

DATE ISSUED: August 31, 2005

REPORT NO. 05-174

ATTENTION: Honorable Mayor and City Council  
Docket of September 6, 2005

SUBJECT: Proposed Regulatory Revisions to Brush Management Resulting from the  
Cedar Fire

REFERENCE: City Manager's Report No. 04-017 dated January 21, 2004

### SUMMARY

#### Issues:

1. Should the City Council adopt changes to the Municipal Code Chapter 14, Article 2, Division 4; Chapter 5, Article 5, Division 1; and Chapter 5, Article 5, Division 92 to modify the requirements of brush management pursuant to the recommendations of the Fire Chief?
2. Should the City Council amend the implementation program of City's Local Coastal Program to allow the modified requirements of brush management to be applicable in the Coastal Zone upon certification by the California Coastal Commission?
3. Should the Council adopt changes to the Municipal Code Chapter 4, Article 4, Division 3, and Municipal Code Chapter 14, Article 2, Division 3 to allow the use of goats as an additional method of performing brush management?
4. Should the Council direct staff to take the necessary actions to increase the conservation of land under the City's MSCP Subarea Plan by 715 acres to 52,727 acres?

#### Manager's Recommendations:

1. Certify Subsequent EIR/ Environmental Assessment and Addendum No.31245, and
2. Adopt changes to brush management regulations as outlined in this report and attachments, and
3. Amend the implementation program of the City's Local Coastal Program to allow the modified requirements of brush management to be applicable in the Coastal Zone upon certification by the California Coastal Commission, and

4. Adopt changes to allow the use of goats for the purposes of performing brush management, and
5. Direct staff to take the necessary step to increase the conservation goal of the City's MSCP Subarea Plan from 52,012 acres to 52,727 acres

Environmental Review:

A Subsequent EIR/EA and Addendum No. 31245 have been prepared for the project in accordance with the State of California Environmental Quality Act Guidelines. Significant impacts to biological resources have been identified and findings and a Statement of Overriding Consideration are provided for Council consideration.

Fiscal Impact:

Brush management regulation changes will increase the Zone 2 thinning requirements to 65 feet or more. This could ultimately increase Park and Recreation's annual brush management budget shortfall to more than \$4 million in order to perform brush management for approximately 600 acres of urban/open space interface per year. In addition, nine additional staff members would ultimately need to be added to the Fire-Rescue Department's Fire Prevention Bureau to reinstate the Brush Management Program to the level established following the 1985 Normal Heights fire, resulting in an annual reoccurring cost of \$697,000. However, full scale implementation is not being proposed at this time, but could instead be phased in over the next several fiscal years if funding becomes available. Some one-time funding of up to \$2.16M for additional Park and Recreation brush management staff and crews may become available if the most recent FEMA grant request is approved. Although the Park and Recreation Department has identified brush management needs, at this time the City Manager is not recommending additional staff from the General Fund to address brush management requirements.

BACKGROUND

On January 27, 2004, the City Council adopted a resolution (R-298827) directing the City Manager to take the necessary actions to amend the brush management regulations in the San Diego Municipal Code to require a 100 foot defensible space between structures and native wildlands, to consider the fiscal cost of ongoing brush management on public lands, and develop a public outreach and training program.

The following report outlines the City Manager's proposed changes to existing Municipal Code §142.0412 to provide for greater defensible space by modifications to brush management regulations as developed by the City Manager, Fire-Rescue, Development Services, Planning Department, and the Park and Recreation. The report also describes changes to Municipal Code §44.0307 and §142.0360 to allow the use of goats in the City of San Diego for brush management, and changes to Municipal Code §55.0101 and 55.9201 so that the brush management regulations are only in Chapter 14 of the Municipal Code.

The proposed changes, combined with the revisions to the Building Code to require fire resistant roofing (Class "A" roofing) effective March 1, 2004, are designed to help provide fire and rescue service time to control and extinguish potential fires. Additional changes to the Building Code to

create more fire resistant structures are proposed to be brought to City Council simultaneously with these brush management revisions.

