also:

- Used of social media outlets and City resources to solicit assistance in street tree watering and proper tree care.
- Updated the City’s Forestry website on tree care and watering information.
- Developed a city-wide information mailer to solicit community help in street tree watering.
- Initiated efforts to make presentations and collaborate with community groups on urban forestry efforts.
NEXT STEPS AND CONSIDERATIONS:

Since it is anticipated that drought conditions will persist, the Department believes additional resources will be needed to maintain City Street trees and Park trees. Existing resources are not adequate to address the most sensitive trees. In addition, as drought conditions persist, larger mature trees are being adversely affected and will require supplemental water. The Department is currently evaluating a number of options as discussed below.

*Increase the number of trees that receive supplemental water*

Currently young trees, historic trees and rare trees that are drought intolerant are prioritized to receive water during the drought. Staff resources currently include one full time water truck driver that is able to water 400 trees in a month. These trees primarily represent 100 young trees that are watered once a week. Other sensitive trees only need water once every two weeks or once a month. Staff is currently developing plans that would identify which additional trees would receive water.

*Expand staff and equipment resources*

In recent weeks, the Department has assigned the Young Tree Care Specialist and an hourly staff member to water trees using a water trailer. It is anticipated that these staff, or other Forestry staff, will be needed on a regular basis in order to address all of the 650 most sensitive trees, including the 71 Historic Italian Stone Pines. It requires an estimated 70 hours alone to water the 71 trees due to their location, and parkway and soil conditions.

To further address the water needs of other City trees, it may be necessary to purchase a second water trailer, increase staff resources (re-direct additional existing staff and/or increase hourly staff) as well as contract with private tree companies. Staff is evaluating whether to install Gator Water bags for young trees which could increase watering efficiencies and free up staff time to water other trees. Staff is also investigating the use of other devices, such as the plastic traffic barriers piloted in the City of Los Angeles, as lower cost methods to deliver water to City trees.

*Continue to solicit community support to water City trees*

The Department will be completing its direct mail campaign in September. While that campaign as well as other community outreach initiatives will likely lead to some residential participation in the watering of City trees, it is not likely to completely offset the growing needs of all trees as drought conditions persist.
Determine funds required to expand watering resources

Staff is currently reviewing water costs to date, identifying equipment and staff resource needs and determining funding options. The discussion and table below provide some preliminary information about potential options and their estimated costs. Further evaluation of tree needs and target areas is needed to refine these estimates.

Some costs, such as the purchase of an additional water trailer ($7,660), and the Gator Bags ($3,050) would be one-time. Other costs for staff and the purchase of water will be ongoing. The annual full-time cost for the Young Tree Care Specialist and an hourly would be $100,000. The re-direction of other Parks Division staff would be an estimated $75,000. Additional hourly staff to support park maintenance would be needed at a cost of $25,000. Any re-direction of existing staff would impact other park and tree maintenance duties.

If the Department determines contract services are needed, it is anticipated that the cost would be $85/hour. At this rate, the weekly rate could be $3,400. The cost of using additional water would depend on the extent of expanded services, climatic conditions and whether the water use triggers the Tier 2 rate. The cost of water, however, would not be significant relative to the cost of labor. In FY 2014, the cost for water was $965. If water use doubled, the cost would increase by a similar amount. Water use would have to more than triple to trigger the Tier 2 allocation.

<table>
<thead>
<tr>
<th>Options to Expand Tree Watering</th>
<th>Estimated Cost</th>
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<tbody>
<tr>
<td><strong>Staff Resources</strong></td>
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<tr>
<td>Young Tree Care Specialist and Hourly Staff</td>
<td>$100,000/year</td>
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<tr>
<td>Parks Grounds Maintenance Staff</td>
<td>$75,000/year</td>
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<td>Hourly staff to back-fill parks maintenance</td>
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<tr>
<td><strong>One-Time</strong></td>
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<tr>
<td>Water Trailer</td>
<td>$7,660</td>
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<tr>
<td>Gator Bags (100)</td>
<td>$3,050</td>
</tr>
<tr>
<td><strong>Private Contract ($85/hour)</strong></td>
<td>$3,400/week</td>
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The above information will be included in the Parks and Recreation Drought Response Update to City Council in the Fall. The Department will continue to evaluate to what extent existing staff and equipment resources might be redirected to support the work plan, and whether funding for additional resources will needed.
ATTACHMENT: Draft Historic and Specimen Tree Drought Action Plan

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