October 22, 2013

Keith Gilless
Board of Forestry and Fire Protection
P.O. Box 944246
Sacramento, CA 94244-2460

RE: Responses to BOF Review of Revised Public Safety Element – Calistoga General Plan

Dear Mr. Gilless,

Thank you for your review letter of June 14, 2013. BOF’s comments were very helpful in identifying actions that the City of Calistoga should take to minimize wildfire risks, facilitate responses to events and recover from these events. We have incorporated many of your suggestions into the enclosed revised sections of the Public Safety and Public Services Elements of the Calistoga General Plan. A matrix identifying the responses is also enclosed.

Partly because of BOF’s comments, we are working on engaging Napa Communities Firewise Foundation to work with affected residents in addressing wildfire hazards in Calistoga.

Please note that the area of Very High Fire Hazard is Calistoga is only 370 acres, and as shown on the enclosed map, is on the periphery of a much larger hazard area that extends well into Sonoma County. Therefore, it is highly likely that any wildfire encroaching into this area would be primarily addressed by Napa County Fire and Cal Fire. Coupled with the fact that Calistoga’s fire-fighting staff and funding resources are very limited, we believe our responses to your comments are appropriate.

We look forward to receiving BOF’s comments on our proposed revisions at your earliest convenience. Please contact me at (707) 942-2763 or lgoldberg@ci.calistoga.ca.us if you have any questions.

Sincerely yours,

Lynn Goldberg, AICP
Planning and Building Director

enclosures
VERY HIGH FIRE HAZARD SEVERITY ZONES IN LRA
As Recommended By CAL FIRE

FIRE HAZARD SEVERITY ZONES
- Very High Hazard (VH)
- High Hazard (H)
- Low Hazard (L)
- Extreme Low Hazard (EL)

Projection: Albers (WGS 1984)
Scale: 1:100,000
Drawn in Adobe Illustrator
September 24, 2008
## Responses to BOF General Plan Safety Element Recommendations

City of Calistoga

<table>
<thead>
<tr>
<th>Board of Forestry Recommendations</th>
<th>Proposed Safety Element Revisions / Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.0 Wildfire Protection Planning</strong></td>
<td>Added multiple new objectives, policies and actions to Safety Element (e.g., Actions A1.2-1 and A1.3-2)</td>
</tr>
<tr>
<td>Identify, reference or create (if necessary) a fire plan for the geographic scope of the General Plan. General Plan (GP) should incorporate the general concepts and standards ... and contain evaluations of fire hazards, assessment of assets at risk, prioritization of hazard mitigation actions, and implementation and monitoring components.</td>
<td></td>
</tr>
</tbody>
</table>

| **2.0 Land Use Planning** | |
| Develop a policy that approval of parcel maps is conditional based on meeting zoning requirements and fire safe development codes. | No revisions needed. Subdivisions within the Wildland-Urban Interface Area are routinely required to submit a Wildland Fire Protection Plan, and measures recommended in the WFPP may be required to be incorporated into the project. |

| **3.0 Housing/structures and neighborhoods** | |
| Identify and map existing housing structures that do not conform to contemporary fire standards in terms of building materials, perimeter access, and vegetative hazards in VHFHSZ by fire hazard zone designation. | Added Actions A1.2-1 and A1.3-2 |
| Identify plans and actions to improve substandard housing structures and neighborhoods. Plans and actions should include structural rehabilitation, occupancy reduction, demolition, reconstruction, neighborhood-wide fuels hazard reduction projects, community education, and other community-based solutions. | Actions A1.2-1 and A1.3-2 added to Safety Element |
| Identify plans and actions for existing residential structures and neighborhoods, and particularly substandard residential structures and neighborhoods, to be improved to meet current fire safe ordinances pertaining to access, water flow, signing, and vegetation clearing. | Actions A1.2-1 and A1.3-2 added to Safety Element |
| Ensure risks to uniquely-occupied structures, such as seasonally-occupied homes, multiple dwelling structures, or other structures with unique occupancy characteristics, are considered for appropriate and unique wildfire protection needs. | Action A1.3-2 added to Safety Element |
| Ensure new development proposals contain specific fire protection plans, actions, and codes for fire engineering features for structures in VHFHSZ. Examples include codes requiring automatic sprinklers in VHFHSZ. | Description of existing sprinkler requirements added to Safety Element. |

