



REPORT TO COUNCIL

City of Sacramento

17

915 I Street, Sacramento, CA 95814-2671
www. CityofSacramento.org

STAFF REPORT
August 30, 2005

Honorable Mayor and
Members of the City Council

Subject: Urban Forest Best Management Practices Implementation Plan and Urban Forest Enhancement Program Update

Location/Council District: Citywide, All Council Districts

Recommendation: For information only.

Contact: Bob Fleming, Park Maintenance Services Manager, (916)808-6301
Jack Harrison, Urban Forest Superintendent, (916)808-6258

Presenters: Bob Fleming, Park Maintenance Services Manager, (916)808-6301
Jack Harrison, Urban Forest Superintendent, (916)808-6258

Department: Parks and Recreation

Division: Urban Forest Services

Organization No: 4713

Summary:

In 2003, the City Council authorized funding for an industry expert to complete a study of industry best practices for the management of our municipal urban forest program. The Sacramento Tree Services Best Management Practices Review and Report was completed in 2004. City staff, with assistance from the Citizen's Advisory Committee for Parks and Recreation, and community stakeholders, reviewed the study and developed an Urban Forest Best Management Practices Implementation Plan (Attachment 1) and an Urban Forest Enhancement Program (Attachment 2). On March 8, 2005, the City Council approved the Implementation Plan and authorized \$600,000 for the English Elm Project portion of Phase 1 of the Urban Forest Enhancement Program. Most of the tasks listed in the Implementation Plan are underway or have been completed. The English Elm and reforestation projects are on schedule and will be completed in the fall of 2005.

Committee/Commission Action:

On August 11, 2005 the Parks and Recreation Commission was provided with a progress report. The report was received as information only with no action required.

Background Information:

The City of Sacramento's urban forest is estimated to include about 1 million trees. Approximately 160,000 of these are trees located along streets, in parks, and in other public places. For decades the City's Urban Forest Services staff has provided consistent care and maintenance of the City's urban forest. Over the years, the challenges of maintaining a mature urban forest in a manner consistent with the industry best practices have increased.

In 2003, the City Council authorized funding for an industry expert to complete a study of industry best practices for the management of municipal urban forest programs. The Sacramento Tree Services Best Management Practices Review and Report was completed in 2004. The report recommended changes in the following areas:

- Tree care and reforestation,
- Public education and information services,
- Staff evaluation and development,
- Work systems and practices, and
- Operation policies and procedures.

The Department of Parks and Recreation established a Best Management Practices Ad Hoc group of industry experts and members of the community to work with City staff and the Parks and Recreation Citizen's Advisory Committee to address the study's recommendations. The result of the collaboration is the Best Management Practices Implementation Plan and Urban Forest Enhancement Program.

Since the March 8, 2005 City Council approval of the Implementation Plan and the Urban Forest Enhancement Program, City staff with the assistance of the Sacramento Tree Foundation and others, has made significant progress on several items (Attachment 1). Starting this fall, three of the four citywide objectives of the Urban Forest Enhancement Program will be underway. First, the City in collaboration with the Sacramento Municipal Utility District (SMUD) and the Sacramento Tree Foundation will plant approximately 300 new trees in each Council District (Attachment 3). Second, since the large backlog of citywide tree maintenance work has been reduced, the City is able to dedicate one crew to do block-by-block proactive pruning for one month in each Council District (Attachment 4). Finally, the condition of approximately 20 percent of the English Elm population will be assessed and appropriate action taken (Attachment 5). Continuation of these projects beyond FY06 will depend upon available funding.

Financial Considerations:

The English Elm Preservation Project portion of first phase of the approved Urban Forest Enhancement Program (Attachment 2) is in progress. There is an additional \$100,000 pending in the FY06 budget, dependent on the outcome of labor agreements, to complete the work on Phase 1 currently in progress. There are nine remaining phases with an estimated cost of \$5.4 million.

Environmental Considerations:

Implementation of the Urban Forest Best Management Practices and improvements for Urban Forest Maintenance Services will insure the longevity of existing trees and includes a proactive planting program to increase the number of trees to a recommended canopy standard.

