



LARPD Fire Hazard Reduction Plan

Goals:

The Livermore Area Recreation and Park District follows the fire hazard reduction plan as a guiding tool to minimize risk, control and reduce fuel loads in LARPD Open Space Parks. The parks include Livermore Area Recreation and Park District manage five different Open Space Parks.

Sycamore Grove Park: An 847-acre park located in South Livermore. It provides a wide variety of trails, and interpretive programs. Parking is available at both entrances of the park. It is staffed with a Ranger during operating hours and is home base for the Ranger and Interpreter staff.

Holdener Park: Located at 2995 Hansen Road in Livermore. It includes 55 acres and features a multi-use trail perfect for hiking, biking, and horseback riding. Vehicles are encouraged to park at the end of Hansen Road near the water tanks

Brushy Peak: A prominent landmark from both the Livermore Valley and the Central Valley. It covers 507 acres. The preserve has several sensitive features and are considered a sacred place by the Native American People. To protect the area and several of the endangered and threatened species, LARPD offers guided tours with a Ranger. LARPD operates the park in cooperation with the East Bay Regional Park District which owns and manages an adjacent portion of the preserve. East Bay Regional Park District's portion of the park is open to the public daily, and is located on the south slope of the peak

Garavente Wetlands: A 21.4-acre area, densely packed with shrubs, seasonal wetlands, and alkaline soil. Not every plant can survive in these conditions, but this unique seasonal wetland supports unusual plant and animal life and is protected. This wetland preserve is currently closed to the public, but you can take a walk on the nearby Altamont Creek Trail located south of the preserve

Camp Shelly: Located near the south shore of Lake Tahoe. Camp Shelly is 25-site family-friendly campground. It is opened from mid-June through early September. Several sites can accommodate boats, tent trailers, and motorhomes, while a few sites can hold vehicles or trailers up to 24 feet in length and 10 feet in height. In addition, there are sites that can accommodate people with mobility issues. The restroom has flush toilets, hot showers, and is mobility accessible.

Sycamore Grove, Holdener, Brushy Peak, Camp Shelly (?) and Garavente Wetlands. We comply with the Park's Conditional Use Permit issued by the County of Alameda.

The intent is to establish standards for the operation of the parks to provide for the safety of the public and to protect the wildlife and physical resources of the facilities from uncontrolled wildland fires. In addition, the plan is designed to help contain and restrict any wildland fires to be held within the boundaries of the Units.

To achieve these standards, the plan is intended to control and reduce the risk of the ignition or fire spread by treating, removing, or modifying vegetation, debris, and detritus.

This plan has been developed and continues to develop with the cooperation and assistance of both the Alameda County Fire Department and the California Department of Forestry, whom both share jurisdiction for wildland fire control and suppression within LARPD Open Space Parks.

LARPD Open Space Division is operated under the Community Services Division.

The Supervisory staff include:

General Manager: Matt Fuzie

Community Services Manager: Jill Kirk

Field Supervisor: Doug Sousa

Our partners include:

Alameda County Fire Department

Ryan Nishamoto – (925) 833-3473 x1111

Livermore/Pleasanton Fire Department

Aaron Lacey – (925) 454-2301

California Department of Forestry

Russell West – (408) 472-1614

PREPARE:

Control Compartments:

Sycamore Grove and Holdener Park

The core concept behind the Open Space fire guidelines, are to divide the park into defensible compartments with fuel breaks and natural barriers to help contain any wildland fires and to provide safety zones for the public in the event of a wildfire.

For the lower part of Sycamore Grove, the two most prominent barriers are the asphalt trail and the Arroyo del Valle stream channel. To further subdivide the park, additional fuel breaks are to be mowed perpendicular to these major barriers (see map) as well as fuel breaks along the outer boundary of the park perimeter. These additional fuel breaks will divide the park into compartments to slow or allow for the stopping of the spread of a wildfire in the park. The upper part of the park lacks these prominent barriers so it will be divided into compartments entirely using a combination of mowed fuel breaks and the native soil roads/trails which act as firebreaks. With these divisions, should there be a fire in the park; fire agencies should be able to contain a fire in one of these divided zones. In addition to the park wide measures special precautions will be taken around the various structures in the park.

The following measures, when reasonable, shall be completed no later than **May 1st** of each calendar year:

The width of fuel breaks will be a minimum of 2 ½ times the height of the tallest vegetation present when possible.

The height of grasses and other herbaceous vegetation in fuel breaks (mowed areas) shall not exceed 3 inches.

Existing surface fuels greater than or equal to 2 inches in diameter, including dead and down branches, logs and shrubs must be reduced.

The minimum width for the fuel breaks along the park boundaries will be 20 feet.

For fuel breaks to subdivide the park into compartments in areas not adjacent to trails or boundaries the fuel break shall be no less than 15 feet in width.

Fuel breaks along the edges of surface roads in the park shall be no less than 10 feet on both sides of the road where possible.

In areas where a public road is immediately adjacent to the park boundary the fuel break shall be no less than 10 feet wide.

The area around all structures in the park shall have a fuel break mowed with a minimum width of 15 feet.

Brushy Peak and Garavente Wetlands stay in their natural state and when needed Cal Fire will respond

We follow all regulations put out by the National Forest Service for Camp Shelley.