### 4.0 Conservation and Open Space

| Identify critical natural resources and other "open space" values within the geographic scope of the GP. | No revisions needed. Identified in Open Space and Conservation Element. |
| Determine maximum acceptable wildfire size, fire prevention plans, emergency response plans and initial attack suppression success rates for protection of these areas and values. | Actions A1.4-1, A1.4-2 added to Safety Element |
| Develop plans and action for vegetation management that provides fire damage mitigation and protection of open space values. Plans should address protection of natural resource financial values, establishment of fire resilient natural resources, protection of watershed qualities, and protection of endangered species habitats. Actions should consider prescribed burning, fuel breaks, vegetation thinning and removal. | Actions A1.2-1, A1.3-2 added to Safety Element |
| Establish goals and policies for reducing the wildland fire hazards within the entity's boundaries and on adjacent private wildlands, federal lands, vacant residential lots, and greenbelts with fire hazards that threaten the entity's jurisdiction. | Actions A1.2-1, A1.3-2 added to Safety Element |
| Establish goals and policies that address unique pest, disease, exotic species and other forest health issues in open space areas for purposes of reducing fire hazard and supporting ecological integrity. | Actions A1.2-1, A1.3-2 added to Safety Element |
| Establish goals and policies for incorporating systematic fire protection improvements for open space. Specifics policies should address facilitation of safe fire suppression tactics, standards for adequate access for firefighting, fire mitigation planning with agencies/private landowners managing open space adjacent to the GP area, water sources for fire suppression, and other fire prevention and suppression needs. | Actions A1.2-1, A1.3-2 added to Safety Element |

