



— WILDFIRE PREPAREDNESS —

Workshop

Brea Wildfire Preparedness Workshop



Mark Terrill,
Fire Chief

The SOLAR Plan



Dan Mielke,
Deputy Fire Chief

The Freeway Complex

November 15 – 19, 2008

**Freeway
Fire**

+

**Landfill
Fire**



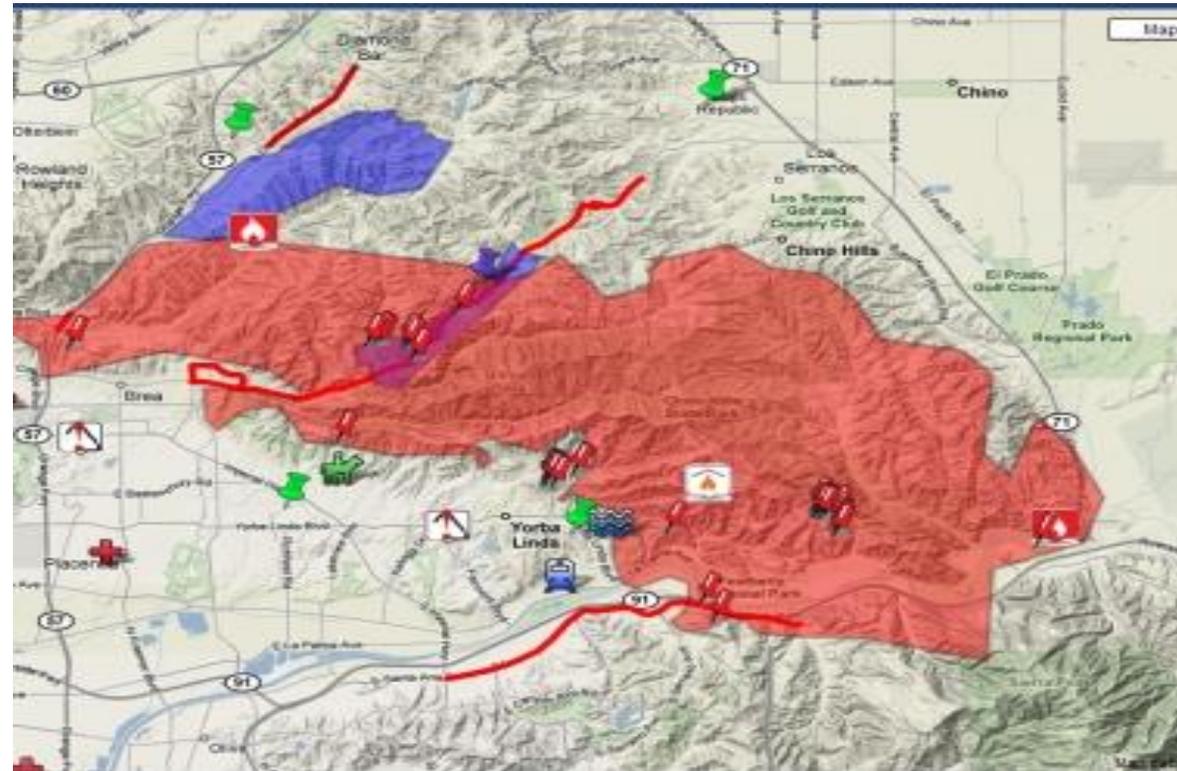
Scope of the Freeway Complex

Cities Affected

- Corona
- Chino Hills
- Yorba Linda
- Brea
- Anaheim
- Diamond Bar

Counties Affected

- San Bernardino
- Orange
- Los Angeles
- Riverside



Impact of the Freeway Complex Fire



Total Burn Area:

30,305 acres (14 acres/min)

Structures Destroyed:

187 homes, 2 commercial buildings

Ecological Impact:

Burned 90% of Chino Hills State Park

People Evacuated:

40,000

Firefighting Costs:

\$16 million

Property Loss:

\$150 million





Lessons Learned

- Inconsistent communication between multiple agencies
- Difficulty ordering and mobilizing resources efficiently
- Lack of pre-set operating plans for large-scale incidents

Key Takeaway:

We needed a unified plan to address multi-agency coordination and resource sharing

The SOLAR Plan



SOLAR BOOK

San Bernardino
Orange
Los
Angeles
Riverside



EDITION 2022

Orange County Fire Authority

With Participation from the Cooperating Agencies:

City of Corona Fire Department

Orange City Fire Department

CAL FIRE/ Riverside County Fire Department

CAL FIRE San Bernardino Unit

City of Brea Fire Department

Los Angeles County Fire Department

City of Anaheim Fire & Recue

Chino Valley Fire Protection District

United States Forest Service

Disclaimer: GIS Data for this project has been provided by the departments listed above. The level of accuracy and context that has been provided is the sole responsibility of the contributing agency. This guide is intended to be reviewed and updated annually.

