



# Fire Hazards and Planning in CA

Integrated Climate Adaptation and Resiliency Program (ICARP)  
Technical Advisory Council

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# General Plan

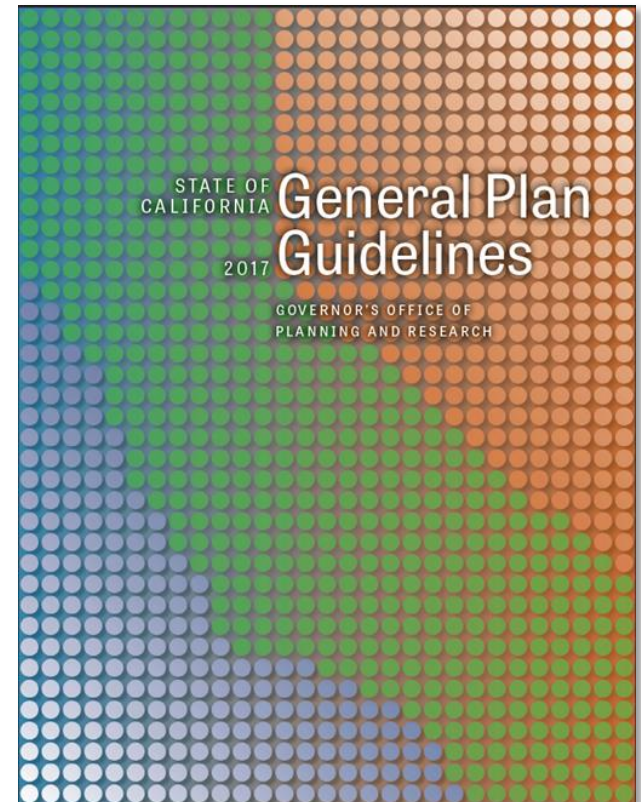
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## Required Elements

- Land Use
- Circulation
- Housing
- Conservation
- Open Space
- Noise
- **Safety**
- Air Quality\*
- Environmental Justice\*

## Topical Considerations

- Climate Change
- Public Health
- Equity
- Resilience
- Economic Development





# Safety Element

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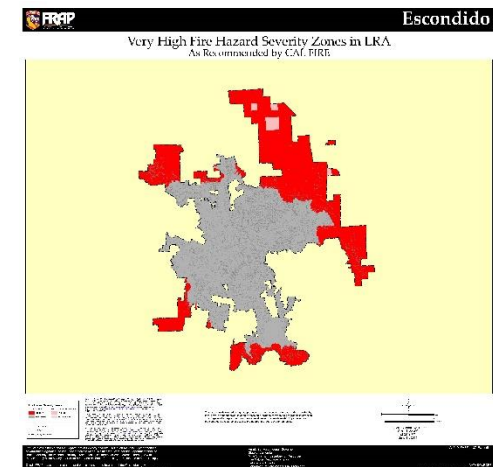
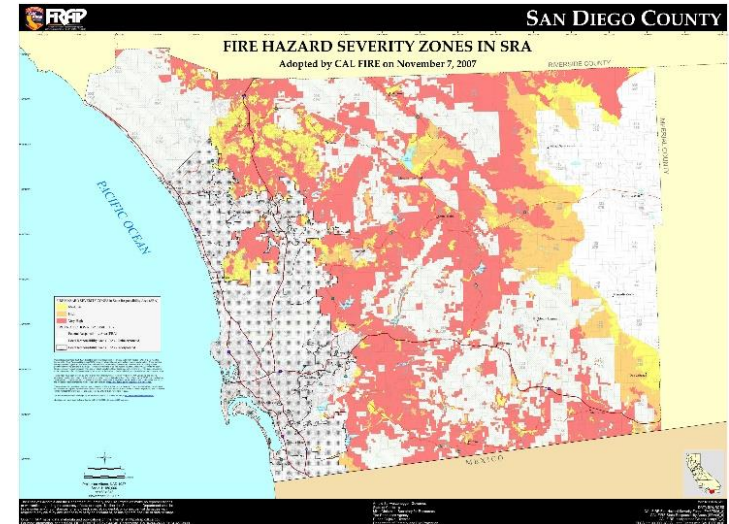
- ❑ Natural hazards: wildfire, flooding, earthquake, others
- ❑ Must identify “**unreasonable risks and policies for the protection of the community from such risks**” (Gov’t Code 65302(g)(1))
- ❑ Additional Requirements and Other Plans:
  - ❑ Climate Adaptation (SB 379, SB 1035)
  - ❑ Local Hazard Mitigation Plans (LHMP) + AB 2140 incentive
  - ❑ Community Wildfire Protection Plans
- ❑ Linkages with other mandatory elements/topics
  - ❑ Land Use, Circulation, Conservation, Open Space, Environmental Justice, others.
  - ❑ All GP elements must be internally consistent.