Responses to BOF Safety Element Review
<table>
<thead>
<tr>
<th>Ensure residential areas have appropriate fire resistant landscapes and discontinuous vegetation adjacent to open space or wildland areas.</th>
<th>Action A1.3-2 added to Safety Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluate and resolve existing laws and local ordinances which conflict with fire protection requirements. Examples include conflicts with vegetation hazard reduction ordinances and listed species habitat protection requirements.</td>
<td>No revisions needed; there are no local ordinances that conflict with fire protection requirements. There are no listed habitats in the fire hazard area.</td>
</tr>
<tr>
<td><strong>5.0 Circulation and Access</strong></td>
<td>Action A1.3-2 added to Safety Element</td>
</tr>
<tr>
<td>Establish goals and policies for proposed and existing transportation systems to facilitate fire infrastructure elements such as turnouts, helispots and safety zones.</td>
<td>No revisions needed. Already addressed by required project WFPPs or code requirements (see enclosed).</td>
</tr>
<tr>
<td>Establish goals and policies for high or very high fire hazard severity zones adequate access that meets or exceeds standards in 14 CCR 1270 for lands with no structures.</td>
<td></td>
</tr>
<tr>
<td>Maintain conditions of access in a suitable fashion for suppression access or public evacuation.</td>
<td>Action A1.3-2 added to Safety Element</td>
</tr>
<tr>
<td>Goals and policies should be established to delineate residential evacuation routes and evacuation plans in high or very high fire hazard residential areas.</td>
<td>Action A1.3-2 added to Safety Element</td>
</tr>
<tr>
<td>Develop an adaptive vegetation management plan that considers fuels, topography, weather (prevailing winds and wind event specific to the area), fire ignitions and fire history.</td>
<td>Action A1.3-2 added to Safety Element</td>
</tr>
<tr>
<td><strong>6.0 Defensible Space</strong></td>
<td>No revisions needed. Already addressed by required project WFPPs.</td>
</tr>
<tr>
<td>Include policies and recommendations that incorporate fire safe buffers and greenbelts as part of development planning.</td>
<td>No revisions needed. Protective design already addressed by Fire Code.</td>
</tr>
<tr>
<td>Ensure that land uses designated near high or very fire hazard severity zones are compatible with wildland fire protection strategies/capabilities.</td>
<td>No revisions needed. Already addressed by Fire Code and annual inspections.</td>
</tr>
<tr>
<td>Establish ordinances in VHFHSZ for vegetation fire hazard reduction around structures that meet or exceed the Board of Forestry and Fire Protection's Defensible Space Guidelines, including vacant lots.</td>
<td>Actions A1.3-3, A1.3-4 added to Safety Element</td>
</tr>
<tr>
<td>Reduce fuel around communities and subdivisions, considering fuels, topography, weather (prevailing winds and wind event specific to the area), fire</td>
<td></td>
</tr>
<tr>
<td><strong>ignitions and fire history.</strong></td>
<td>Action A1.4-1, A1.4-2 added to Safety Element</td>
</tr>
<tr>
<td><strong>Establish goals and policies that create wildfire defense zones for emergency services including fuel breaks, back fire areas, or other staging areas that support safe fire suppression activities.</strong></td>
<td>Action A1.4-1 added to Safety Element</td>
</tr>
<tr>
<td><strong>Establish goals and policies that identify structures (or other critical/valuable assets) that have adequate fuel modification or other fire safe features that provide adequate fire fighter safety when tactics call for protection of a specific asset (i.e., which houses are safe to protect).</strong></td>
<td>Fire Protection Services chapter of Public Safety Element amended to include this information.</td>
</tr>
<tr>
<td><strong>7.0 Emergency Services</strong></td>
<td>No revisions needed. Such studies would be initiated if warranted by service demands and the City's financial resources.</td>
</tr>
<tr>
<td>Include descriptions of emergency services including available equipment, personnel, and maps of facilities.</td>
<td>No revisions needed. Already addressed by required project WFPPs.</td>
</tr>
<tr>
<td>Initiate studies and analyses to identify appropriate staffing levels and equipment needs commensurate with the current and projected emergency response environment.</td>
<td>No revisions needed. Already addressed by City's training programs.</td>
</tr>
<tr>
<td>Ensure new development includes appropriate facilities, equipment, personnel and capacity to assist and support wildfire suppression emergency service needs.</td>
<td>No revisions needed. City already utilizes SEMS and maintains these cooperative agreements.</td>
</tr>
<tr>
<td>Establish goals and policies for emergency service training that meets or exceeds state or national standards.</td>
<td>No revisions needed. Already addressed by City's training programs.</td>
</tr>
<tr>
<td>Adopt the Standardized Emergency Management Systems for responding to large scale disasters requiring a multi-agency response. Ensure and review mutual aid/automatic aid and other cooperative agreements with adjoining emergency service providers.</td>
<td>No revisions needed. City already utilizes SEMS and maintains these cooperative agreements.</td>
</tr>
<tr>
<td><strong>8.0 Post Fire Safety, Recovery and Maintenance</strong></td>
<td>Action A1.4-1 added to Safety Element</td>
</tr>
<tr>
<td>Incorporate goals and policies that provide for reassessment of fire hazards following wildfire events. Adjust fire prevention and suppression needs commensurate for both short and long term fire protection needs.</td>
<td>Action A1.5-1 added to Safety Element</td>
</tr>
<tr>
<td>Develop burn area recovery plans that incorporate strategic fire safe measures developed during the fire suppression, such as access roads, fire lines, safety zones, and fuelbreaks, and helispots.</td>
<td></td>
</tr>
<tr>
<td>Develop burn area recovery plans, evaluation processes and implementation actions that encourage tree and biomass salvage, reforestation activities, create resilient and sustainable landscapes, and restore functioning ecosystems.</td>
<td>Action A1.5-1 added to Safety Element</td>
</tr>
<tr>
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</tr>
<tr>
<td>Establish goals and policies for consideration of wildlife habitat/endangered species into long term fire area recovery and protection plans, including environmental protection agreements such as natural community conservation plans.</td>
<td>Action A1.5-1 added to Safety Element</td>
</tr>
<tr>
<td>Incorporate native species habitat needs as part of fire restoration plans.</td>
<td>Action A1.5-1 added to Safety Element</td>
</tr>
<tr>
<td>In High and Very [High] hazardous areas, ensure redevelopment utilizes state of the art fire resistant building and development standards to improve past 'substandard' fire safe conditions.</td>
<td>No revisions needed. Adequately addressed by existing Fire Code.</td>
</tr>
<tr>
<td>Provide polices and goals for maintenance of the post-fire-recovery projects, activities, or infrastructure.</td>
<td>Action A1.3-2 added to Safety Element</td>
</tr>
<tr>
<td>Develop frameworks for rapid post-fire assessment and project implementation to minimize flooding, protect water quality, limit sediment flows and reduce other risks on all land ownerships impacted by wildland fire.</td>
<td>Action A1.5-1 added to Safety Element</td>
</tr>
<tr>
<td>Identity flood and landslide vulnerability areas related to post wildfire conditions.</td>
<td>Action A1.5-1 added to Safety Element</td>
</tr>
<tr>
<td>Establish goals and policies that address the intersection of flood/landslide/post fire burn areas into long term public safety protection plans. These should include treatment assessment of fire-related flood risk to life, methods to control storm runoff in burn areas, revegetation of burn areas, and drainage crossing debris maintenance.</td>
<td>Action A1.5-1 added to Safety Element</td>
</tr>
<tr>
<td>Encourage rapid post-fire assessment, as appropriate, and project implementation to minimize flooding, protect water quality, limit sediment flows and reduce other risks on all land ownerships impacted by wildland fire.</td>
<td>Action A1.5-1 added to Safety Element</td>
</tr>
</tbody>
</table>

### 9.0 Terrorist and homeland security impacts on wildfire protection

Establish goals and policies consistent with the Governor’s Blue Ribbon Fire Commission of 2005 for communications and interoperability. Example goals and policies should address fire personnel capability to communicate effectively across multiple frequency bands and update and expansion of current handheld and mobile radios used on major mutual aid incidents.