Guide Design and Maps By: Mischele Richards & Orange County Fire Authority GIS 2022

May 29, 2025

What is SOLAR



Partnership among surrounding agencies.

Agreement:

- Common communication frequencies
- One central place to order resources
- Pre-set Operating Plan
- Quarterly training



Elements of the SOLAR Plan



- List of dedicated radio frequencies
- List of resources to be ordered
- Individual city maps of the area
- Pre-plans that show past fire behavior, structures, access.
- Safety Information

S.O.L.A.R. MUTUAL THREAT ZONE COMMUNICATIONS PLAN

CARBON CANYON SAFETY MESSAGE

S.O.L.A.R. Mutual Threat Zone Guide Index Page Fall, 2009

SOLAR VICTOR 130.200 MHz

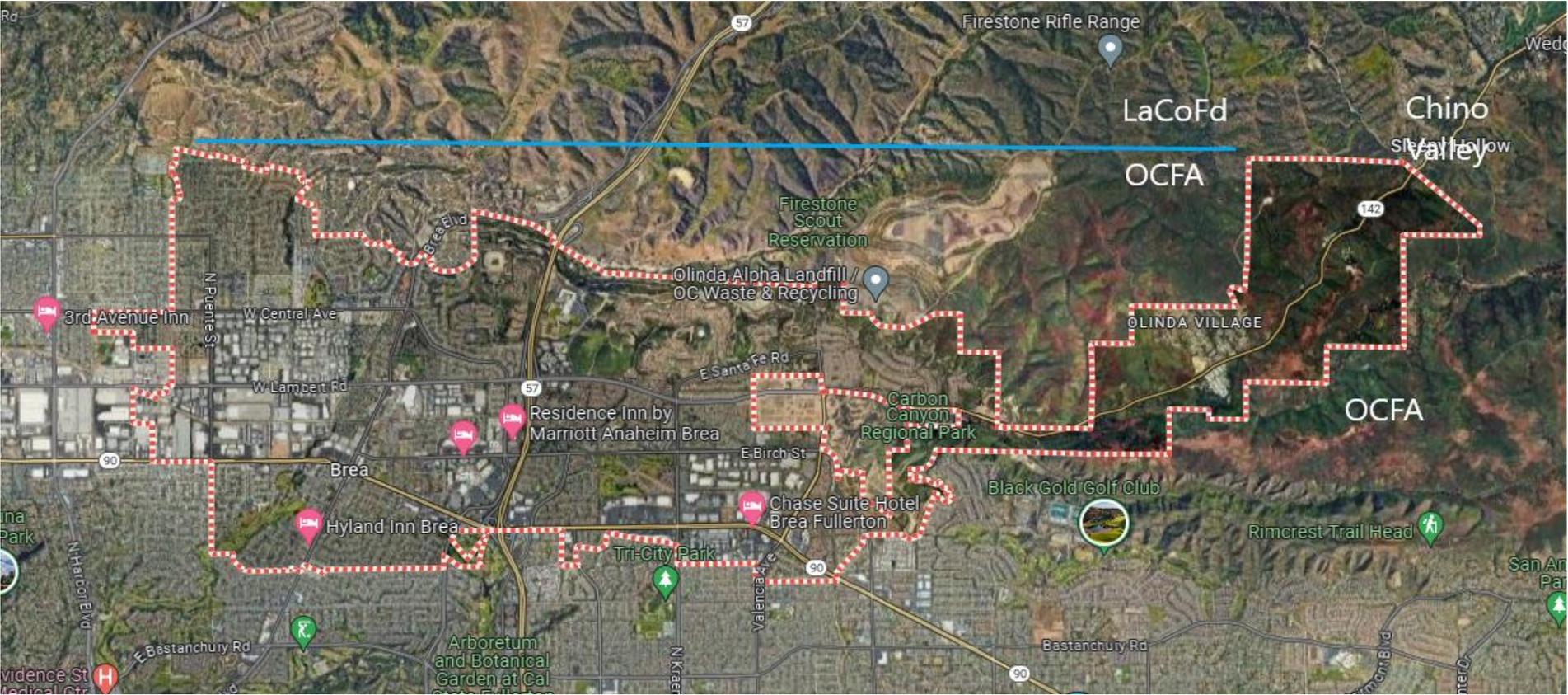
INCIDENT RADIO COMMUNICATIONS PLAN		Incident Name	Date/Time Prepared	Operational Period Date/Time							
		SOLAR MTZ	3-25-15/1400	2015 Final							
Zn	Function	Channel Name/Trunked Talkgroup	Assignment	RX Freq	RX Tone/NAC	TX Freq	Tx Tone/NAC	Dev	Par	MODE A.D.	Remarks
Zn Ch1	COMMAND	CDF C-1	IC & OPS	151.3550	Tone 8 103.6	159.3000	OST	N	H	A	T-1 Santiago Pk, T-5 Strawberry Pk
Zn Ch2	COMMAND	CDF C-2	IC & OPS	151.2650	Tone 8 103.6	159.3300	OST	N	H	A	T-1 Santiago Pk, T-5 Strawberry Pk
Zn Ch3	COMMAND	CDF C-3	IC & OPS	151.3400	Tone 8 103.6	159.3450	OST	N	H	A	T-2 Carbon Cyn, T-4 Sierra Pk, T-5 Strawberry Pk
Zn Ch4	COMMAND	CNF	IC & OPS	168.7500	Tone 8 103.6	171.4250	OST	N	H	A	T-1 - Sierra Pk, T-2 - Santiago Pk, T-12 Sitton Pk
Zn Ch5	COMMAND	FIRE OC	IC & OPS	151.0100	Tone 2 123.0	154.9650		N	H	A	