Under the California Environmental Quality Act (CEQA), the environmental impact is considered insignificant during the English Elm Remediation process. The loss of canopy cover will be offset by the reforestation program with appropriate species, and additional plantings throughout the City to ensure a healthy and growing urban forest for generations to come.

Policy Considerations:

It is good management practice that the management of our urban forest be consistent with industry standards and best practices. This project is consistent with and supports the City's Strategic Goals to improve and expand public safety and achieve sustainability and livability.

Emerging Small Business Development (ESBD):

None at this time. Selection of any contractors to carry out the projects and tasks prescribed in the Implementation Plan will follow city-established guidelines for inclusion of ESBD firms.

Approved by: 
ROBERT G. OVERSTREET II
Director of Parks and Recreation

For City Council Information:

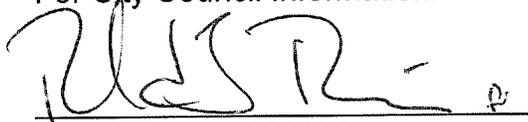

ROBERT P. THOMAS
City Manager

Table of Contents:

| | | |
|----|------|---|
| Pg | 1-4 | Report |
| Pg | 5-7 | Attachment 1 Urban Forest Implementation Plan |
| Pg | 8-10 | Attachment 2 Urban Forest Enhancement Program |
| Pg | 11 | Attachment 3 Reforestation Project |
| Pg | 12 | Attachment 4 Proactive Pruning Program |
| Pg | 13 | Attachment 5 English Elm Project |

ATTACHMENT 1

**URBAN FOREST MAINTENANCE SERVICES
BEST MANAGEMENT PRACTICES
IMPLEMENTATION PLAN**

| BMP RECOMMENDATION | DESCRIPTION | TARGET COMPLETION | % OF COMPLETION |
|---|--|--------------------------|------------------------|
| 7.1 Develop Strategic Plan | Vision, mission statement. Objectives. Tree Program Strategic Plan. (BMP Action Plan) | Sep 2005 | 60% |
| 7.2 Revise City Tree Ordinance | Recommend revisions | Oct 2005 | 80% |
| 7.4.2 Increase Operational Efficiencies | Reduce reactive pruning, increase pre-planned pruning (See 7.9) | Oct 2005 | 90% |
| 7.5 Tree Services Citizen's Advisory Group | Make recommendations to the CAC | Jan 2005 | Complete |
| 7.6 Public Information Education Program | Coordinate with the Sacramento Tree Foundation for public education and information | June 2005 | Complete |
| 7.7 Staffing | Review staffing levels and job descriptions to identify needs of the Tree Services Program | Jan 2006 | 90% |
| 7.8 Inspection Program | Develop, implement inspection program | Sep 2006 | 90% |
| 7.9 Distribution of Services | Establish priorities and follow a system for proactive planting, pruning and removal | Feb 2006 | 33% |
| 7.11 Policies, Procedures and Specifications Document | Develop written document after all operational changes have been implemented | Feb 2006 | 10% |
| 7.12 City Tree Inventory | Conduct a complete inventory of the City tree population. | Jan 2006 | 0% |

| BMP RECOMMENDATION | DESCRIPTION | TARGET COMPLETION | % OF COMPLETION |
|---|---|-------------------|-----------------|
| 7.13 Work Management System | Procure a user-friendly work management information system | Jan 2006 | 0% |
| 7.14 Benchmarking System | Develop a benchmarking system for tree selections, canopy cover, planting practices, etc. | Aug 2005 | 10% |
| 7.15 Training Program | Development in-house training program | Sep 2005 | 50% |
| 7.15.1 Professional Associations | Expand staff participation in professional associations | Jul05 | Complete |
| 7.16 Equipment Inventory and Replacement Plan | Develop an equipment inventory and replacement plan including condition and period of usefulness. | Jan 2005 | Complete |
| 7.17 Tree Selection Policy | Develop policy consistent with ISA Best Practices | July 2005 | Complete |
| 7.18 Tree Canopy Coverage Plan | Develop canopy coverage goals and increase plantings | Jan 2006 | 50% |
| 7.19 Tree Installation Policy | Develop a tree installation policy and specs to insure proper timing, site prep and installation | Jan 2005 | Complete |
| 7.20 Post-Planting Care Procedures | Develop post-planting procedures to help enhance survival rates and reduce future maintenance costs | Jan 2005 | Complete |
| 7.21 Low Limb Pruning Procedures | Develop low limb pruning procedures for the Tree Maintenance Section and the Tree Pruning Section | Oct 2005 | 90% |
| 7.22 Mature Tree Pruning Practices and Schedule | Establish a mature tree pruning practices and schedule according to ANSI A300 practices | July 2005 | Complete |
| 7.23 Pest Management | Develop IPM Program for long-term tree management | Jul 2006 | 50% |