## DISCUSSION

### **Brush Management Revisions**

Each year San Diego Fire-Rescue responds to over 800 vegetation fires. During certain times of the year, native vegetation can pose a wildfire risk and requires proper management of the urban wildland interface. The City has a total of over 24,000 acres of open space managed by Park and Recreation which creates approximately 220 linear miles of urban wildland interface. Over 16,000 acres of City open space presents a moderate to severe fire threat to communities throughout the City, not including the thousands of privately owned interface properties. One of the most proven pre-fire management actions that can be done by a city or community is creating a defensible space of 100 feet between the structure and the vegetation. A proper defensible space not only reduces the size and intensity of the fire, but also allows the Fire Department time and space to mount a defense against impending fire.

The current brush management regulations in Chapter 14--the Land Development Code--were developed in conjunction with the Multiple Species Conservation Program (MSCP). The regulations were approved by City Council in November 1997 and by the California Coastal Commission in November of 1999. They were made effective with the entire Land Development Code January 3, 2000. Also, Chapter 5 of the Municipal Code includes duplicate brush management regulations, which are proposed to be repealed.

The current Municipal Code consists of a two-zone system of brush management based upon the location of the property west or east of Interstate 805 and El Camino Real. Zone One is the area adjacent to structures and consists of pavement and permanently irrigated ornamental plantings. Zone Two is an area of native plant material thinned to reduce fuel load. The width of Zone One currently varies from 20 feet to 40 feet west of Interstate 805 and El Camino Real, and 30 feet to 45 feet east. Zone Two currently varies from 20 feet to 30 feet west of Interstate 805 and El Camino Real, and 40 feet to 50 feet east.

Analysis of the Cedar Fire indicates that if the Santa Ana winds had continued, it is likely that the fire could have burned all the way to the ocean. The climatic coastal influence would not have been a factor in this event. This has prompted the Fire-Rescue Department to re-evaluate the current distinction and propose a single citywide brush management system. In light of the size and severity of the Cedar Fire, and the other wildfires in October 2003, the Fire Chief is recommending a citywide 100 foot brush management area consisting of 35 feet of Zone One and 65 feet of Zone Two. In addition, it is proposed that Zone Two would be expanded accordingly to achieve 100 feet of brush management where Zone One is less than 35 feet from existing structures. A standard 100 foot brush management zone would allow for a greater defensible space against impending fire. The proposed code amendment language for brush management is shown in *Attachment 1*.

A Subsequent EIR, Environmental Assessment and Addendum have been prepared for consideration and certification by the City Council. Significant impacts to biological resources

have been identified and findings and a Statement of Overriding Consideration are provided for Council consideration. The proposed brush management zones are consistent with a previously adopted Memorandum of Understanding (MOU) between the state and federal wildlife agencies and the San Diego County Fire Chief's Association dated February 26, 1997.

Modification of the Municipal Code will require the adoption of an ordinance by the City Council becoming effective 30 days after the second reading. In the Coastal Zone, final adoption of the proposed revisions would require certification by the California Coastal Commission to modify the City's Local Coastal Program. After adoption of brush management by the City Council, staff will apply to the California Coastal Commission for modification to the City's Local Coastal Program.

### **Brush Management Responsibilities**

#### Park and Recreation Department Open Space Division

The Open Space Division manages over 24,000 acres of City-owned open space, and is responsible for performing Zone Two brush management along the urban edge where these lands adjoin developed areas. A Geographic Information System (GIS) study and more detailed analysis estimated that adoption of the proposed average brush management Zone Two width of 65 feet citywide would affect approximately 1,180 acres. Ideally, the entire brush management area would be thinned on an average of every two years, or about 590 acres per year under the revised regulations. Current FY05 staffing consists of 3.25 budgeted positions and one outside contractual crew, capable of thinning approximately 70 acres of brush per year. Due to the lack of staff, brush management is typically handled on a complaint basis. Adjacent residents who do not want to wait for City staff can receive a Right of Entry permit to perform brush management in compliance with City regulations on open space property.