<p>| Already implemented, but Policy 1.4-2 and Action A1.4-3 added to Safety Element | Responses to BOF Safety Element Review |</p>
<table>
<thead>
<tr>
<th>Identify goals and policies that address vital access routes that if removed would prevent fire fighter access (bridges, dams, etc.). Develop an alternative emergency access plan for these areas.</th>
<th>No revisions. Alternative access already identified by Fire Department.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify and prioritize protection needs for assets at risk in the absence of response forces.</td>
<td>No revisions. High-priority assets already identified by Fire Department.</td>
</tr>
<tr>
<td>Establish fire defense strategies (such as fire ignition resistant areas) that provide adequate fire protection without dependency on air attack and could serve as survivor safety zones for the public or emergency support personnel.</td>
<td>Action 1.4-1 added to Safety Element</td>
</tr>
</tbody>
</table>
Excerpts from Calistoga Fire Code

Chapter 9, Fire Protection Systems

903.2.19 Additions & alterations.

If deemed necessary by the Fire Code Official additions to existing residential and non-residential buildings that increase the square footage by 50% of the existing gross floor area and/or results in the building exceeding 3,600 square feet shall be installed with an automatic fire sprinkler system throughout.

903.2.20 Repairs.

For the purposes of this section for automatic fire sprinkler system requirements, and if deemed necessary by the Fire Code Official, repairs to existing buildings that have sustained damage of more than 50% of the floor area or more than 50% of the value of the building shall meet the requirements for a new building.

903.2.21 Change in occupancy.

For the purposes of this section for automatic fire sprinkler system requirements, a proposed change in use or occupancy to an existing building that would result in a more hazardous use or occupancy shall meet the requirements for a new building.

Chapter 49, Requirements for Wildland-Urban Interface Fire Areas

4903.1. General.

A Wildland Fire Protection Plan (WFPP) shall be submitted by licensed or registered fire protection specialists/consultant knowledgeable in the field of Wildland Urban Interface Fire Protection.

4903.2. Requirements.

The following requirements shall be included in the WFPP:

4903.2.1 Sheltering in place (SIP).

During a wildfire, SIP shall be considered if the homes and community as a whole can meet all of the following features:

a. Constructed of ignition resistant materials.
b. Protected eaves.
c. Residential fire sprinklers.
d. Maintain fire resistive landscape with a minimum 100-foot defensible space surrounding all structures.
e. Class “A” non-combustible roof assembly.
f. Dual pane or tempered glass windows.
g. Chimneys with spark arrestors 1/2 inch screening.
h. Adequate roadway and driveway widths – meeting designed standards.
i. Adequate water supply and water flow for firefighting (2,500 gpm).
j. Vegetation-modification zones and fire department approved landscape plans.
4903.2.2 Water supply.

List parcel size, required hydrant spacing, required flow for firefighting (2,500 GPM in Wildland Interface Areas), and show existing and proposed hydrant locations.

4903.2.3 Fire access.

Address main access, secondary access, road width, driving surface improvement, capacity (weight of fire apparatus is 75,000 lbs), grade, angle of approach/departure, obstructions, gates, fire lane marking, turnarounds meeting Fire Department design template, and ongoing maintenance of these elements.

Note: If the project cannot provide secondary access, the applicant shall provide alternatives or justify why it is not needed.

Individual property owners are responsible for maintaining driveways, gates and signs on their own parcel in compliance with fire codes. Private roads and other access components, including gates and signs within the project shall also be maintained in compliance with fire codes in perpetuity. Identify what entity (not a named individual) is responsible for on-going road maintenance, and how that will be funded and monitored.

Address all of the following:

a. Organization responsible for road maintenance (cannot be dissolved or unfunded).

b. Funding obligation, which shall be shared by all project owners.

c. Responsibility to participate conveyed with property transfer.

d. Failure to maintain road elements in compliance with fire codes subjects owners to potential fines and forced abatement by the fire agency or the County, with charges, including administrative costs and penalties, liened against the property.

4903.2.4 Urban wildland interface area.

This is land in an area designated or identified as a Hazardous Fire Area. Hazardous Fire Area is any geographic area mapped by the State or the City of Calistoga as a high or very high fire hazard area, or as set forth by the City of Calistoga that contains the type and condition of vegetation, topography, weather, and structure density to potentially increase the possibility of vegetation corflagration fires. (Refer to City Council Resolution #2008-104 for map of the City of Calistoga's Fire Hazard Severity Zone.)

4903.2.5 Fire protection systems.

Fire sprinklers are required for all newly constructed buildings.

4903.2.6 Defensible space.

Address code minimums (100 feet) and show proposed modifications. If the fire behavior model (Refer to Section 4903.2.8) indicates a greater distance, incorporate it here and reference the fire modeling.