Zn Ch8	COMMAND	LAC V-1	IC & OPS	152.1500	Tone 14 151.4	158.6100		N	H	A	
Zn Ch7	COMMAND	RRU 2	IC & OPS	151.1750	Tone 1 110.9	159.2850	OST	N	H	A	T-1 Santiago Pk, T-9 El Cariso
Zn Ch9	TACTICAL	VFIRE23	DIVS/GRP	154.2650	Tone 6 156.7	154.2650		N	L	A	
Zn Ch9	TACTICAL	VFIRE22	DIVS/GRP	154.2950	Tone 6 156.7	154.2950		N	L	A	
Zn Ch10	TACTICAL	VFIRE24	DIVS/GRP	154.2725	Tone 6 156.7	154.2725		N	L	A	
Zn Ch11	TACTICAL	VFIRE25	DIVS/GRP	154.2875	Tone 6 156.7	154.2875		N	L	A	
Zn Ch12	TACTICAL	VFIRE26	DIVS/GRP	154.3025	Tone 6 156.7	154.3025		N	L	A	
Zn Ch13	TACTICAL	VTAC11	DIVS/GRP	151.1375	Tone 6 156.7	151.1375		N	L	A	
Zn Ch14	AIR-to-GROUND	LAC A/G	ALL PERSONNEL	154.4000	Tone 14 151.4	154.4000		N	H	A	TBD @ TIME OF DISP
Zn Ch15	AIR-to-GROUND	CDF A/G 1	ALL PERSONNEL	151.2200	NONE	151.2200		N	L	A	TBD @ TIME OF DISP
Zn Ch16	EMERGENCY	AIR GUARD	ALL PERSONNEL	168.6250	NONE	168.6250		N	L	A	

Prepared By: (SOLAR Communications Group) Incident Location: **SOLAR Mutual Threat Zone**

Neil Eaton - South OPS (951) 320-6127 County: State CA Latitude: N Longitude: W

The convention calls for frequency lists to show four digits after the decimal place. The letter "U", "N", or "W" in the deviation (Dev) column reflects whether the frequency is ultranarrow, narrow, or wide band. Mode refers to either "A" indicating Analog, "D" indicating Digital (e.g. Project 25) or "M" indicating Mixed Mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeaters (and depending on use, base stations) must be programmed with the Rx and Tx reversed.