#### Fire-Rescue Department, Fire Prevention Bureau

The Brush/Weed Section is responsible for receiving and evaluating all complaints in which vegetation conditions pose a potential fire threat to a community. When the complaint is on private property and an inspection reveals violations, a Notice of Violation (NOV) is sent to the property owners. The Brush/Weed Section then monitors the property for compliance. When the complaint is on City-owned property and an inspection reveals violations, a referral is sent to the appropriate City department. Because of staffing reductions, brush management issues are only addressed on a complaint basis. Additional duties include participating in community outreach, including giving educational presentations, and responding to Route Slips and AIMS complaints from the Council offices, Mayor's Office and City Manager's Office as well as complaints from other governmental agencies and municipalities. The section also monitors the Proactive Weed Abatement and the City Non-Profit Weed Abatement Programs.

The Proactive Weed Abatement Program consists of approximately 1,800 private lots throughout the City that may contain weeds. The Fire-Rescue Department has a no-fee contract with a private company, Fire Prevention Services, Inc., that performs inspections, sends a NOV, and conducts abatements of lots that do not voluntarily comply. The Fire Prevention Bureau

monitors the work of Fire Prevention Services, Inc., and assists in conducting abatement hearings for property owners that request them.

The City Non-Profit Weed Abatement Program is a yearly program in which Fire Prevention Bureau staff, with the help of other City departments, identifies weed violations on City-owned property. Once the property has been identified and inspected, staff meets on-site with private contractors who bid on the removal of the weed violations. Once the bid(s) has been awarded, the Fire Prevention Bureau staff monitors the removal process by the private contractor.

### **Use of Goats for Brush Management**

Staff in Park and Recreation Open Space Division has investigated the use of goat herds to perform brush management in certain areas. Goats are used by a number of other cities and counties for weed abatement and brush management in certain areas or situations, including the cities of Laguna Beach, Sunnyvale, San Luis Obispo, Escondido (State Historic Park Site), Los Angeles, Claremont, San Francisco and the Bay area, Berkley Hills, Menlo Park, Sacramento (Marina), Mill Valley, Los Altos Hills, Oakland, San Mateo, Santa Cruz, and others. It is generally thought that goats can perform brush management for approximately 25 percent to 50 percent of the cost of a contract crew, although at a slower rate per day. It is estimated that 100 goats can thin an acre per day if each goat consumes 5 percent of its body weight daily. A six-day pilot project with a small herd of 40 goats on a 1/3-acre open space hillside in Tierrasanta was implemented beginning April 12, 2004. Initial evaluation indicated the goats accomplished a form of the required 50 percent thinning with few problems, although it took six days to complete the 1/3 of an acre (compared to human crews, who typically can do 1/3 of an acre in one day). More goats would be brought on-site to reduce the number of days needed to complete the 50 percent thinning goal. It should be noted that the goats would be a supplement to human crews, and could not replace them. They would most typically be used in steeper areas where the habitat is not sensitive, assuming staging and access is possible.

In order to implement the use of goats for brush management in the City of San Diego, certain sections of Chapter 4 of the Municipal Code, Health and Sanitation, need to be amended. Currently, Article 4, Division 3, Section 44.0307 states, in part: “No person shall bring or maintain, within a non-agricultural area within the City, any cattle, bovine animals, goats or sheep.” *Attachment 2* outlines the proposed code amendment language, as approved by the Natural Resources and Culture Committee, to create an exemption for the use of goats on private and public land if certain criteria in the code are met, without the requirement to obtain a permit. Additionally, the City fence regulations, contained in Chapter 14, Article 2, Division 3, need to be amended to permit the use of temporary electric fencing in non-agricultural zones to contain goats in the areas to be targeted for brush management. *Attachment 3* includes the proposed amendments to Section 142.0360, Electrically Charged and Sharp-Pointed Fence Regulations, as approved by the Natural Resources and Culture Committee.

