

**1993 Vegetative Fuels Management Plan (Updated)
to be incorporated into the
Wildland Fire Plan - City of Santa Barbara Fire Department**

The 1993 Vegetative Fuels Management Plan addressed City lands both within and outside the high fire hazard area. The Plan outlined vegetation management projects on these lands and is incorporated into the Wildland Fire Plan. Additional vegetation management areas are included in the Wildland Fire Plan to ensure that Fire Department Defensible Space Standards are met for City lands. Specific project specifications and project areas are outlined below.

Vegetation Management will involve reducing the amount of flammable vegetation within the specified area by approximately 1/3 to 1/2 in areas outside the Fire Department's defensible space requirements within each zone. Vegetation management will be targeted on the removal of flammable vegetation (brush and understory) by preferentially removing exotic plants, thinning, pruning and limbing of vegetation to remove fire ladders, limbing up of oak overstory, pruning out of dead material, and thinning out continuous areas of brush using a mosaic pattern.

In areas where City lands are in close proximity to structures and within the structures defensible space requirements the focus of vegetation removal will be to meet the Fire Department's Defensible Space Requirements (See enclosed High Fire Hazard Defensible Space Requirements).

In areas with heavy accumulations of eucalyptus, trees may be thinned to obtain 10 to 16 trees per 1,000 square feet. Eucalyptus trees left in place will be limbed up 8 to 10 feet from the ground. Leaf and ground litter will be retained in the area for soil protection. No eucalyptus chips or debris will be placed within oak forests, coastal sage scrub, riparian corridors or banks of riparian corridors, or other areas dominated by native plants. Chips will be placed in eucalyptus areas.

Large eucalyptus branches greater than 8 inches in diameter may be left on site provided they are placed outside the drip line of trees left on site, do not result in a heavy accumulation of logs on site, will not roll down slopes into drainages, and they do not pose a safety or fire hazard.

Roadways within the vegetation management areas will have vegetation thinned and removed to meet Fire Department requirements for flammable vegetation removal and thinning within 10 feet from the edge of public roadways and 13.6 inches vertically (See enclosed roadway requirements).

Vegetation management work shall be completed outside of the defined nesting season for birds (i.e. before April 1 and after July 30). If vegetation management work must occur within the project areas during the breeding season (April 1 to July 30), a site survey shall be conducted by a qualified wildlife biologist to determine any presence of nesting birds. Vegetation management activities shall not occur within 200 feet of active nests located during this survey. The hours of work will include weekdays between the hours of 8:00 to 5:00 pm. No work will be completed on weekends or designated holidays.

Within the vegetation management areas no entry will be allowed into streambeds and brush removal shall be limited to the removal of dead brush that is easily accessible and the removal of exotic pest plants within a 15-foot buffer along the top of banks, as long as the work does not cause damage to the bank structure. No placement of cut vegetation shall occur within a 15-foot buffer along the top of banks. The top of bank shall be defined by the first bank out from the present, active stream channel (denoted by an incised bank and cobble bed). The 15-foot buffer shall be measured out from the top of bank, marked in the field by an approved biologist and the City project manager prior to any work occurring in drainage areas.

To maintain adequate regeneration rates of oak trees within vegetation management areas the following procedures will be followed:

- No live oak trees will be removed.
- Oak saplings will be protected from damage or cutting during the project.
- As much as possible other healthy native understory components such as toyon, lemonadeberry and current will be retained within oak forests, as long as they do not create fire ladders.
- Lower oak branches (to six feet) of oaks will be thinned of branches to reduce the total plant volume, dried grasses, dead branches and resinous woody species shall be removed.
- Young coast live oak saplings and seedlings shall not be removed during brush modification in grasslands and scrublands.
- Chips will not be spread more than 6 to 8 inches in depth. All chip piles should be kept at least 5 feet from the dripline of oak trees.
- Any eucalyptus debris (e.g. chips, branches, and leaves) should be kept out of native habitats, as this material tends to inhibit the germination of most species.
- All removed oak limbs shall be clean-cut, using the best industry standard practices.