Brea's MTZ SOLAR Activation



What's Coming?

- (3) Fixed Wing Aircraft
 - (2) Super Scoopers
- (8) Helicopters
- (3) Dozers
- (4) Type 3 Engines
- (14) Type 1 Engines
- (6) *Hand Crews*
- (3) Water Tenders
- (10) Chief Officers

Roughly 180 personnel





Wildfire Preparedness



Lisa Keyworth,
Emergency Preparedness
Coordinator

Emergency Kits (Home and Car)

- Food-shelf stable (don't forget a can opener)
- Water (1 gallon per person a day)
- Medications, hearing aids, eyeglasses, mobility devices
- Cash-all denominations
- First Aid Kit
- Phone chargers
- Flashlight/AM-FM Radio with batteries
- List of important phone numbers
- Other items-whistle, emergency blankets, utility shut-off tools
- Change of clothes- jacket, sturdy shoes
- Pet supplies
- Remember to keep at least a half of tank of gas in your vehicle



Evacuation Needs (5 P's)



- People and pets
- Prescriptions - eyeglasses
- Photos- irreplaceable memorabilia
- Papers- insurance documents, birth certificates, wills, cash, identification
- Personal Electronics- Hard drives, laptops, phones
- Other items to include- comfort items for children, list of important contact numbers, basic needs such as food and water

Types of Evacuations



Evacuation Warning (Voluntary)

- You should plan on leaving now, or at least have your vehicle loaded and ready to go

Evacuation Order (Mandatory)

- Once evacuation is an order, there will be no re-entry into evacuated areas
- You do not need to wait for a Warning or Order to leave if you feel unsafe or conditions are rapidly evolving
- The city has transportation plans in place for those that need assistance evacuating

****Anyone with mobility issues can call 911 for assistance****

Notifications



- AlertOC
- Social Media
- In person by PD/Official personnel
- Please only rely on official notifications as the information is vetted and confirmed
- Sign up for the Watch Duty app for wildfire information

Public Safety Power Shutoffs (PSPS)



- SCE will initiate Public Safety Power Shutoffs in fire prone areas during high wind events or Red Flag Warnings (wind, temperature and low humidity) in order to minimize risk of igniting wildfires
- Customers are notified well in advance (if possible) of a PSPS event
- Make preparations for long term loss of power- have plans in place
- SCE offers battery backup/generators for residents with medical needs
- Cell phone towers and internet will be down
- Consider a generator
- Know how to manually open your garage door

Emergency Operations Center



- Activated in anticipation of, or in response to a disaster or emergency
- Helps support field operations- personnel, shelter operations, transportation
- Organized, pre-planned, trained positions for city staff
- Coordination with outside agencies, NGO's and the County Operational Area