### **Increasing Conservation Target under the City MSCP**

In the Environmental Impact Report/Environmental Impact Statement (EIR)/(EIS) for the MSCP several assumptions were used to evaluate whether the proposed Multi-Habitat Planning Area (MHPA) would result in adequate coverage of species and habitat. A key assumption was the

identification that a 200-foot strip inside the MHPA was assumed for indirect impacts, including brush management. These indirect impacts to covered species were considered significant but mitigated to below a level of significance with implementation of preserve management and planning guidelines identified in each City's MSCP Subarea Plan and associated implementing regulations.

In addition, a MOU was signed between the Fire Chief's Association, the California Department of Fish and Game, and the U.S. Fish and Wildlife Service, which allows for a 100 foot brush management zone. The City's proposed brush management zone is within the 200 edge effect area identified in the MSCP EIR/EIS, and is also consistent with the MOU signed by the Fire Chief's Association.

The California Department of Fish and Game and the U.S. Fish and Wildlife Service have expressed concern regarding the expansion of Zone Two brush management as it relates to potential impacts to the MSCP, as shown in their September 27, 2004 letter included as *Attachment 4*. The expansion of Zone Two brush management into the MHPA would cover approximately 715 acres of public and private lands adjacent to existing development. To further reduce the impacts to the MHPA from the proposed expansion of brush management zones, the wildlife agencies have requested that the conservation target identified in the City's MSCP Subarea Plan be increased. City staff is recommending an increase of 715 acres. This would result in an increase of the conservation target from 52,012 acres to 52,727 acres pursuant to the provisions of Section 10.2.A (Lands to be Conserved) and 10.8 (Assembly and Protection of the MHPA) of the City's Implementing Agreement.

Based upon previous direction by the City Council Rules Committee (April 17, 2000) on MSCP Land Acquisition, City staff feels comfortable that the new conservation target can be achieved. City staff would work out the necessary process to modify the conservation target and the City's MSCP Subarea Plan accordingly.

### **Educational Outreach**

Staff from Park and Recreation, Fire, Development Services, and Environmental Services have worked jointly to prepare a brush management training program for City crews and contractors, as well as landscape contractors and members of the public who are doing brush management. City brush crews have been trained in the field on improved techniques. A PowerPoint presentation has been developed explaining the importance of brush management for fire protection, and depicting environmentally sensitive brush management techniques that comply with the current and proposed code requirements. This PowerPoint is being used in presentations to community, homeowner and professional groups about fire protection and brush management.

Staff is working with City TV staff on the production of a video explaining the importance of brush management, and demonstrating proper brush thinning techniques. This video is expected to be completed and to start airing on Channel 24 following Council approval of the brush management revisions. It can also be provided to community groups. One-page flyers that are handed out regularly to homeowners explaining brush management regulations and techniques have been jointly developed by Fire, Park and Recreation and Development Services. The Fire-

Rescue Department, through a grant from the Burn Institute, developed a customer-friendly, 12-page Canyon Fire Safety Brochure. Approximately 250,000 copies were placed in a Sunday edition of the Union Tribune. Distribution and funding was provided by Fireman's Fund Insurance Company. The brochures were also distributed door to door by local fire stations in June of last year and are available at every City fire station, library and Council office.

## **Fiscal Ramifications**

### Park and Recreation Department Open Space Division

Current Open Space Division FY06 staffing consists of 3.25 budgeted positions: one Utility Supervisor, two Laborers, a portion of a District Manager, and \$121,100 per year to hire outside contractual crews four days per week, at an annual cost of \$366,534. The number of staff has steadily declined since 1987 by 17 budgeted positions, requiring Park and Recreation to reduce other budgeted expenditures to supplement brush management when possible.

