8.0 FIRE SAFETY

As described in Section 3.3.4, all of the Project Area is located in a Very High Fire Severity Zone (in accordance with AB 337) due to the presence of steep slopes and large areas of chaparral plant communities that are prone to fire. General recommended fire management and safety strategies that should be implemented in the Project Area include: 1) identifying the specific fire risk for both the *Hillside Wilderness Preserve* and *Hillside Recreation* planning areas, 2) developing a Community Wildfire Protection Plan (CWPP) and implementation program, 3) evaluating vegetation and revegetation management practices to best preserve pristine resources while enhancing community safety, and 4) expanding community outreach.

8.1 EXISTING FIRE SAFETY PROGRAMS

Current management practices should be continued to address the natural, fire-based ecology of the Project Area while minimizing risk to persons and property within and adjacent to the Project Area. Details about these existing programs are provided in Appendix C – Existing Conditions. These existing programs include:

1. Mutual cooperation and mutual aid for initial attack, as well as a statewide mutual aid system of fire disasters through an agreement between the City, the Consolidated Fire Protection District of Los Angeles County, and the U.S. Forest Service.
2. Enforcement of the Uniform Fire and Building Codes and State and City ordinances.
3. An active fuel management plan that includes fire prevention and pre-fire suppression measures to control plant fuels along the southern boundary (urban-edge) and along a few of the paved roads that bisect the Project Area.
4. Avoidance or impact reduction strategies focused on the following Project Area/urban-edge sites: north end of Highland Place and brush country west to city limits; Cloverleaf Drive to gate at nursery; Gold Hills, Hidden Valley, Briarcliff, Ridgeside and Oakglade area; Lower Clamshell Motorway Trail; Canyon Park; and all of the Norumbega Drive area, north of Valle Vista.

8.2 STRATEGIES FOR FIRE MANAGEMENT

8.2.1 Assessing and Quantifying Community Wildlife Risk

Wildland fire risk assessments should be conducted to collect the data needed to prepare a Community Wildfire Protection Plan, as discussed in Section 8.2.2.

1. Provide accurate technical information and enlist the assistance of individual residents to remedy hazardous situations in the *Hillside Wilderness Preserve* and *Hillside Recreation* planning areas to enhance the overall safety of the community. Tasks that should be incorporated into this analysis include:
    - Enlist technical specialists to work with firefighters to identify issues, evaluate field conditions, and define hazardous areas with criteria and boundaries.

- Create a baseline map of Fire Hazard Zones using aerial photo interpretation with detailed parcel-based assessment to determine those inhabited areas (e.g., residences and park uses) that would potentially be affected by wildland fires.
- Develop an assessment form to use in the field for those parcels deemed at-risk that will provide data on the fuel load and the fuel characteristics for each vegetative community (e.g., measuring tree canopy crown height, shrub crown height, litter depth).
- Recruit and train student interns to assess individual properties within defined hazardous areas.
- Compare field data with fuel characteristics to assess the potential fire behavior in each vegetation community and to determine the fire risk from existing fuel levels.
- Linkparcel-based database to GIS features to assist in evaluating survey results and to provide a visual format to summarize and communicate the results to the community.
- Assign a fire prevention inspector, if funding becomes available, to manage students and inspect homes after assessments.
- Assemble information documenting wildfire risk: baseline map, parcel-based residential assessment, technical information on vegetation, slope, wildfire history and evacuation routes.

8.2.2 Community Wildfire Protection Plan

A fire management plan should be prepared for the Project Area by working with appropriate agencies such as the CDFG, USFWS, and County and City fire departments. The plan should address all aspects of wildfire planning, including prevention, presuppression, and suppression. Recommended strategies for developing a Fire Management Plan for the Project Area are described below.

1. Continue preparation and implementation of a Community Wildfire Protection Plan (CWPP) that will complement and enhance existing fire prevention and safety programs following guidance from the National Association of State Foresters. The Plan should address the unique conditions found in the Project Area and include the following information:
   - A discussion of the natural and historic role of fire, the existing fire environment, ecological effects of fire.
   - A summary of natural resources (e.g., topography, climate, hydrology, geology, soils, vegetation and wildlife) and their fire risk implications.
   - A summary of the Wildland Fire Risk Assessment findings (See Section 8.2.1).
   - Documentation of management alternatives (e.g., proposed action, no action, mechanical treatment, manual treatment, chemical, grazing, prescribed fire).
   - A detailed fire program by management unit with priorities, treatment schedule and exclusion zones.
   - A discussion of treatment constraints such as air quality and smoke management, wildlife, geologically sensitive areas, aesthetics, and public safety.