4903.2.7 Vegetation management.

Discuss how fuel modification will be maintained. Indicate who the responsible party is (individual property owner or other entity) and how this will be handled in
perpetuity. It is not acceptable to have an association charged with the task if that organization can dissolve itself or become ineffective for lack of funding. Individual property owners are responsible for maintaining their own parcel in compliance with fire codes. Parcels of open space easements, road easements, and similar land uses within the project shall also have vegetation maintained in a fire-safe manner in perpetuity. Identify which entity (not a named individual) is responsible for on-going vegetation maintenance and how that will be funded and monitored.

Address all of the following:

a. Organization responsible for maintenance (cannot be dissolved or unfunded).

b. Funding obligation, which shall be shared by all project owners.

c. Responsibility to participate conveyed with property transfer.

d. Failure to maintain in fire-safe manner subjects owners to potential fines, and forced abatement by the City of Calistoga Fire Department, with charges, including administrative costs and penalties, liened against the property.

4903.2.8 Fire behavior model.

Identify the specific model and version being used. Clearly identify your source for worst-case and summer and fall weather conditions. Ensure all additional supplemental information is included, such as product examples or clearing methods and is in full compliance with the California Building Standards Codes and local amendments.
Proposed Revised Wildland Fires Section
of Calistoga General Plan Public Safety Element

October 22, 2013

WILDLAND FIRES

This section addresses wildland fires. Additional information and policies regarding urban fires are contained in the Fire Protection Section of the Public Services Element.

Background Information

With its Mediterranean climate, Calistoga and its Planning Area experience a long, dry summer with high wildland fire hazards. In 1964, the community was threatened by a wildfire that led to the evacuation of its residents. The Hanly Fire destroyed 35 to 45 homes in the Calistoga area and burned 52,000 acres in an area between Mt. Saint Helena, Knights Valley and Santa Rosa.

The risk of wildfire hazard is related to a combination of factors, including winds, temperatures, humidity levels, and fuel moisture content. Of these four factors, wind is the most critical. Steep slopes also contribute to fire hazard by intensifying the effects of wind, and making fire suppression difficult. Features in some parts of the Planning Area, including highly flammable vegetation, warm and dry summers, rugged topography and occasional human presence create a situation that results in potential wildland fires.

Fire Hazard Zones

To quantify this potential risk, the California Department of Forestry and Fire Protection (Cal Fire) has developed a Fire Hazard Severity Scale that utilizes the following criteria to evaluate and designate potential fire hazards in wildland areas: fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope).

Wildland fire hazards in the Planning Area are shown in Figure SAF-6. As shown in this figure, Calistoga’s low-lying, flat areas are outside of the wildland fire hazard risk zone. However, nearly all of the 370 acres south of Foothill Boulevard, which is characterized by steep, wooded slopes, is located within the Very High Fire Hazard severity zone, while the area north of the Silverado Trail/Lincoln Avenue intersection is primarily classified in the High Fire Hazard severity zone.

Wildland Fire Prevention

New development in Very High and High fire hazard severity zones is required by state law to utilize fire-resistant building materials and provide adequate access for emergency vehicles. California Fire Code Chapter 49 establishes fire safety requirements for new construction in the wildland-urban interface that have been incorporated into the Calistoga Municipal Code (CMC Chapter 15.36). New construction in these zones is required to adhere to guidelines for defensible space, vegetation management in a fire-safe manner, financial responsibility for maintenance of landscaping and open parcels (forest), and other measures. In addition, a wildfire behavior model is required to specify building setbacks and fire resistive ratings.
When a specific project or development is proposed within the wildland-urban interface fire area and cannot meet the requirements of the building code, a wildland fire protection plan (WFPP) prepared by a license or registered specialist is required to be submitted for review and approval. The protection plan recommendations are then incorporated into conditions of approval for the project or development.

The Fire Department routinely inspects properties and homes in the Very High Fire Hazard Area to enforce vegetation management requirements, and publicizes the chipping program provided by the Napa Communities Firewise Foundation, which encourages the removal of dangerous vegetation. The Department is familiar with the locations of all structures in this Area and available access.

However, the City does not have sufficient staff or funding resources to formally educate Area residents about defensible space planning and construction, fire-safe landscaping, emergency supplies and evacuation, wildfire behavior and “fire hardening” their homes to survive an advancing wildfire.

**Wildland Fire Response**

Because of limited local resources, a significant wildfire in Calistoga would require outside support from the County, Cal Fire and nearby cities. A plan to coordinate this potential fire-fighting effort is needed to ensure a timely and effective response.

**Wildland Fire Recovery**

Following a significant wildfire, prompt action is needed to avoid erosion, landslides and mudflows, and provide for revegetation. The City does not have a recovery plan to coordinate these efforts.

**Key Findings**

1. The majority of the city is classified as being at low risk from wildland fires because of its flat topography and limited flammable vegetation. However, higher wildfire hazards exist south of Foothill Boulevard and in steeply-sloping areas surrounding the city.