At this current staffing level, an average of approximately 70 acres of brush is thinned per year. The areas needing brush management are typically steep, often difficult to access, and the labor involved is physically challenging. Given the current level of staffing, brush thinning mostly occurs in response to referrals from the Fire Department, route slips, specific adjacent property owner complaints, or for a limited number of identified high priority areas. For open space areas that need brush thinning but cannot be accommodated in an acceptable timeframe, Right of Entry Permits are issued if requested by adjoining property owners who are willing to perform this difficult work in compliance with City standards.

In January 2004, the City and County of San Diego received a Department of Labor National Employment Grant through the California Employment Development Department (EDD) to hire temporary workers displaced by the October fires to do restoration and brush management in fire-affected areas. This grant enabled the City to have two temporary crews work on Mission Trails erosion control and restoration projects, and on fire clean up and, initially, some brush management in the Scripps Ranch, Tierrasanta and Mission Trails areas. These crews started in March and have been extended to work through December 2005. Unfortunately, shortly after the grant was received, State EDD opined that use of these grant funds is restricted to only those lands that were actually burned, which would disallow any further brush management work on "non-burned" lands.

Additionally, in March 2004, Park and Recreation submitted a grant application for \$4.99M to the State Office of Emergency Services (OES)/Federal Emergency Management (FEMA) Hazard Mitigation Grant Program to obtain Federal Stafford Disaster Relief and Emergency Assistance Act funding for an Open Space Brush Management Program. Federal funding requested was \$3.74M, with a proposed \$1.24M City match (existing Park and Recreation Department and EGF funding). Alternative options were included for funding at 75 percent and 50 percent of these amounts. This grant would have provided funding for start up costs--including equipment purchase--and a one to two-year pilot program to hire City staff and contract crews to thin the approximate 590 acres of open space brush needed per year. This 2004 grant application was not funded, and a second similar OES/FEMA grant for \$2.16M (Federal funding of \$1.59M; City match of \$574,640) submitted in March 2005 was also not funded. At the suggestion of OES

staff, a third grant for the same \$2.16M amount is currently being prepared, but has been split into three separate applications for different geographic areas. This grant will be submitted in September 2005; notification would not be expected until early spring of 2006. .

**FY 2006 and Beyond Needs:** If the City is awarded all or a portion of the \$2.16M OES/FEMA grant currently being applied for, it would provide start-up funding for a portion of the first and potentially second year implementation costs for an increased brush management program through FY07. If this grant is not received, it is anticipated that staffing could gradually be “ramped up” over multiple fiscal years as funding becomes available in order to eventually fully implement this increased level of brush management. Alternative funding sources to the General Fund, including additional grants, or some form of assessment, may need to be explored. To eventually perform brush thinning for the currently estimated 1,180 acre urban interface area every two years would necessitate a permanent increase in brush management staff from 3.25 to 33.25 budgeted positions, allowing an increase in annual acres thinned from 70 to 590 acres. As shown in the table below, total cost for brush management would be approximately \$4.2M for the first year start up (including one-time expenditures), and \$3.5M per year thereafter.

<b><i>Park and Recreation Department Brush Management Program</i></b>	<b><i>Current Costs</i></b>	<b><i>Additional Costs</i></b>	<b><i>Total Costs Year 1</i></b>	<b><i>Total Costs Ongoing</i></b>
Positions (FTE)*	3.25	30.00	33.25	33.25
Salaries + Non Personnel Expenses (uniforms, refuse fees, etc.)	\$245,434	\$2,016,972*	\$2,262,406	\$2,262,406
Contracts	\$121,100	\$968,800	\$1,089,900	\$1,089,900
Administrative Staff**		\$178,866	\$178,866	\$178,866
One Time Expenses (Vehicles, Office space, computers, tools etc.)		\$674,730	\$674,730	\$0
<b>Total</b>	<b>\$366,534</b>	<b>\$3,839,368</b>	<b>\$4,205,902</b>	<b>\$3,531,172</b>

\* Includes 9.00 Utility Workers I, 16.00 Laborers, 2.00 Utility Supervisors, 1.00 Grounds Maintenance Manager.