Where slopes exceed 30% and the surface vegetation is reduced to approximately 50% or greater of cover (compared to bare ground), the City project manager shall consult with the Building and Safety Division and/or project Biologist as necessary to determine if additional soil erosion retention measures are necessary to prevent erosion.

Four vegetation management methods will be utilized; 1) hand cutting and chipping of vegetation, 2) hand cutting and multi-cutting of vegetation, 3) hand cutting and prescribed burning of vegetation, or 4) prescribed burning of vegetation.

1) **Hand cutting and chipping** - Hand cutting and chipping vegetation involves cutting vegetation using hand tools (McLeod's, Pulaski's, or shovels), chainsaws, weed whips, and mowers. Cut vegetation will then be chipped on site and chips will be spread back on the project area where physically feasible and shall be spread no greater than 12 inches in depth. No chipped material will be placed into any streambeds. The chipper will be moved around as work occurs. Actual placement of the chipper will depend on the ability to minimize the distance vegetation must be hauled to the chipper. The chipper will not be placed within sensitive habitat areas as outlined in the Biological Assessment. Refueling of the chipper will occur outside of riparian areas or any sensitive habitat. The chipper will not be stored or maintained within 50 feet of a stream or riparian area. Using this vegetation management method would result in minimal

ground disturbance since the root structure of vegetation will be left in place and chips generated from vegetation reduction will be placed back on site where physically feasible.

2) **Hand cutting and multi-cutting** - Hand cutting and then multi-cutting involves cutting vegetation (using hand tools, chainsaws, weed whips, and mowers) and cut vegetation is then reduced in size by cutting into lengths no longer than 6 inches long. The multi-cut vegetation is then left on the ground within the project area no greater than 12 inches in depth. Minimal ground disturbance would occur using this method since the root structure of vegetation will be left in place and biomass generated from vegetation reduction will be placed back on site.

3) **Hand cutting and prescribed burning** - Hand cutting and using prescribed burning involves vegetation being hand cut (using hand tools, chainsaws, weed whips, and mowers) and then vegetation is prescribed burned using two prescribed burn techniques. The first prescribed burn technique is called pile burning. It involves cut vegetation being stacked into piles on site. The vegetation in the piles is allowed to dry and the piles are then ignited to consume dry vegetation. Piles will range in size from 10 * 10 * 10 feet to 12 * 12 * 25 feet. The second prescribed burn technique is called broadcast burning. It involves cut vegetation being broadcast on the ground, allowed to dry and then the area is ignited in small patches, not more than 1 acre in size.

All prescribed burning would be conducted under safe burning conditions outside of the Fire Department's designated fire season and will require a California Air Resources Board designated burn day and the development of a burn plan that will be approved by the Fire Chief and Santa Barbara County Air Pollution Control District. A pile burn plan will outline weather, topography and fuel within the project area, the prescribed burn objectives, the required fire organization and resources needed to control the fire, and the weather parameters under which the burn can be conducted safely and with minimal smoke disturbance.

4) **Prescribed burning** - Prescribed burning is a broadcast burn technique where dry grass is left standing and then ignited over a small area not more than 1 acre in size.

All prescribed burning would be conducted under safe burning conditions outside the Fire Department's designated fire season and will require a California Air Resources Board designated burn day and the development of a prescribed burn plan that will be approved by the Fire Chief and Santa Barbara County Air Pollution Control District. A prescribed burn plan will outline weather, topography and fuel within the project area, the prescribed burn objectives, the required fire organization and resources needed to control the fire, and the weather parameters under which the burn can be conducted safely and with minimal smoke disturbance.

Prescribed burning of cut vegetation would result in minimal ground disturbance. Hand tools (pulaski's, McLeod's, shovels) would be used to clear a shallow trench or line no more than 2 inches in depth around each pile, group of piles, or broadcast burn area to confine the fire and catch any burned materials that may roll downhill during burning.

A copy of the Santa Barbara City Fire Department Pile Burn Plan and Prescribed Burn Plan are available by request at City Fire Station 1, located at 121 W. Carrillo, Santa Barbara, CA, 93101.