Evacuations – Brea Police Department



Chris Haddad,
Police Lieutenant

Evacuations- Hi Lo Siren

Brea Public Works – Water Division



Matt Matlock,
Water Distribution/Production,
Sewer/Storm Drain

Brea's Water



Water Availability

- Where it comes from, how much there is
- Reservoirs

Booster Pump Stations

- Monitoring and maintenance

Power Supply

- PSPS Events, Power Outages

Fire Hydrants



Brea Water Infrastructure



May 29, 2025

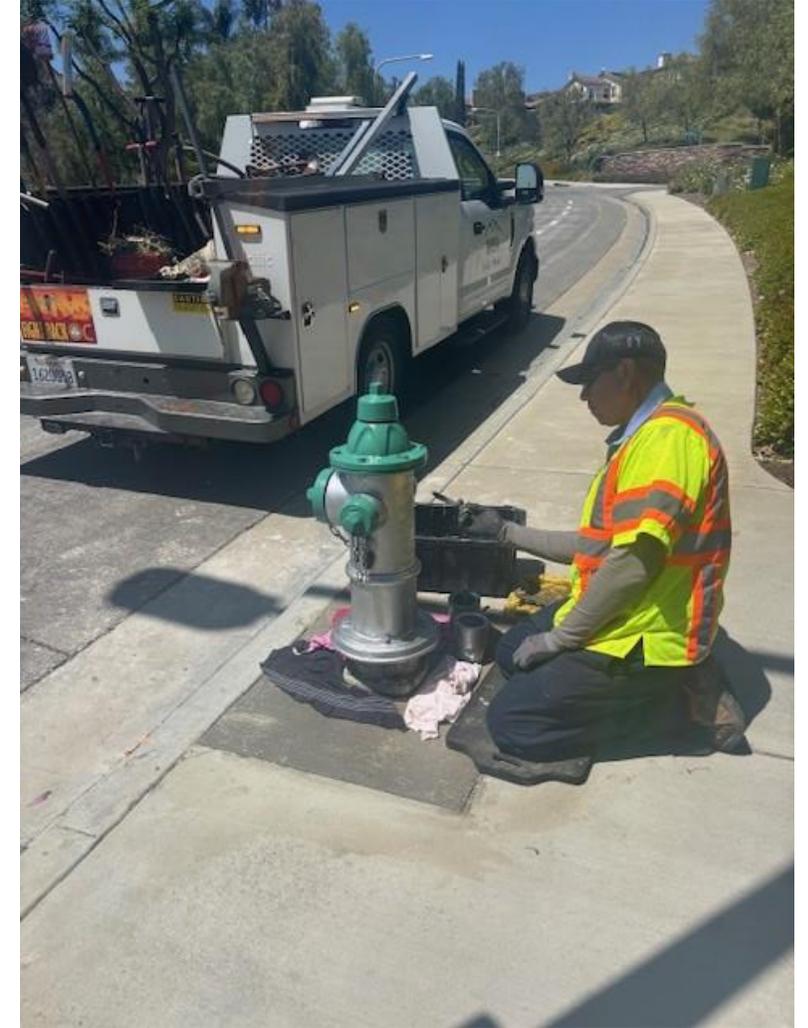
Brea Water Infrastructure



Brea Water Infrastructure



Fire Hydrant Maintenance



Home Hardening & New Maps



Nicole Pesqueira,
Fire Marshal

What Can You Do?