2. Residents within the city’s Very High Fire Hazard Area need to be educated about wildfire prevention and mitigation, and be involved in these efforts.

3. A plan to coordinate the response to a significant wildfire is needed.

4. A plan for impact minimization and recovery after a significant wildfire is needed.

**Goal, Objectives, Policies and Actions**

<table>
<thead>
<tr>
<th>Goal SAF-1</th>
<th>Protect lives and property from wildland fire hazards.</th>
</tr>
</thead>
</table>

**Objective SAF-1.1** Plan new developments with wildland fire hazards in mind.

**Policies**

P1.1-1 All development in high and very high fire hazard severity zones shall meet the State’s minimum “defensible space” clearance requirements.

City of Calistoga – Revised Public Safety Element
P1.1-2 Plans for development in areas of potential wildland fire hazard shall be reviewed for their incorporation of design measures to reduce wildland fire risk.

P1.1-3 New roadways and driveways in wildland fire hazard areas shall be designed and constructed to be adequate in terms of width, radius, and grade to facilitate access by fire-fighting apparatus.

Action

A1.1-1 Enforce wildland fire control measures.

Objective SAF-1.2 Achieve a full understanding of local wildfire threats and behavior, and appropriate mitigation actions.

Policy

P1.2-1 The City shall be fully informed about potential wildfire risks and how wildfires are likely to behave.

Action

A1.2-1 Prepare a community wildfire risk assessment that identifies likely severe-case wildfire characteristics; identifies sub-standard conditions, such as existing structures that do not conform to contemporary fire standards, inadequate access and insufficient water flow; and actions that could be taken to avoid wildfires and minimize wildfire damage.

Objective SAF-1.3 Promote fire-wise behavior within the City’s Very High Fire Hazard Area.

Policies

P1.3-1 Provide opportunities for residents within the City’s Very High Fire Hazard Area to be informed about wildfire prevention and response.

P1.3-2 Support efforts to organize Area residents to promote fire-wise practices.

Actions

A1.3-1 As resources are available, educate Area residents about defensible space planning and construction, fire-safe landscaping, fire-wise construction, emergency supplies and evacuation, wildfire behavior and “fire hardening” their homes to survive an advancing wildland fire through workshops and providing information.

A1.3-2 As resources are available, work to establish a Fire Safe Council and the preparation of a community action plan that prioritizes hazard mitigation actions and provides a sustained program of wildfire mitigation.

A1.3-3 Support events that involve Area residents in vegetation clean-up.

A1.3-4 Seek fire safety grants to fund wildfire mitigation activities such as vegetation management.

City of Calistoga – Revised Public Safety Element
Objective SAF-1.4 Respond to wildfires in an effective and coordinated manner.

Policies

P1.4-1 Maximize the use of outside resources in responding to wildfires.

P1.4-2 Maintain effective communications during major mutual aid incidents.

Actions

A1.4-1 Work with Cal Fire to develop a coordinated plan that effectively addresses wildfires in the city and its environs.

A1.4-2 Participate in countywide local hazard mitigation planning efforts and the implementation of fire hazard mitigation actions.

A1.4-3 Continue to implement state and federal communication and interoperability guidelines and maintain sufficient communication equipment.

Objective SAF-1.5 Minimize post-wildfire damage and promote recovery.

Policies

P1.5-1 Be prepared to minimize damage after a wildfire from erosion, landslides and mudflows.

P1.5-2 Promote appropriate revegetation after a wildfire.

Actions

A1.5-1 Seek funding for and prepare a burn area recovery plan that provides for revegetation; control of noxious weeds; restoration of native species and wildlife habitats; minimizes flooding, sediment flows and landslides; protects water quality and reduces other risks.

A1.5-2 Plan for the disposal of debris and ash, building inspections, and building and grading permits.
Proposed Revised Fire Protection and Emergency Medical Services
Section of Calistoga General Plan Public Services Element
October 22, 2013

FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

This section addresses urban fire issues. Wildland fires are addressed in the Public Safety Element.

Background Information

Fire Services

Fire services are primarily provided in Calistoga by the City of Calistoga Fire Department, which maintains a station at 1113 Washington Street. The 6,400-square foot single-story structure, originally constructed in 1969, was seismically-retrofitted and modernized in 2006.

[photo]

The fire station at 1113 Washington Street

The Fire Department is currently equipped with the following modern apparatus:

- Two Type 1 engines with a pump capacity in excess of 1000 gallons per minute (gpm)
- One Type 2 watertender that can also be used as a Type 2 engine
- One Type 3 engine for use in wildland fires
- One patrol truck
- Two support vehicles.