| BMP RECOMMENDATION | DESCRIPTION | TARGET COMPLETION | % OF COMPLETION |
|--|---|----------------------|--------------------|
| 7.25 Green Waste Recycling Program | Develop a green waste recycling program for using wood products and debris created by urban forest maintenance activities | Jan 2006 | 40% |
| 7.41 Funding and Volunteer Resources | Identify and develop supplementary funding and volunteer resources. | Nov 2005 | 10% |
| | | | |

ATTACHMENT 2

City of Sacramento Urban Forest Enhancement Program

Introduction

Sacramento has a long and proud history as the “City of Trees”. The urban forest within the City of Sacramento is estimated to include about one million trees. Of this amount, approximately 160,000 are City owned trees located along streets, in parks, and in other public places. It is well known that a healthy and well-managed urban forest provides many benefits such as improved property values, energy conservation, cleaner air, and community pride.

City staff has developed a proposed phased program to address the current needs of Sacramento’s urban forest.

The objectives of the program outlined below include the following:

- Address the aging English Elms within the City (approx. 1,700 trees).
- Complete a citywide Tree Inventory.
- Eliminate the backlog in tree maintenance and establish proactive pruning cycles.
- Accomplish citywide preservation and reforestation goals.

Phase 1 (FY 05-06)

| | |
|---|-----------|
| English Elm Preservation Project (Assess and take action on 20% of English Elm trees, plus start-up costs for program, such as equipment, etc.) | \$600,000 |
| Reforestation Planting (approx. 2400 Trees) | \$100,000 |
| Total | \$700,000 |

Phase 2

| | |
|--|-----------|
| Complete citywide tree inventory | \$600,000 |
| Reforestation Planting (approx. 1,000 trees) | \$100,000 |
| Total | \$700,000 |

Phase 3

| | |
|--|------------------|
| English Elm Preservation Project (Assess and take action on 10% of English Elm trees) | \$250,000 |
| Begin proactive pruning | \$340,000 |
| Reforestation Planting (approx. 1,000 trees) | \$100,000 |
| Total | <u>\$690,000</u> |

Phase 4

| | |
|--|------------------|
| English Elm Preservation Project (Assess and take action on 10% of English Elm trees) | \$250,000 |
| Continue proactive pruning | \$340,000 |
| Reforestation Planting (approx. 1,000 trees) | \$100,000 |
| Total | <u>\$690,000</u> |

Phase 5

| | |
|--|------------------|
| English Elm Preservation Project (Assess and take action on 10% of English Elm trees) | \$250,000 |
| Continue proactive pruning | \$340,000 |
| Reforestation Planting (approx. 1,000 trees) | \$100,000 |
| Total | <u>\$690,000</u> |

Phase 6

| | |
|--|------------------|
| English Elm Preservation Project (Assess and take action on 10% of English Elm trees) | \$250,000 |
| Continue proactive pruning | \$340,000 |
| Reforestation Planting (approx. 1,000 trees) | \$100,000 |
| Total | <u>\$690,000</u> |

Phase 7

| | |
|--|------------------|
| English Elm Preservation Project (Assess and take action on 10% of English Elm trees) | \$250,000 |
| Continue proactive pruning | \$140,000 |
| Reforestation Planting (approx. 1,000 trees) | \$100,000 |
| Total | <u>\$490,000</u> |

Phase 8

| | |
|--|------------------|
| English Elm Preservation Project (Assess and take action on 10% of English Elm trees) | \$250,000 |
| Continue proactive pruning | \$140,000 |
| Reforestation Planting (approx. 1,000 trees) | \$100,000 |
| Total | <u>\$490,000</u> |