In areas where it is not physically feasible to put chip or multi-cut material back on the ground, alternative uses for the generated biomass will be developed. Biomass created from this project may provide for economic opportunities for alternative sources of products and energy within the community. These alternatives must be economically viable for the project and will be developed during environmental review.

A plan to eradicate and minimize the potential spread of exotic pest plants will be developed for this plan and be implemented for each project area. Exotic pest plants identified in the project area will be removed during initial vegetation management work. Any follow-up treatments to eradicate exotic plants shall be the responsibility of the City Department. The Biological Assessment will outline treatments to eradicate these plants and methods to incorporate into project areas.

A monitoring plan will be developed for the project areas and shall be the responsibility of the City project manager to complete according to schedule.

Maintenance of vegetation management within each City area will vary. Areas that require grass and weed-whipping will require annual maintenance. Maintenance of vegetation management work in areas with shrubs, brush, and trees will be on a five-year rotation.

Outlined in the following pages is the City lands identified in the 1993 Plan, recommendations to be incorporated into the Wildland Fire Plan, and updated recommendations for City lands.

EQUESTRIAN CIRCLE/ MISSION PARK AREA

Equestrian Circle

- **Completed** - Implement vegetation management treatment to provide defensible space for firefighting apparatus and personnel and extend this perimeter control line along Mountain Drive. Vegetation management will extend 100 feet along north edge of Mountain Drive (**Area A**) or to the riparian zone. This vegetation management should consist of pruning out dead material, limbing or thinning of eucalyptus (**Area B**), and chipping and scattering biomass throughout the site.
- **Completed** - Weed-whip or mow entrance road (**Area C**) and import chipped biomass material for weed/grass control.
- **Completed** - Import chipped material and spread around horse area (**Area D**).
- **New** - Implement High Fire Hazard Area Defensible Space Requirements as needed throughout park area.

Mission Park

- **New** - Implement 100 foot vegetation management buffer throughout northeast and east portion of parcel 025-273-02 (undeveloped park area only) to allow for increased fire safety to fire personnel and residence.
- **New** - Implement 50 foot vegetation management buffer along east portion of parcel 025-272-001 (undeveloped park area only) to allow for increased fire safety to fire personnel and residence.

- **Completed** - Chipped material should be spread for grass and weed control and reduce potential for spontaneous combustion. Import additional chipped material as necessary.
- **Completed** - Grass and weeds will need annual weed-whipping or mowing unless chipped biomass material is used.

Reservoir #3

- **New** - Insure that vegetation road clearance meets Fire Department's High Fire Hazard Area Defensible Space Requirements.
- **New** - Remove dead vegetation throughout parcel.

Rocky Nook Pump Station

- **New** - Implement vegetation management throughout the Rocky Nook Pump Station.

Sheffield Pump Station

- **New** - Implement vegetation management throughout the Sheffield Pump Station.

PARMA PARK AREA

Parma Park

- **Completed** - **Area A** - Thin and remove chaparral and limb trees 75 feet on each side of the access road through the middle of the open space. Focus of work will be to remove of ladder fuels and dead vegetation. Grasses in this area will be mowed or weed whipped annually.
- **Completed** - **Area B** – Thin and remove 1/3 to 1/2 of the vegetation along open space boundary. Width of vegetation management in this area will be 100 to 200 feet from the open space boundary. Focus of work will be removal of ladder fuels and dead vegetation.. Grasses in this area will be mowed or weed whipped annually.
- **Not Completed** - **Area C** - Thin and remove 1/2 of the chaparral to create a vegetation management buffer along the eastern boundary of the Open Space. Chaparral will be removed in a mosaic pattern clusters and feathered to protect visual quality of the area.
- **Partially completed** - **Area D** - Thin and remove 1/2 of the chaparral along the open space boundary.
- **Completed** - **Area E** - Remove 50 percent of the understory chaparral in oak woodland in northwest area of the open space. Prune out dead material, limb oak trees up to 6 feet oak branches. Remove ladder fuels.
- **Completed** - **Area F** - Thin and remove understory vegetation in olive orchard. Prune out dead material, limb trees up six feet off the ground, chip and scatter chips on site not more than 12 inches in depth. Mow or weed-whip grass areas under trees annually.
- **Not completed** - **Area G** - Thin and remove understory vegetation in eucalyptus grove along upper Parma Road. Limb eucalyptus trees 12 feet from the ground. Remove some mature eucalyptus trees to obtain a ratio of 12 to 18 trees per 1,000 square feet of area.
- **Partially Completed** - **Area H** – Implement vegetation management 100 feet on each side of the access road through the middle of the open space. The focus of work will be removal of chaparral in a mosaic pattern and feathered to protect visual quality of the area. Mow grasses within 50 feet of the road annually.
- **Not Completed** - **Area I** – Implement vegetation management 50 feet on each side of the access road on the east side of the open space. The focus of work will be in a mosaic pattern

