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• NORTH
• SOUTH
• CITY-WIDE

October 5, 1990

**Budget and Finance Committee
Transportation and Community Development Committee
Sacramento, California**

Honorable Members in Session:

SUBJECT: Status Report of Dutch Elm Disease

SUMMARY

This report is a follow-up to the September 4, 1990 report to the City Council regarding Dutch Elm Disease (DED) in the City of Sacramento. This report provides the City Council with the current status of DED and actions the Department of Parks and Community Services is taking in response to the disease. This report is provided for information only.

BACKGROUND

The City of Sacramento has a population of approximately 15,000 elm trees on public property and another several thousand on private property. DED is a contagious fungus disease that only attacks elms and related species such as zelkovas. Tree death may occur within a few weeks or gradually, branch by branch, over several years.

In July 1990 City Tree Services notified the State Department of Forestry that an elm tree at 10th and G Streets displayed signs of DED. Laboratory testing by the State determined that the tree did have DED on August 28, 1990. Additionally, three more trees tested positive for the disease. The Department of Parks and Community Services took immediate action. Within 48 hours of the DED diagnosis, the trees were removed and the wood buried according to State guidelines.

The following steps are being taken by the Department of Parks and Community Services in response to DED:

1. City Tree Services, in cooperation with the State Department of Forestry, is currently assessing elm trees for signs of DED. Twelve trees are now being tested. They are located in the downtown area, Dry Creek Road in North Sacramento, and Freeport Boulevard south of Meadowview in South Sacramento.
2. The City will remove any positively diagnosed trees within 10 days, well in advance of the 20 days required by the State Department of Forestry guidelines for DED.
3. On September 13, 1990, all City Tree Services crews received refresher training on inspection procedures for DED from the State Department of Forestry and Fire Protection. The City invited all area local government agencies and park districts to attend the training. Six agencies sent representatives to the training. A second training session was held the next week at the County Administration offices. Approximately 15 agencies were represented at that training. The City will continue to keep other agencies informed regarding latest information on DED in the Sacramento area.
4. A City Tree Services team will continue to inspect all elm trees in the City, both public trees and private trees, for signs of DED.
5. Tree Services has prepared an informational handout which will help the public understand the disease and what steps they should take if they think their tree may have DED (see attached Exhibit A). The handout will be distributed during the elm tree inspections.
6. Status reports will be presented to the City Council and the City Manager on a quarterly, or as needed, basis regarding DED.
7. The Department will work with the State Department of Forestry, the County Agricultural Commission, the Sacramento Tree Foundation and other cities, counties and park districts regarding DED. The City will coordinate weekly meetings with officials from the State and County who comprise the DED project team.

City Tree Services will continue a proactive program for elm trees which began ten years ago. In 1980, the City recognized that the elm trees were in a state of decline and began a reforestation program to remove the failing elm trees and replant with a variety of species including oak, sycamore, liquidambar, chinese pistache, maple and ginkgo, among others. The City has been removing from 80 to 200 elms each year for the past ten years.

With the diagnosis of Dutch Elm Disease, the number of elms removed each year may increase. At this time, City Tree Services does not know how many elm trees may die as a result of DED. Recent experience in Marin County provides the best comparison available as to what may happen in Sacramento. The worst year for DED in Marin was 1985 when they lost 154 trees (1.5 percent of their population of 10,000 elm trees). The climate in Marin is cooler and damper than Sacramento and the trees are planted further apart. The heat and the close proximity of elms to each other in Sacramento may accelerate the spread of the disease. The dryness of the climate

may help slow the disease. Based on what has happened in Marin County, the State Department of Forestry and the City Arborist believe that a worst case scenario for Sacramento would be a loss of from two to three percent of the elm population in a single year. This would mean approximately 300 to 450 trees removed in a year due to DED. The cost for removal and disposal of 400 trees is approximately \$760,000.

Tree Services is anticipating that a quarantine area for elm trees will be established for the City of Sacramento within the next several weeks. A quarantine area will mean that no elm wood can leave the area and no elm trees can be sold or brought into the area. The boundaries will be established by the State Department of Food and Agriculture. Staff anticipates that the quarantine will become effective in several weeks. The most significant impact of the quarantine will be the elm wood waste disposal procedures.

The Department is working with the State and the Department of Public Works, Solid Waste Division, to find the most economical method of disposing of the elm wood waste. Tree Services' current wood yard on North B Street is reaching capacity. With the diagnosis of DED, elm wood can no longer be stored at that facility. A mature elm tree generates approximately 20 tons of wood waste. Options for disposal include the City Landfill at 28th and C Streets, a private landfill, or chipping the wood within 24 hours. All elm wood must be buried or chipped within 24 hours to prevent the spread of the disease. Chipping the wood waste may be difficult because of the size and volume of the wood produced by the elm trees. Staff is currently investigating a chipper that can handle the volume of elm waste as well as other disposal options. Recommendations regarding wood disposal will be presented to City Council by Public Works.

FINANCIAL DATA

City Tree Services' current budget of \$3 million includes \$120,000 for the removal of approximately 50 to 100 elms annually. In a worst case scenario, \$760,000 would be required to remove and dispose of the wood from 400 elm trees. The wood waste disposal procedures required due to the discovery of DED will impact the disposal costs for all elm wood, both for trimming and removals. All elm tree wood waste will be required to follow the same disposal procedures whether or not the individual tree has been diagnosed with DED.

If the disease were to spread rapidly or if wood disposal costs become extreme, additional funding for removal and disposal may be required. See Exhibit B for estimates of the impact of DED on Tree Services' budget.