- A discussion of wildland fire response readiness for initial attack, as well as a statewide mutual-aid system of fire disasters through an agreement between the City, the Consolidated Fire Protection District of Los Angeles County, and the U.S. Forest Service.
- A description of the urban-wildland interface including local regulations for fire protection for homes adjacent to the Project Area.
- A summary of the community relations and public education program (See strategies for developing this program below).

2. Prepare an implementation plan that prioritizes tasks set forth in the CWPP, identifies implementators, and provides information relating to funding and schedules. Tasks that should be incorporated into this analysis include:
   - Detail community priorities and technical recommendations: identify local priorities for fuel treatment, preferred methods for fuel treatment, management strategies along the wildland-urban interface (See Section 8.2.5), structural ignitability recommendations, and methods to enhance fire response capabilities.
   - Develop an action plan with roles and responsibilities, funding needs, and timetables.
   - Define priority projects with associated costs.
   - Establish an assessment strategy to evaluate effectiveness over the long term.
3. Prepare environmental documentation consistent with the California Environmental Quality Act (CEQA) Guidelines for the Fire Management and Implementation Plan.

8.2.3 Fire Management

The greatest fire danger to the City is from the Wildland Urban Interface (WUI) (e.g., Project Area boundary), where homes meet the 30-50 year brush growth. In these areas, excessive fuel accumulation has created dense chaparral shrubland areas that are especially fire prone, posing a threat to the surrounding homes and communities and the native vegetation itself. The following management strategies are directed at developing fire control methods that will cause the least damage to natural resources while still providing effective fire control.

Management Strategies to Manage Fuel Loads within the Project Area:

Ensure that any strategies developed to address wildfire risks reflect the Resource Management Plan goals and objectives for protecting natural and cultural resources by:

1. Utilizing non-fire techniques to reduce fuel load order to manage severe fire hazard areas at the urban-wildland interface.
2. Evaluating soil, slope, and vegetation of burned areas in the aftermath of a wildfire.
3. Employing temporary soil/slope stabilization measures if an area is subject to soil or slope erosion or failure before vegetation can recover.
4. Revegetating disturbed areas at the urban-wildland interface with plants that are compatible with fuel modification zones, and properly managed to encourage native vegetation to thrive.
5. Permanently locating fuel modification areas utilizing GPS units and incorporating the results into the GIS mapping system for ease in managing these units.

8.2.4 Guidelines for Future Projects

Fire safety in the City is concentrated on suppression, prevention, and emergency care. The purpose of the All-Hazard Mitigation Program (2004), which was developed by the City Fire Department with their inter-agency partners, is to evaluate the effectiveness of existing programs and their potential for improvement in addressing fire issues. Recommended strategies for developing or retrofitting facilities within the Project Area, in accordance with the All-Hazard Mitigation Program, are described below.

1. Locate, design, and manage facilities to reduce their potential fire hazard.
2. Evaluate existing vegetation patterns in terms of their fuel characteristics, such as ease of ignition, relative flammability, fuel load, responsiveness to suppression actions, and ramifications if the vegetation should burn. Where an alternate trail alignment is available, the alignment with the least flammable vegetation should be given priority.
3. Enforce the provisions of the Uniform Fire and Building Codes and State and City ordinances for private and public structures when constructing new or retrofitting existing facilities.
4. In conformance with the "*All Hazard Mitigation Plan Goals, Objectives and Policies*":
    - Provide and maintain fire suppression access to natural chaparral areas.
    - Require landscape plans to be approved by the City Fire Department. Plant materials should to be selected for their compatibility with surrounding natural vegetation taking into account climatic, soil, exposure, and ecological characteristics of the site.
    - Provide adequate fire department access including a continuous circulation system linking foothill neighborhoods. Segments of that system may consist of emergency access roads.

8.2.5 Neighborhood Policies

The proximity of residential development to natural areas of the Project Area prompts the issue of wildfire safety. Fuel modification zones are primarily the responsibility of individual owners. These areas are designed to reduce flame length and radiant heat and allow firefighters to safely protect structures from approaching fires. The current maintenance procedures for the fuel modification zones require the residential properties at Project Area boundaries to participate in the City's annual weed abatement program by mowing, discing, weed whipping, and/or hand-thinning/clearing 200 feet of defensible space around residential structures and out buildings on properties located in the fire zone. In addition, the City applies fire retardant in the interface zone and bulldozes firebreaks at the following locations on an annual basis: Lower Clamshell Motorway (Firebreak), Briarcliff, and the road to Canyon Park. Recommended strategies for managing fuel load along Project Area boundaries are described below.