and feathered to protect visual quality of the area. Mow grasses within 20 feet on each side of the road annually

- **New - Access Road** - A fire access road that starts at the main entrance off of Stanwood Dr. and runs in a northeast direction to the top of the ridge and then goes downhill in a southeasterly direction will be maintained. The effectiveness of the fuelbreak in the Open Space is dependant on the ability of fire personnel being able to access the fuelbreak area. The lower portion of the fire access road along the east end of the open space was washed out during the winter of 1999. This portion of the road allowed fire resources to safely exit the park to Stanwood road. The project proposes to open up the lower portion of the road to maintain this safety route. This portion of the road will require construction of a new road to connect with the Southern CA Edison that exits onto Stanwood Road. This will allow a safe exit for fire resources.
- **New** - Implement thinning, limbing, and pruning along parcel 019-031-002.
- **New** - Implement 150 foot vegetation management buffer along southeast corner of parcel 021-130-002. Allow property owners to complete Fire Department Defensible Space Requirements on Parma Park property within parcel 021-130-002.

Fire Station 7

- **Completed** - Implement vegetation management throughout parcel 021-120-012 (area around Fire Station 7).
- **New** - Restore parcel 021-120-012 to native oak woodland by eradicating scotchbroom and other non-native plants and reseed with native perennial grasses.

Sheffield Reservoir

- **Completed** - Mow or weed whip weed as needed throughout reservoir area.
- **** This area will become an open space and is covered under the maintenance plan developed for Sheffield Open Space. Specific vegetation management actions are outlined is part of the Sheffield Reservoir Project Plan .

HONDA VALLEY / THORNBERRY PARK AREA

Honda Valley Park

- **Completed** - Implement vegetation management treatment 100 feet around the entire perimeter (**Area A**) of both parks. This involves pruning out all dead material, partially thinning clusters of brush, limbing up (6 feet from the ground) large bushes and trees, chipping or multi-cutting and scattering cut biomass on-site.
- **Not completed** - Reduce the amount of non-native vegetation within the riparian zone (**Area B**). Trim up eucalyptus, prune out dead material, chip and scatter chips on site. Keep chipped material out of the water course.
- **Completed** - Import and spread chipped biomass material along the canyon bottom riparian zone (**Area C**) for erosion control and weed abatement.
- **Completed** - Maintain fire access road, with locked gate, for fire protection and park access.
- **Completed** - Mow or weed whip grass area to maintain a low fuel volume vegetation zone along a key ridgetop, in (**Area D**).

- **Ongoing** - City Parks and Recreation and Fire Department staff should work with private landowners to encourage their participation in defensible space landscaping on their private property along the park boundaries (**Area F**).

Vic Trace Reservoir

- **Completed** - Continue moving of grass/weeds at this site and import chipped biomass for future weed control.
- **Partially completed** - Implement vegetation management treatment 30 feet around the entire perimeter (**Area A**) of reservoir as needed. This involves pruning out all dead material, partially thinning clusters of brush, limbing up (6 feet from the ground) large bushes and trees. Vegetation should be chipped and scattered on-site.