# Safety Element: Wildfire

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- **SB 1241 (2012):** Added mandatory wildfire requirements for jurisdictions in State Responsibility Area (SRA) and Very High Fire Hazard Severity Zone (VHFHSZ)
- Gov't Code 65302(g)(3)
- Applies to 189 cities and 52 counties
- Effective date: safety element must be updated “upon next housing element update on or after 1/1/2014”





# Wildfire Requirements: Information

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(1) “**Information regarding fire hazards**, including but not limited to, all of the following:

- ❑ **Fire hazard severity zone (FHSZ) maps** available from the Department of Forestry and Fire Protection [CAL FIRE].
- ❑ **Any historical data on wildfires** available from local agencies or a reference to where the data can be found.
- ❑ Information about wildfire hazard areas that may be available from the **United States Geological Survey**.
- ❑ **General location and distribution of existing and planned uses of land** in very high fire hazard severity zones and in state responsibility areas, including **structures, roads, utilities, and essential public facilities**.
- ❑ Local, state and Federal **agencies with responsibility for fire protection**, including special districts and local offices of emergency services.”



# Wildfire Requirements: Policies

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(2) “A set of goals, policies, and objectives based on the information identified in subparagraph (1) regarding fire hazards for the **protection of the community from the unreasonable risk of wildfire.**”



# Wildfire Requirements: Implementation

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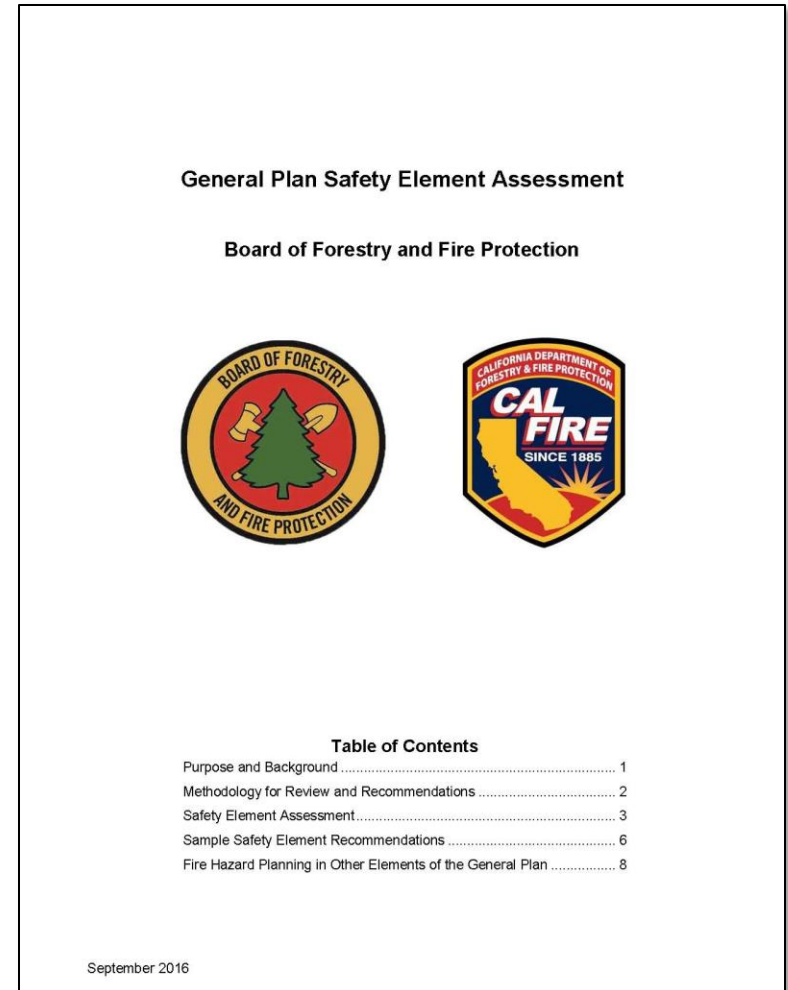
- (3) “A set of **feasible implementation measures** designed to carry out the goals, policies, and objectives based on the information identified in subparagraph (2) including, but not limited to, all of the following:
- ▣ **Avoiding or minimizing** the wildfire hazards associated with new uses of land.
  - ▣ **Locating, whenever feasible, new essential public facilities outside of high fire risk areas**, including, but not limited to, hospitals and health care facilities, emergency shelters, emergency command centers, and emergency communication facilities, or identifying construction methods or other methods to minimize damage if these facilities are located in SRA or VHFHSZ.
  - ▣ **Designing adequate infrastructure** if a new development is located in SRA or VHFHSZ, including safe access for emergency response vehicles, visible street signs, and water supplies for structural fire suppression..
  - ▣ **Working cooperatively** with public agencies with responsibility for fire protection”



# Safety Element: Mandatory Review

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- State Board of Forestry and CAL FIRE Land Use Planning Program
  - Mandatory Safety Element Reviews (Gov't Code 65302.5)
  - Proactive outreach to local planning agencies in SRA and VHFHSZ
  - Ongoing work to support safety elements, local ordinances, compliance, and enforcement
  - 70+ safety elements reviewed since 2014