POLICY CONSIDERATIONS

No change in the City's current policy regarding elm trees is called for at this time.

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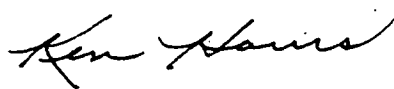
MBE/WBE EFFORTS

None.

RECOMMENDATION

This report is provided for information only.


Respectfully submitted,



KEN HARRIS, Manager
Parks & Recreation, City Wide

APPROVED FOR INFORMATION

APPROVED:


FOR SOLON WISHAM, JR.
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ROBERT P. THOMAS, Director
Parks & Community Services

Contact Person: Ken Harris, 449-5384

October 16, 1990
All Districts

RPT:jb

DUTCH ELM DISEASE IN THE CITY OF SACRAMENTO

WHAT IS DUTCH ELM DISEASE (DED)?

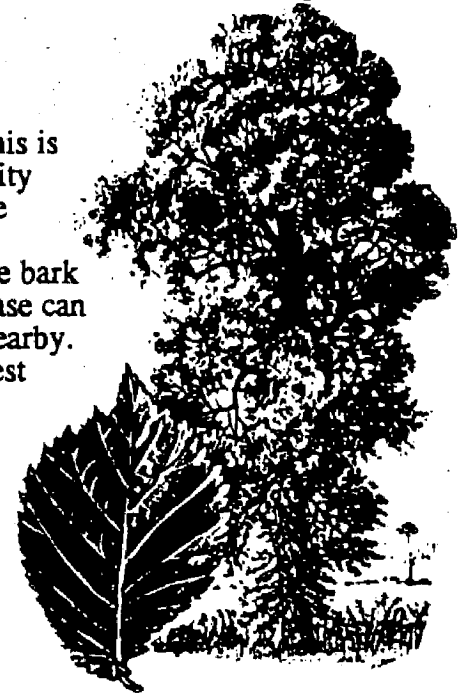
Dutch Elm Disease is a fungus wilt disease which clogs the elm tree's water conducting system. Symptoms of the disease are sudden wilting or yellowing of the leaves on individual branches or the entire tree. Wilted leaves curl, turn from dull green to yellow and brown, often falling prematurely. Tree death may occur within a few weeks or gradually, branch by branch, over several years.

HAS DUTCH ELM DISEASE BEEN FOUND IN SACRAMENTO?

Yes, Dutch Elm Disease has been found in two large elms on "G" Street in downtown Sacramento. Within 48 hours after the discovery both Elm trees and one adjacent tree were removed and buried at the City Landfill. The City of Sacramento is taking the discovery of Dutch Elm Disease very seriously. There are approximately 15,000 Elm trees on City property and another 2,500 on private property within the City limits.

HOW DOES DUTCH ELM DISEASE SPREAD?

DED is most often spread from tree to tree by the elm bark beetle. This is a different beetle from the elm leaf beetle which has been present in City elm trees for many years. The elm leaf beetle causes leaves to become transparent and drop prematurely but does not kill the tree. The elm bark beetle spreads the Dutch Elm Disease fungus by feeding under the bark and spreads the disease by moving from tree to tree. Dutch Elm Disease can also be spread from an infected root system to a healthy one planted nearby. Elm bark beetles also breed in chopped or diseased wood and may infest trees from woodpiles. That is why burying wood from infected trees is critical in stopping the disease from spreading.



HOW CAN I TELL IF MY TREES ARE ELM TREES?

Only elm trees and related species such as Zelkovas can contract DED. The drawing here represents the most common elms in the Sacramento area. Most of these trees were planted in the early 1900's and are quite large.

WHAT STEPS IS THE CITY TAKING TO CONTROL THE SPREAD OF DED?

The City of Sacramento Tree Services personnel have received additional training on identifying trees with Dutch Elm Disease and proper methods for removing infected trees. Staff has begun a comprehensive program to inspect all elm trees in the City of Sacramento and have suspect trees tested for the disease. Trees diagnosed with DED will be removed immediately.

WHAT CAN I DO?

If you suspect that you have an elm tree with Dutch Elm Disease you should:

1. Confirm that the tree is an elm species.
2. Consider whether the tree may have elm leaf beetle symptoms rather than Dutch Elm Disease.
3. Contact City Tree Services at 449-5304 if you suspect Dutch Elm Disease in the City limits.

If you suspect an elm tree in the County of Sacramento, telephone 440-6291.

The City of Sacramento Tree Services is hopeful that with early detection, proper methods of removing diseased trees and the drier climate of Sacramento, the spread of Dutch Elm Disease can be controlled and tree loss can be kept to a minimum. Your assistance with this effort is appreciated.

ELM TREE REMOVAL COSTS *IMPACT FROM DUTCH ELM DISEASE IN SACRAMENTOBest Case Scenario

10 additional trees to be removed annually due to DED

Removal cost including
stump grinding (\$1,500 per tree average) \$ 15,000

Wood Disposal **

Dump fee \$150

Mileage 100

Labor 150

\$400 per tree

\$ 4,000

\$ 19,000

Worst Case Scenario

400 additional trees (2-3 per cent of total City elm tree population)
to be removed annually due to DED

Removal cost including
stump grinding \$ 600,000
(\$1,500 per tree average)

Wood Disposal **

Dump fee \$150

Mileage 100

Labor 150

\$400 per tree

\$ 160,000

\$ 760,000

* Estimates for elm tree removals by City staff.

** Assumes wood disposal at a private landfill.