1. The current fuel load reduction program should be continued.
2. Long-term, the fuel load reduction program may be modified, especially along the southern boundary of the Project Area that borders the developed areas of the City, according to the findings of the CWPP.

8.2.6 Emergency Preparedness

As the entire Project Area is located within the Monrovia Hazardous Fire Zone as defined by the State, the City must maintain due diligence with regard to establishing and following an emergency preparedness plan. Current standard fire prevention practices include: closing Canyon Park during periods of high fire hazard risk, maintaining an evacuation plan for Canyon Park and for the residential areas within the urban interface zone during periods of extremely high fire danger, and maintaining emergency access and egress routes. This plan is currently in effect and is adhered to by Canyon Park staff as well as the agencies under the mutual response MOU. Recommended strategies for ensuring adequate emergency response access to the Project Area are described below.

Strategies for ensuring adequate emergency response access to the Project Area:

1. *Cloverleaf Drive*. This access to the Lower Clamshell Motorway will be for fire management, private in-holding ingress/egress and public pedestrian bicycle access. The Wilderness Fire Station will be a 1st alarm dispatch. Possible relocation of the access gate to minimize impediments to fire safety functions for Wildfire Station may take place. In-place automatic response will be provided as part of a City of Monrovia/Los Angeles County/U.S. Forest Service seasonal agreement.
2. *Highland Place*. This access will be designed to accommodate pedestrians and bicyclists. Vehicular traffic will be limited to fire management and utility operations only. Gateway signage will include emergency response contact information.
3. *Ridgeside Drive*. This access will be designed to accommodate walk-in/bike-in recreational traffic. Vehicular traffic will be limited to fire management, utility operations, and private in-holding emergency egress only. Gateway signage will include emergency response contact information.
4. *Canyon Boulevard.* Retain existing evacuation and closure procedures.
5. *Lower Clamshell Motorway as a Fire Vehicle Access Route and open for pedestrians and bicyclists*.Retain this route as a throughway for emergency response while adhering to California Fish and Game Code Section 1900-1913 pertaining to the protection of *Astragalus brauntonii* (Braunton's milk-vetch). For more strategies on short and long term vegetation management strategies oriented toward the protection and enhancement of Braunton's milk-vetch, refer to Section 6.2.1.

Strategies for Managing Evacuation and Closure of the Project Area:

1. *Evacuation and Closure Procedures*. During high fire risk periods, employ procedures set forth in the Monrovia Canyon Park Fire Emergency Plan (May 14, 2002) for Canyon Park and for the residential areas within the urban interface zone.
2. Close the entire Project Area to any public vehicular or pedestrian access on July 4th and any high fire risk as determined by the Fire Chief. Enlist extra volunteer support to monitor Project Area facilities and trails.
3. As new areas of *Hillside Wilderness Preserve* and *Hillside Recreation* planning areas are acquired and opened to the public, current evacuation and closure procedures should be reevaluated to ensure adequate consideration is given to evacuating and closing the entire Project Area during periods of high fire hazard and other emergency conditions.

8.2.7 Outreach

As stated in Section 7.0, outreach programs directed to local jurisdictions, neighbors, and the public can be an effective information tool. Fire safety programs should be focused on ways to reduce fire risks to persons and property. The program should provide information on: 1) wildfire management, including the natural role of fire in native vegetation communities, 2) fire safe practices when interfacing with these wildland areas, and 3) emergency contact information. Recommended management strategies to increase public awareness of fire ecology and fire safe practices are described below.

1. Provide information to property owners and workers who live and work in the interface regarding the way shrubland fires behave, and establish an evacuation plan to address these areas.
2. Educate and involve the public in establishing community priorities and recommendations as the CWPP and subsequent implementation plans are developed.
3. Enlist the help of technical specialists to communicate results of the Fire Management Plan and educate the public to gain community support for a wildfire protection program by:
    - Meeting with a core technical advisory committee (TAC) that includes fire and vegetation specialists.
    - Contacting adjacent land management agencies including the City, the Consolidated Fire Protection District of Los Angeles County, and the U.S. Forest Service.
    - Enlisting a technical specialist to walk neighborhoods with residents to discuss fire issues.
    - Using the baseline map and community risk assessment to conduct public meeting(s) for describing fire risk and ways to mitigate that risk.
    - Designing and producing information materials for neighborhood residents and schools.
    - Establishing partnerships with local schools and other community-based organizations.