GOULD PARK

Gould Park

- **Not completed** - Implement vegetation management treatment to provide defensible space for firefighting apparatus and personnel in addition to reducing the risk from ignitions along Mountain Drive. Vegetation management treatment will extend 100 feet to each side of Mountain Drive when allowed by park boundary. Treatment will use cutting and chipping or cutting and multi-cutting methods.
- **Not completed** - Implement vegetation management treatment 50 feet on each side of Cold Spring Creek trail for 1,000 feet. Treatment will use cutting and multi-cutting methods.
- **Completed** - Continue grass and weed control along Mountain Drive and Cold Springs Trail.

TUNNEL RESERVOIR AREA

Tunnel Reservoir

- **Partially completed for 10 feet on each side of Tunnel Road** - Implement vegetation management treatment to provide defensible space for firefighting apparatus and personnel in addition to reducing the risk from ignitions throughout Tunnel Reservoir and along upper Mission Canyon Roads for a distance 50 feet on each side of the road.
- **Not completed** - Complete vegetation management within entire portions of parcels 23-060-48 and 23-060-49 (Las Canoas and Mission Canyon Road Water Resource areas) to reduce fuel loading.
- **Completed** - Continue grass and weed control along Tunnel Reservoir and Mission Canyon Roads and accessible trails.

RATTLESNAKE CANYON AREA

Rattlesnake Park

- **Not completed** - Implement vegetation management treatment to provide defensible space for firefighting apparatus and personnel in addition to reducing the risk from ignitions along Gibraltar Road. Treatment should extend 100 feet on each side of Gibraltar Road or to park boundary.
- **Not completed** - Implement vegetation management treatment 50 feet on each side of Rattlesnake Canyon trail in parcels 21-010-25, 21-020-01, and 153-280-01.

- **Completed** - Continue grass and weed control along Gibraltar Road, Las Canoas Road and any accessible areas along Rattlesnake Trail.

STEVENS PARK / CATER WATER TREATMENT FACILITY/ LAUREL CANYON AREA

Stevens Park

- **Not completed** - Implement vegetation management treatment 100 feet along the western perimeter of parcel 55-160-48.
- **Completed** - Implement vegetation management treatment 50 feet around the perimeter of parcel 53-032-01, which includes the developed park site.
- **Completed** - Continue mowing, weed whipping and weed control along trial, roads, within meadow, and as needed throughout park.

Cater Water Treatment Facility

- **Not completed** - Implement vegetation management treatment behind Cater water treatment facility within 100 ft along site perimeter.
- **Completed** - Continue grass and weed control throughout reservoir parcels.

Laurel Reservoir

- **New** - Implement vegetation management perimeter treatment around west and south perimeter of Laurel Canyon Park for a distance of 100 feet.
- **Completed** - Continue grass and weed control throughout Laurel Canyon Park and along Laurel Canyon Road.

La Vista Reservoir

- **Completed** - Continue grass and weed control throughout reservoir parcels.

HALE PARK AREA

Hale Park

- **Partially completed**- Implement vegetation management treatment along southwestern perimeter for a distance of 100 feet from the park boundary. Additional clearance due to steepness of slope should be the responsibility of private landowners. Opportunity exists for coordinated effort between private property owners and City.
- **New** - Implement 50 foot vegetation management buffer around perimeter of park, with exception of 100 feet along southwest perimeter.
- **Completed (out to bid)** - Reduce the amount of fuel in brush ravine by implementing vegetation management treatment by using the cut and chip method. Maintain green fuels in natural state. Tie work into mowed areas, perimeter, and eucalyptus vegetation management areas.
- **Partially completed** - Thin, limb and prune eucalyptus areas throughout the park to 10 to 16 trees per 1,000 feet.
- **Completed** - Continue annual grass control by mowing or weed whipping throughout the park.

Reservoir 1

- **New** - Implement vegetation management treatment along perimeter of reservoir for a distance of 50 to 100 feet around perimeter.
- **Completed** - Continue annual grass control by mowing or weed whipping throughout reservoir area.