The Fire Department has one full-time fire chief, three full-time firefighters and up to 15 part-time firefighters. However, not all of the part-time firefighters are available at any given time. Response time from the station during the day is approximately one minute. During evenings, the response time is usually within 3 minutes.

The City has 202 fire hydrants, which deliver between 500 and 1,000 gpm. Water storage capacity in the city is adequate for fire protection purposes. The City recently completed construction of a 1.5-million gallon water tank, which has greatly increased the residual pressures throughout the city.

The Fire Department receives approximately three calls per day. Of all calls received by the Fire Department, approximately 6 percent are for fire service, 76 percent for emergency medical service, and 18 percent for other reasons, including hazardous condition calls such as downed power lines, service calls for accidental lock-outs and false alarms. A significant amount of the medical service calls are due to the large number of elderly people living in Calistoga. Tourists account for approximately 10 percent of the calls.

The City assesses a fee on new development to fund capital improvements needed to offset public safety impacts.
The Calistoga Police Department's re-routes local 911 calls for fire service to the California Department of Forestry and Fire Protection (Cal Fire) dispatch center. Outside of the city limits, 911 calls for all emergency services are routed by the Napa County Sheriff's Department. Cell phone calls for 911 service are answered by the California Highway Patrol (CHP)'s Golden Gate office in Vallejo. The CHP dispatch service then routes all non-traffic related calls to the appropriate jurisdiction; for Calistoga and the Planning Area this would be either the Calistoga Police Department or the Napa County Sheriff's Department.

Fire Code

The City has adopted the following regulations in addition those mandated by the State in order to further promote fire safety:

- New and existing buildings shall have approved illuminated or reflective address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property.
- All buildings and winery caves shall have approved radio coverage for emergency responders within the building or winery cave based upon the existing coverage levels of public safety communication systems of the jurisdiction, at the exterior of the building.
- If deemed necessary by the Fire Code Official, additions to existing residential and non-residential buildings that increase the square footage by 50% of the existing gross floor area and/or results in the building exceeding 3,600 square feet shall be installed with an automatic fire sprinkler system throughout.
- If deemed necessary by the Fire Code Official, repairs to existing buildings that have sustained damage of more than 50% of the floor area or more than 50% of the value of the building shall meet the requirements for a new building.
- A change in use or occupancy of an existing building that results in a more hazardous use or occupancy shall meet the automatic fire sprinkler requirements for a new building.

Fire Protection in the Unincorporated Planning Area

In accordance with California law (Government Code Section 65300), cities are also required to look beyond their borders when considering issues which in a city's judgment bear relation to its planning.

The Napa County Fire Department (NCFD) is the fire authority for the unincorporated portions of the Planning Area (see Figure INTRO-2 for the boundaries), with the exception of some areas serviced by the American Canyon Fire Protection District. NCFD contracts with Cal Fire for fire protection services, which staffs the fire stations. As a State-funded fire authority, Cal Fire also has the responsibility for wildlife fire protection in the designated State Responsibility Areas. Cal Fire operates a fire station 3.6 miles south of Calistoga's city limits on Highway 29.

Fire protection within the unincorporated Planning Area is provided by Cal Fire and NCFD, and is rated 6 for properties located within 1,000 feet from a fire hydrant and rated 9 for properties located further than 1,000 feet from a hydrant. The ISO ratings cannot be reduced in the unincorporated...
Planning Area since it is not possible at this time to provide uninterrupted water supply of at least 250 gpm to all properties located further than 1,000 feet from a hydrant.

Fire Safety Issues

The Insurance Service Office (ISO) provides a Public Protection Classification for fire protection, with Class 1 representing the best public protection and Class 10 representing no recognized protection. In California, approximately 62 percent of communities maintain an ISO rating of 5 or better. Fire protection within the Calistoga city limits has an ISO rating of 5 for properties located within 1,000 feet of a fire hydrant and 9 for properties located further than 1,000 feet from a fire hydrant. However, the City’s Fire Department has the ability to provide uninterrupted water supply in excess of 250 gpm to all properties located further than 1,000 feet from a hydrant. The ISO has given the city credit for the Fire Department’s ability to provide uninterrupted water supply at 250 gpm for those few circumstances within the city limits where a hydrant is located further than 1,000 feet from a property, as provided in Section 611(F) of the ISO’s Fire Suppression Rates Schedule. For these reasons, the ISO ratings for the city limits are considered to be adequate.

The fire station could be better located, since route options to and from the station are limited, and in the future, increased traffic congestion on Washington Street and Lincoln Avenue may further impede emergency response. Furthermore, a few parcels along Myrtle Road in the far northern part of the City are more than 1.5 miles from the station; the ISO recommends a distance of 1.5 miles or less. Despite these issues, there are significant benefits to its present downtown location, including ample parking for personnel and good community visibility, which increases awareness of fire prevention.