Photo by Glen Florey

Definitions:

- **Fuel break:** A strip or block of land on which the vegetation, debris and detritus have been reduced and/or modified to control or diminish the spread of fire crossing the strip or block of land.
- **Fire break:** Firebreaks may be temporary or permanent and shall consist of fire-resistant vegetation, non-flammable materials, bare ground or a combination of these of sufficient width and length to contain an expected fire.
- **Compartment:** An area not receiving fire mitigation treatment surrounded by either fire breaks or fuel breaks such that a wildfire started in the compartment can be contained or slowed from spreading to other compartments.

Fuel Types:

- **Grass:** Dry grasses burn hot and spread quickly. These fast moving grasses can ignite other larger fuel sources like trees and shrubs.
- **Shrubs:** Both dry and wet shrubs burn aggressively. Mule fat and coyote brush are both examples of native species of baccharis that burn intensely. Not only do these fires burn fiercely, shrub fires can catch larger fuel sources like trees.
- **Timber:** Different tree species burn differently. Eucalyptus burn very hot while willows burn cooler. Live oaks are relatively fire resistant but once oaks catch fire they burn hot. California black walnuts are also a hardwood that burn hot once they ignite.
- **Timber Litter:** This is the dead vegetative material found on the ground. It consists of fallen branches, sticks, leaves, and in some places needles. Due to its dry state and concentration around trees it can work as kindling around hardwood trees.

MITIGATE:

The most effective portion of our fire suppression efforts during the fire season are the fire closures that take place when the temperature is too high, and the humidity is too low. This combination increases the probability of a fire taking place and closing to the public helps minimize the risk during these times. This criteria for fire closures have been used by LARPD in open space for 30 years.



Fire Closure Criteria:

- The relative humidity (RH) is **10%** or less
- The temperature is between **80-89 F** and the RH is **15%** or less
- The temperature is between **90-99 F** and the RH is **20%** or less
- The temperature is over **100 F** and the RH is **25%** or less

* If the wind speed is 20 mph or greater, use the next higher humidity level.

* If none of these conditions are met, but County Fire calls and tells us to close, we will always do so at their request.

Fire Closing Procedure:

- Record weather conditions at the time of closure in the log.
- Change answering machine tape to fire recording. Change back to regular recording at the end of the shift.
- Call Supervisor and the DO to let them know of the closure.
- Patrol park and make sure that it is empty of visitors.
- Hang the appropriate signs at park entrances and close the gates.
- Periodically patrol the park to keep visitors out and observe for dangerous conditions.
- Put signs away at the end of the closing shift.

Other Precautions:

The other invaluable part of our fire suppression efforts is the ongoing daily patrolling of the park done by the ranger staff. Having staff keep a close eye on the facility provides an early warning if a fire does happen.

All patrol vehicles are outfitted in the summer with a 5-gallon wildfire backpack water pumps to deal with any small fires while LPFD is in route. We also use a less combustible weed whip with nylon string during the fire season to maintain trail safety while cleaning up any growth from invasive species like star thistle. This hardened monofilament nylon line is much less likely to start a fire from creating a spark versus a metal blade.

The open space division also has a tow behind water buffalo that we use for supplemental watering of young plants and small fire suppression. Staff gets the water buffalo cleaned and filled so that this tool is ready to use during fire season.

Equipment:

Every season ranger staff uses the following LARPD equipment to create an effective fuel break around trails, signs, parking areas, structures, and benches.

- Tractors (with mowing attachment)
- Brush Cutters
- Lawn Mowers
- Weed Whips

Tractors

Tractors outfitted with an attached mowing deck are typically used alongside wider trails and the paved path at Sycamore Grove Park. It gets the largest coverage per pass (roughly 5ft) and works best on relatively flat terrain. The mower deck height is adjustable so staff can control the length of the mowed grass.



Brush Cutters

Brush cutters are used on smaller width trails and single-track portions of Holdener Park and Sycamore Grove Park. The passes with the brush cutter are roughly 3ft wide. The brush cutter can cut plants and shrubbery as well as long grasses. Though smaller than the mower, the cuts are typically rougher.

Lawn Mowers

Lawn mowers are used on the lawn in the front of the cross house that is used for summer nature camp. Its low weight and ease of use make it ideal for this purpose. It makes smaller passes of 21" allowing it to turn much easier than either the brush cutters or the tractor.

Weed Whips

Weed whips are used for hard-to-reach sections of trails or areas with rough terrain where the tractor or the brush cutters cannot go. They are also ideal for around structures like buildings, fences, and benches. Due to their use of nylon string and not metal blades like mowers use, weed whips are less likely to cause sparking.

Other Mowing

For the larger scale mowing that our equipment is unable to handle we outsource that work to a company named H&N Enterprises out of Pleasanton, CA. H&N mows both the perimeter of Sycamore Grove Park and some of Holdener Park. H&N uses a tractor with a mowing deck that makes 8ft wide passes. This wide fuel break creates a safer area around the park's borders.

RESPOND:

Evacuation Criteria:

- The fire weather reading meets closure criteria.
- There is a fire in the park.
- There is a fire immediately adjacent to the park.
- There is a large fire in the Livermore Valley adjacent to LARPD Open Space

Evacuation Procedure (fire in the park):

- Notify the proper authorities.
- Put on full fire gear.
- Use the water buffalo and patrol vehicles with lights and a PA system.
- Use as many staff as possible to ensure visitor safety.
- Start as close to the fire as possible and fan out, pushing visitors away from the fire
- Once all the visitors are safely out, and another fire department has not yet responded, and it is safe to do so, begin fighting the fire.
- If needed, station a Ranger over night to check hot spots.

This plan is reviewed and updated as necessary.