



# CITY OF CARMEL-BY-THE-SEA

## Hazard and Asset Summary Sheet – Community Wildfire Preparedness

October 15, 2020

**TO:** Climate Committee Members

**SUBMITTED BY:** John Hill, Committee Member

### SUMMARY

**Asset:** Public and Private Property, Public Safety

**Hazards:** Local Fires and Wildfire damage due to accumulated dry fuel & increasing wind and weather events.

**Version:** 1

**General Comments and Outlook:** The severity of fires and wildfires in California continues to increase in intensity and occurrence. California had low intensity fires until the logging of old growth forests, the introduction of grazing and invasive grasses, indigenous burning was replaced by fire suppression, and urban sprawl invaded the wildland areas. Community wildfire preparedness is supported by Monterey Fire's Defensible Space Inspection Program and coordination with surrounding fire prevention organizations to limit fire and wildfire risk through planning, prevention, and mitigation. Monterey Fire and the Carmel Public Works Department have working relationships with the Pebble Beach Services District for fire mitigation in Pescadero Canyon, and partner with the Friends of Mission Trail Nature Preserve for fuel reduction in Mission Trail Nature Preserve. CalFire's Fire & Resource Assessment Program (FRAP) and Fire Hazard Severity Zone (FHSZ) maps are available on line with information on forest assessment, fire severity zones, and defensible space. Monterey Fire personnel have inspected and graded all Carmel parcels as pass, pending, or fail. Grading criteria is evolving as knowledge on fire spread is developed. Current criteria is based on dry fuel accumulation, spark arrestors, overhanging tree limbs, etc.

#### Identified Issues:

- Some northern and eastern areas within City limits are within the Very High Fire Hazard Severity and Wildland Urban Interface (WUI) Zones.
- Some areas within the City limits and adjacent communities have accumulated fuel levels as well as overhead infrastructure (i.e. Mission Trail Park) that present fire and wildfire risks.
- An integrated approach to fire resilience in the landscape along with hardening structures against fire are ways to mitigate fire impact on lives and property.
- Fire resiliency can be controlled by creating defensible space with Fire Defense Zones around structures, an ignition zone (5 feet), a defense zone (30 feet) and reduced fuel zone (100 feet)
- Fuel is affected by the height and placement of plants & their chemical content. Pine forests and Oak woodlands are resilient but dead material and limbed branches in the understory must be maintained.
- Fire retardant plants, trees, and ground covers can absorb heat and fire without burning, trap embers, reduce wind speed, and slow the travel of a fire.
- 9 out of 10 structures lost are due to low intensity ground fire and embers in the 5-foot zone around them. Combustible materials such as decks, wood chips, and plant material should not be located within 5 feet of nor attached to the structure.

- Vents and windows are the most vulnerable areas in a house, gaps in vent screening should be no more than 1/8" maximum and plants should not be located near or below windows.
- The City's Building Department has adopted the California Building Code requirements in the Very High Fire Hazard Zone but the City's planning guidelines currently do not address them or may be in conflict with them.

### **Possible actions to be recommended in the committee's Final Report**

- Carmel City Council consider fire hazard severity and evacuation plans in the safety elements of the General Plan and monitor the level of fire hazards within and surrounding the community. Resolutions and/or Ordinances could include:
  - Documenting the various existing hazards.
  - Assigning staff/council personnel as liaisons to CalFire (Cypress Fire District), and adjacent communities which could threaten Carmel in a wildfire.
  - Assist Monterey Fire in its current efforts in inspecting and identifying fire risks.
  - City Forester consider fire retardant trees and plants in City controlled areas and for tree replacement requirements for private property.
  - Update City Planning guidelines to reflect or not conflict with current California codes (CBC Chapter 7 & CRC R337) in the Very High Fire Hazard Severity (VHFHS) Zone.

## **REFERENCES**

- Fire and Resource Assessment Program (FRAP) [ResilientCA.org](http://ResilientCA.org)
- Monterey Fire Defensible Space Inspection Program [mry.maps.arcgis.com](http://mry.maps.arcgis.com) , [monterey.org/fire](http://monterey.org/fire)
- CalFire Defensible Space/Home Hardening [readyforwildfire.org](http://readyforwildfire.org)
- CalFire Fire Severity Zone Viewer [gis.data.ca.gov](http://gis.data.ca.gov)
- Wildland Urban Interface (WUI) [frap.fire.ca.gov](http://frap.fire.ca.gov)
- Every Building's Wildfire Risk in Monterey County [defensibleapp.com](http://defensibleapp.com)
- The A.I.A. Designing for Fire Presentation <http://youtu.be/MWslhXidZnc>

## **History**

- Version 2 presented at committee meeting on 1/21/2021