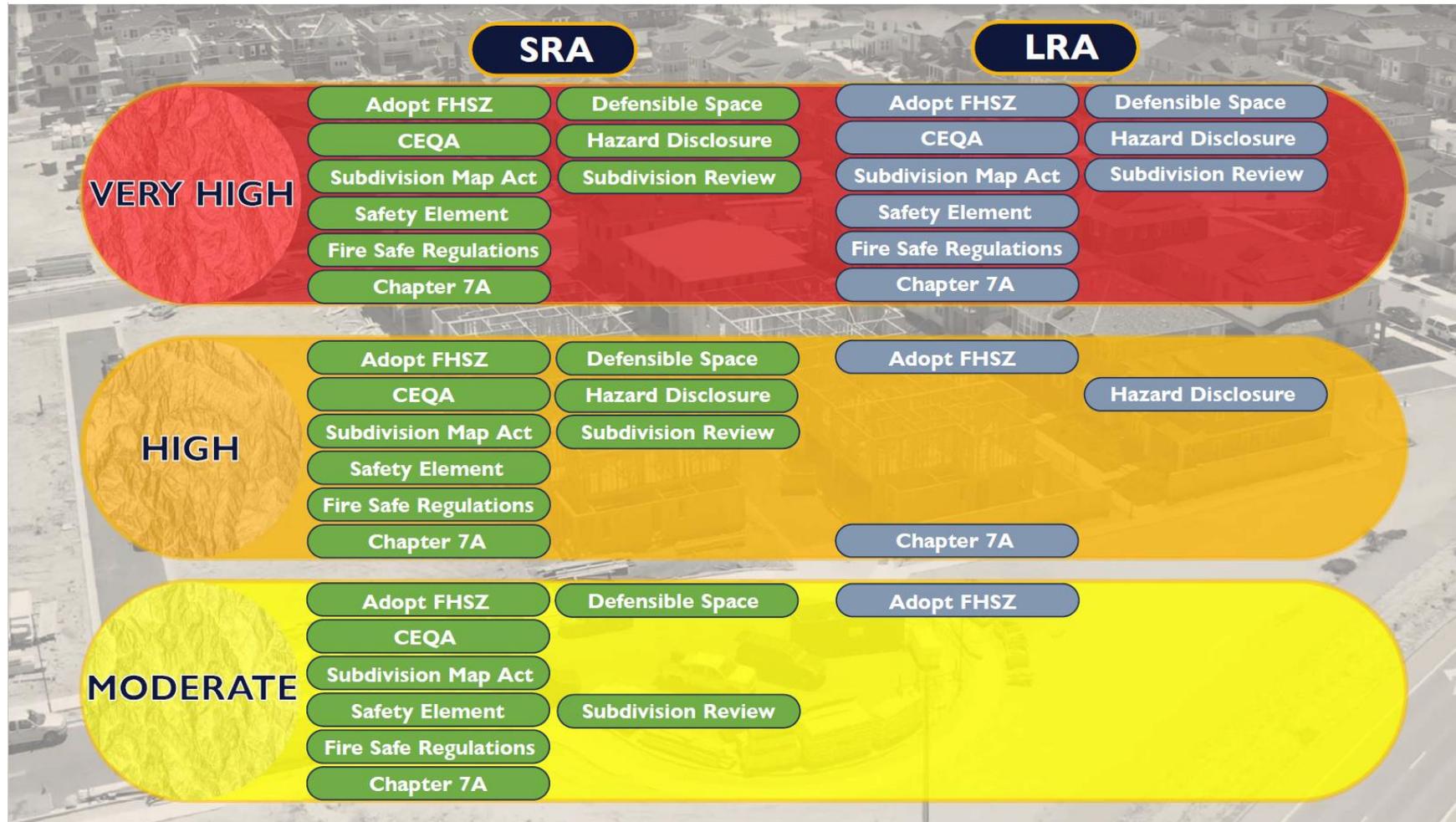


- Class A Fire Rated Roof
- Block spaces between your roof covering and sheathing with noncombustible materials (bird stops)
- Install a noncombustible gutter cover on gutters to prevent the accumulation of leaves and debris in the gutter
- Install ember and flame-resistant vents
- Install spark arrestor on chimney
- Inspect exterior siding for dry rot, gaps, cracks, and warping. Plug gaps greater than 1/8-inch in siding and replace any damaged boards, including those with dry rot
- Install weather-stripping to gaps greater than 1/8-inch between garage doors and door frames to prevent ember intrusion

Updated Brea Fire Hazard Severity Zone Map



What is Impacted



Defensible Space



David Fitz,
Fire Prevention Specialist

How Fire Spreads in the Wildland Urban Interface



Radiant exposures occur when large flames from either wildfire or structural fires are close to exposed structural elements. The intensity of thermal radiation reduces with increasing distance.

Direct flame contact occurs when flames from nearby fires, such as burning wood piles, vegetation, or structures come in direct contact with structural components.

Embers are responsible for the majority of structure losses in WUI fires.

Defensible Space



Zone Zero – Start Closest to Your Home to be Ember-Resistant

What to do:

- **Use hardscape** like gravel, pavers, or concrete. No combustible bark or mulch.
- **Remove all dead and dying plants**, weeds, and debris (leaves, needles, etc.) from your roof, gutter, deck, porch, stairways, and under any areas of your home.
- **Remove all branches within 10 feet of any chimney** or stovepipe outlet.
- **Limit combustible items** (like outdoor furniture and planters) on top of decks.
- **Relocate firewood and lumber** to Zone 2.
- **Replace combustible fencing, gates, and arbors** attached to the home with noncombustible alternatives.
- **Consider relocating garbage and recycling containers** outside this zone.
- **Consider relocating boats, RVs, vehicles**, and other combustible items outside this zone.

Zone One - Keep it Lean, Clean & Green Within 30 Feet



What to do:

- **Remove all dead plants**, grass, and weeds.
- **Remove dead or dry leaves** and pine needles.
- **Trim trees regularly** to keep branches a minimum of 10 feet from other trees.
- **Create a separation** between trees, shrubs, and items that could catch fire, such as patio furniture, wood piles, swing sets, etc.

Zone Two - Reduce Potential Fuel Within 100 Feet



What to do:

- **Cut or mow annual grass** down to a maximum height of four inches.
- **Create horizontal space** between shrubs and trees. (See diagram)
- **Create vertical space** between grass, shrubs and trees. (See diagram)
- **Remove fallen leaves**, needles, twigs, bark, cones, and small branches. However, they may be permitted to a depth of three inches.
- **Keep 10 feet of clearance around exposed wood piles**, down to bare mineral soil, in all directions.
- **Clear areas around outbuildings and propane tanks**. Keep 10 feet of clearance to bare mineral soil and no flammable vegetation for an additional 10 feet around their exterior.

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