Some have suggested that Calistoga needs an additional road across the Napa River to improve fire protection access. The construction of a new “southern crossing” of the Napa River from Washington Street to Foothill Boulevard would provide some benefit in allowing for more circulation routes for emergency vehicles, but is not essential for maintenance of adequate fire protection unless considerable development were to occur on the south side of the city.

Wildland fires are a significant hazard in some parts of the City and much of the Planning Area. While parts of the City located on the valley floor are considered at low risk from wildfires, heavily vegetated hillside areas such as those found at the edges of the City and Planning Area are considered at greater risk. The Public Safety Element describes and maps wildland fire hazard in greater detail, and contains goals, objectives, policies and actions to protect life and property from these risks.

The downtown has a large number of old buildings built in close proximity to each other. Both the age of these buildings and their proximity to each other present a fire hazard. However, the City has adopted a more-restrictive fire sprinkler ordinance than required by state law, as described above, to address this issue over time.

Emergency Medical Services
Medical emergency treatment, including basic and advanced life support, and transport is provided by American Medical Response. The Calistoga Fire Department also provides basic life support.

Mutual Aid

Cal Fire, NCFD and the Calistoga Fire Department maintain a mutual aid agreement for emergencies, including wildland and structure fires, and traffic incidents. The Fire Department also has a series of formal and informal mutual aid agreements with a number of local fire protection agencies, including the Cities of St. Helena and Napa, the American Canyon Fire Protection District, and the Knights Valley and Mountain Fire Departments. These agreements are expected to continue.

**Key Findings**

1. Fire protection and emergency medical service provision within the city limits is adequate.
2. Although fire protection within Calistoga is adequate, the City should continue to enforce development codes that reduce fire hazard.
3. While the present location of the fire station is problematic because of limited routes to and from the station and increasing levels of traffic congestion downtown, the present location is beneficial because it raises the profile of the Fire Department and increases awareness of fire prevention in Calistoga. Therefore, there is no need to plan for a new fire station at this time.
4. Current water storage capacities are adequate for fire protection reserves and fire flows.
5. An additional north-south circulation route in Calistoga would provide benefit from a public safety perspective, but is not essential to maintenance of adequate fire protection in the City unless development in the south part of Calistoga were to significantly increase.
6. The downtown is densely developed and has many older commercial buildings. Provision of fire sprinklers would enhance their safety.
7. Wildland fire is a significant hazard in some portions of the City and Planning Area. These hazards are discussed further, and goals, objectives, policies and actions to address them can be found in the Public Safety Element.
**Goal, Objectives, Policies and Actions**

<table>
<thead>
<tr>
<th>Goal SER-1</th>
<th>Minimize loss of life and property from fires, medical emergencies and public emergencies.</th>
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**Objective SER-1.1**  Plan for ongoing maintenance and development of fire protection services.

**Policies**

P1.1-1  The City shall maintain a water system that provides adequate water pressure for fire protection.

P1.1-2  The City shall work with Napa County to maintain contracts for fire protection outside of the city limits within the Planning Area.

**Actions**

A1.1-1  The Fire and Public Works Departments shall work together to address the effects of planned water system improvements on fire flows.

A1.1-2  Support ongoing efforts to improve performance and efficiency in the Fire Department.

**Objective SER-1.2**  Promote coordination between land use planning and fire protection.

**Policies**

P1.2-1  The City shall request notifications from the County of development projects within the unincorporated part of the Planning Area that could require fire protection services from the City.

P1.2-2  New development projects shall pay a fair and equitable amount to offset the costs for expanded fire services they require.

**Actions**

A1.2-1  Ensure through the development process that roadways are adequate in terms of width, radius, and grade to facilitate access by City fire-fighting apparatus, while considering maintenance of Calistoga’s small-town character.

A1.2-2  The City shall advise the County of fire protection requirements for development projects within the unincorporated part of the Planning Area.

A1.2-3  Continue to monitor traffic conditions and development in Calistoga to determine if the location of the fire station needs to be changed.
Objective SER-1.3  Maintain and enforce codes related to fire protection.

Policies

P1.3-1 Ensure that City fire safety codes provide an adequate level of fire protection.
P1.3-2 Promote fire safety in commercial and industrial buildings.
P1.3-3 Continue to cooperate with State, County and other cities’ fire protection agencies.

Actions

A1.3-1 Update City fire safety codes as necessary.

A1.3-2 Ensure through the development process that roadways are adequate in terms of width, radius, and grade to facilitate access by City fire-fighting apparatus, while considering maintenance of Calistoga’s small-town character.

A1.3-3 Maintain a regular program of fire inspections for commercial and industrial buildings and require building owners to address identified deficiencies.

A1.3-4 Maintain mutual aid agreements.