\*\*Consists of 1.00 Administrative Aide II, 1.00 Principal Drafting Aide

Fire Department - Fire Prevention Bureau

Nine staff members would be required to reinstate the Brush Management Program to the level established following the 1985 Normal Heights fire. Over the years, this program has been reduced to two staff members and is unable to meet the demands of the public for guidance and enforcement of brush management issues. A needs assessment report has indicated that the total cost of reinstatement would be \$697,000 per year. It is anticipated that staffing could be gradually increased over the next several fiscal years to reach the desired level. Additionally, there will be a continued effort to explore and evaluate all grant funding opportunities.

**Funding Options**

1. General Fund: The General Fund has supported the brush management programs since 1988, however, it is not currently capable of supporting significant increases in program expenditures. Incremental additions could be considered during the budget process over the next several fiscal



years in order to achieve higher staffing levels for brush management inspections and implementation.

2. Maintenance Assessment District: Given the potential unmet brush management and fire prevention staffing needs and expected budget shortfalls for upcoming fiscal years, use of a maintenance assessment district as a funding option could be explored. This unique citywide brush management maintenance assessment district would have to be voted on by all affected City of San Diego property owners. Estimated costs of forming such a district, due to the size of the district, the complexities of the assessment engineer's report in determining special benefit for potentially hundreds of thousands of affected parcels in proximity to open space, and to the citywide balloting effort, could be as high as \$1 million. This initial expenditure could be included in the district's year one budget and recaptured if the district is successfully formed, but repayment would not occur if the district fails.

#### ALTERNATIVE(S)

##### 1. **Brush Management Revisions:**

The City Council could continue with the existing brush management regulations without pursuing any modifications. The Fire Chief could continue on a case-by-case basis to require modifications to the brush management zones and/or require additional architectural features as is currently allowed for under the Municipal Code §142.0412(i). This alternative will not significantly reduce the brush management program staff needs, which exist regardless of the proposed code changes.

##### 2. **Alternative to Funding Expanded Brush Management Program: Increased Right of Entry (ROE) Permits**

Currently ROEs are issued at the request of adjoining private property owners if there is a brush management need and City staff is unable to schedule brush management in a reasonable period of time. This option could be publicized in affected communities to increase awareness of this option, and City staff would provide information, direction, tracking, and brush pick up. This would require at least one additional brush management crew, and staff to both administer and support the property owner program, at an estimated total cost of \$620,000 for the first year and approximately \$500,000 thereafter, including some potential increased contract costs. It is unclear how many additional acres could be thinned annually under this alternative, but given the difficulty of the work and small number of ROE's currently requested, an annual increase of 30-40 acres may be a reasonable estimate, resulting in a total annual brush management area of 100-110 acres.

##### 3. **Use of Goats for Brush Management**

Do not direct the City Manager to take the necessary steps to allow the use of goats for brush management within the City of San Diego.

##### 4. **Increased Conservation Target of MSCP**

Do not direct the City Manager to take the necessary steps to increase the conservation target of the MSCP Subarea plan by 715 acres.

Respectfully submitted,

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Jeff Bowman  
Fire Chief

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Approved: Lisa Irvine  
Deputy City Manager

IRVINE/JB

- Attachments:
1. [Draft Municipal Code Amendments to Chapter 14, Article 2, Division 4; Chapter 5, Article 5, Division 1; and Chapter 5, Article 5, Division 92 \(Brush Management\).](#)
  2. [Draft Municipal Code Amendments to Chapter 4, Article 4, Division 3, Section 44.0307 \(Goats-Health and Sanitation\).](#)
  3. [Draft Municipal Code Amendments to Chapter 14, Article 2, Division 3, Section 142.0360 \(Goats-Fences\).](#)
  4. [Letter from U.S. Fish and Wildlife Service and California Department of Fish and Game dated September 27, 2004 regarding mitigation for potential impacts of brush management revisions.](#)

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