HIDDEN VALLEY

Hidden Valley

- **Completed** - Continue vegetation management treatment along perimeter slopes 50 feet from the park boundary adjacent to homes (parcel 049-040-034), except in the riparian zone. Leave riparian zone in natural state.
- **New** - Implement vegetation management treatment throughout parcel 049-030-035 and 049-330-013.
- **Completed** - Limb up eucalyptus branches, prune behind pump station, chip biomass and spread chips along trails, roads for grass/weed control.
- **Completed** - Continue to maintain grass area.

SKOFIELD PARK

Skofield Park

- **Completed** - Continue vegetation management treatment to provide defensible space for firefighting apparatus and personnel in addition to reducing the risk from ignitions along Las Canoas road. Treatment to extend 150 feet below Las Canoas road.
- **New** - Implement 100 foot vegetation management buffer along the south portions of parcels 021-071-001, 021-040-024, and 021-030-007.
- **Not completed** - Implement vegetation management treatment 50 feet on each side of primary trails through parcel 021-040-024.

El Cielito Reservoir

- **Completed** - Continue vegetation management treatment throughout parcel.
- **Completed** - Continue grass and weed control throughout parcel.

SLYVAN PARK /LOMA MEDIA

Loma Media Park

- **New** - Implement 50 foot vegetation management buffer along southern perimeter of Loma Media Park.
- **Completed** - Continue weed control and brush thinning on eastern perimeter of park.
- **Completed** - Continue grass and weed control throughout park.

Slyvan Park

- **New** - Implement 70 foot vegetation management buffer on the western perimeter of parcel 019-201-005.
- **Completed** - Continue weed control and brush thinning on western perimeter of park.

- **Completed** - Continue grass and weed control throughout park.

FRANCESCHI PARK

Upper Franceschi Park

- **Completed** - Implement vegetation management treatment throughout parcel 19-101-18.
- **New** - Parcels 019-090-006, 019-090-007, 019-090-008, and 019-090-009 together form the western area of Upper Franceschi. Implement Fire Department Defensible Space requirements around the perimeter of the western area made up of the 4 parcels.
- **Completed** - Implement vegetation management and weed whipping where feasible throughout parcel 019-101-008.
- **Completed** - Implement vegetation management throughout parcel 019-101-009. Fire Department Defensible Space Requirements must be met for the existing structures on the property.

Lower Franceschi Park

Not completed - Implement vegetation management treatment a minimum of 75 to 100 feet on the south and east perimeter of parcel 019-103-001 and 100 feet on the south and west perimeter of parcel 019-191-006 and areas along Mission Ridge Road.

COASTAL CITY AREAS

Escondido Reservoir

- **New** - Implement vegetation management treatment throughout reservoir area.

Cliff Drive Lift Station

- **Not completed** - Implement vegetation management treatment throughout parcel.

Hope Reservoir Booster Station

- **Completed** - Implement vegetation management treatment throughout reservoir area.

LAS POSITAS AREA

Ellings Park (City owned however managed by Ellings Park Foundation)

- **New** - Implement 50 foot vegetation management buffer on the northern portion of parcel 047-010-034 (to protect homes at the end of Live Oak Lane).
- **New** - Implement 50 foot vegetation management buffer on the west, north, and east portions of parcel 049-150-050.
- **New** - Implement 50 foot vegetation management buffer on the east portion of 047-010-049 (to protect homes at the end of Valerio, Calle Linares, Calle Galicia, and Calle Almonte).

601 Las Positas Road

- **New** - Within parcel 047-010-009 limb up all dead palm frawns to 20 feet.
- **New** - Implement 50 foot vegetation management buffer on the west and south portions of parcel 047-010-009.

Campanil Hills Booster Station

- **Completed** - Continue annual mowing and weed whipping.
- **New** - Thin, prune, and trim hedges throughout parcel as needed.

OAK PARK/TALLANT ROAD

Oak Park / Tallant Road

- **Partially Completed** - Implement 50 foot buffer along the western portion of Oak Park adjacent to homes along Tallant Road and the Samarkand area. Within the 50 foot buffer thin out any dead fuel, limb up trees 6 feet, and prune out ladder fuels.