Phase 9

| | |
|--|------------------|
| English Elm Preservation Project (Assess and take action on 10% of English Elm trees) | \$250,000 |
| Continue proactive pruning | \$130,000 |
| Reforestation Planting (approx. 1,000 trees) | \$100,000 |
| Total | <u>\$480,000</u> |

Phase 10

| | |
|--|------------------|
| English Elm Preservation Project (Assess and take action on 10% of English Elm trees) | \$250,000 |
| Continue proactive pruning | \$130,000 |
| Total | <u>\$380,000</u> |

Ten-Phase Total: \$6,000,000

ATTACHMENT 3

URBAN FOREST REFORESTATION PROJECT

To increase the tree canopy coverage throughout the City of Sacramento, the Urban Forest Services Division, with the assistance of the Sacramento Municipal Utility District (SMUD) and the Sacramento Tree Foundation, will plant approximately 2,400 street trees during the fall months in 2005.

Approximately 400 planting locations have been identified in each District to insure there will be at least 300 sites where the residents agree to care for the new tree. Trees will be planted in planting strips, or within the City right-of-way in front yards where there is no planting strip.

The Sacramento Tree Foundation will assist by contacting the residents to insure that they will care for the tree and to allow the resident to choose the type of large canopy tree to be planted. SMUD has agreed to match the City's cost of purchasing trees not to exceed \$40,000. Urban Forest Services Division staff will expend an estimated \$90,000 of City funds to purchase and plant the trees. Following planting, City staff will care for the new trees by providing water and pruning where needed for one year.

Public information about this project will be placed on the City web page and information will be provided to the media.

ATTACHMENT 4**PROACTIVE TREE PRUNING PROGRAM**

In an effort to help preserve and enhance the health of our urban forest, the Urban Forest Services Division will begin block-by-block pruning on October 1, 2005. City crews will spend one month in each Council District pruning trees as needed. Crews will cover as much of the Council District as possible and will resume where they left off when they return after servicing all other Council Districts.

In addition to the block-by-block pruning, City crews will continue to respond to citizen requests for service, handle emergencies, and provide a variety of other tree care related tasks and projects.

By random selection, the following will be the order in which block pruning will occur:

| | |
|---------------|--------------------|
| October 2005 | Council District 1 |
| November 2005 | Council District 5 |
| December 2005 | Council District 8 |
| January 2006 | Council District 7 |
| February 2006 | Council District 6 |
| March 2006 | Council District 2 |
| April 2006 | Council District 4 |
| May 2006 | Council District 3 |

Once all Council Districts have been serviced, the cycle will repeat in the same order.

ATTACHMENT 5

ENGLISH ELM PROJECT

Purpose

- The removal of structurally unsound trees.
- The preservation of trees through nontraditional pruning methods.
- Reforestation of large canopy shade trees in appropriate locations.

History

- Sacramento's English elms are over 100-years old and were planted between 1870-1910.
- In 1938 a catastrophic windstorm blew over 500 elms and loosened the roots on another 300 elms to the extent they had to be removed.
- The elms were topped to a height of 55-65 feet to prevent anymore from blowing over.
- In August 1990, Dutch elm disease was confirmed in Sacramento.
- August 1990 to present, 268 elms (American, English, Siberian and Chinese) have been removed because of Dutch elm disease.
- In November 1995, Dutch Elm Disease Resistant Elms became available in California.

Program Plans and Status

- Private registered consulting arborist are conducting aerial inspections on 20% of the total English elm population. This is a random sample of 240 English elms along the streets and in the parks. Inspections began in July 2005 and will be completed by October 2005.
- Remedial work (removal/pruning) will be performed by a private contractor. Removals will follow standard procedures for 30-day posting and notification of property owner unless tree is in eminent danger of failing.
- Pruning work will occur after mid-October because of Dutch elm disease concerns and be completed by April 2006.
- Public education has included presentations at neighborhood meetings in neighborhoods most directly impacted by the program. Information about this program will also be on the City's web page. The Sacramento Bee carried a story about the project on June 30, 2005
- Urban Forest Service's staff will carry out the reforestation program in City park strips.