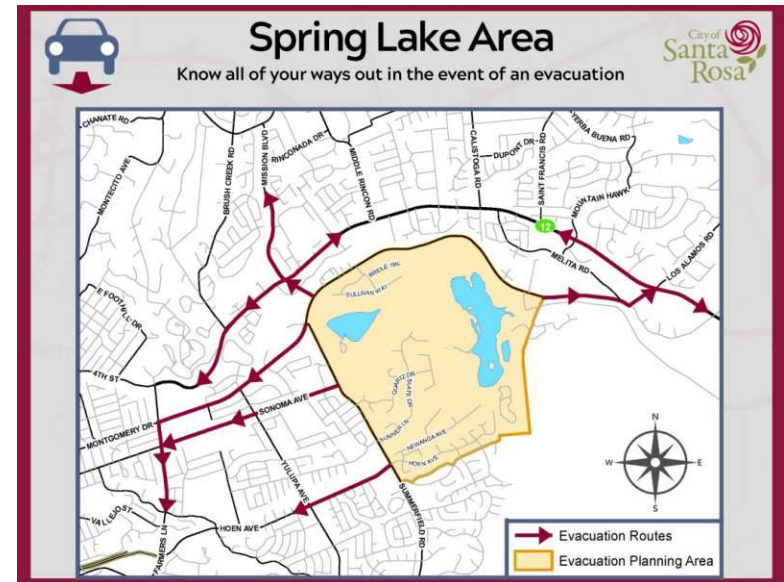




# Safety Element: Evacuation Routes

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- AB 747 (Levine, 2019)
  - ▣ Requires local governments to identify **evacuation routes** and evaluate their capacity, safety, and viability under a range of emergency scenarios.
  
- SB 99 (Nielsen, 2019)
  - ▣ Requires local governments to identify residential developments in hazard areas that do not have **at least two** emergency evacuation routes.
  - ▣ CAL FIRE: working on survey of subdivisions without two points of ingress/egress, per PRC 4290.5. To be completed by 2021



Source: [www.srcity.org](http://www.srcity.org)



# Regulatory Requirements

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- Local VHFHSZ ordinances (GC 51179)
- Fire safety regs for subdivisions (PRC 4290)
- Tentative subdivision maps - mandatory local findings of compliance (GC 66474.02)
- Defensible space regs (Public Resources Code [PRC] 4191)
- WUI Building Code (Chapter 7A, CA Building Code)

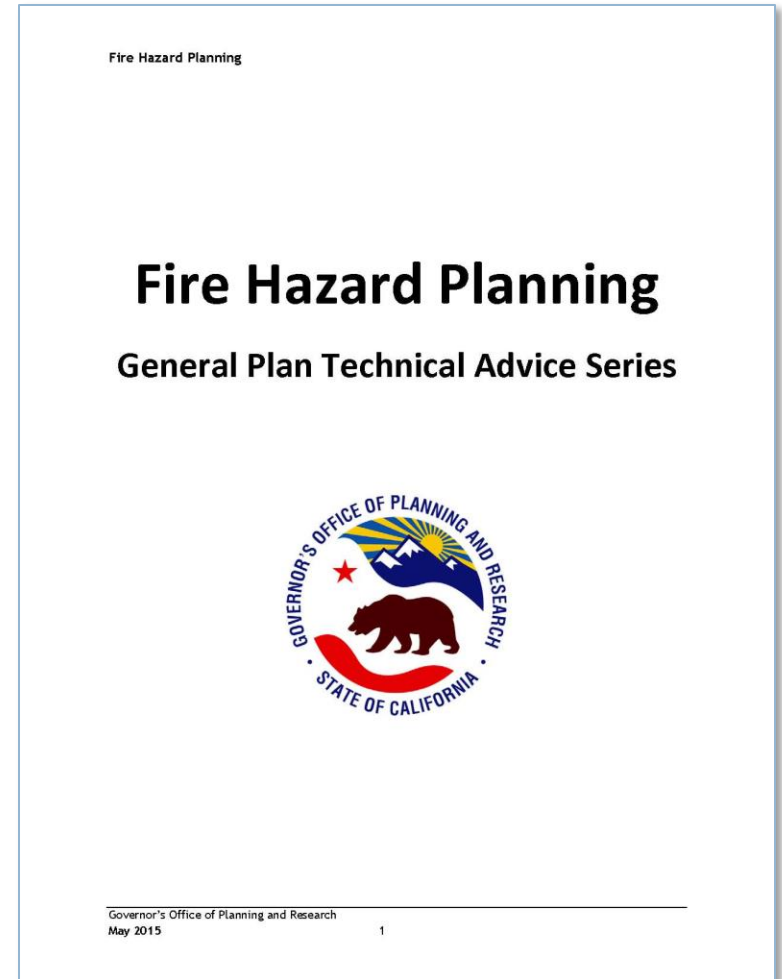




# Wildfire TA

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- **AB 2911 (2018):**
  - Requires OPR to update the *Fire Hazard Planning General Plan Technical Advice Series* (“Wildfire TA”)
  - Land use strategies to protect buildings, infrastructure, and communities
  - Alignment with LHMPs, CWPPs, and SB 379 adaptation requirements
  - More examples, best practices and case studies, tools, and resources





# What is the WUI?



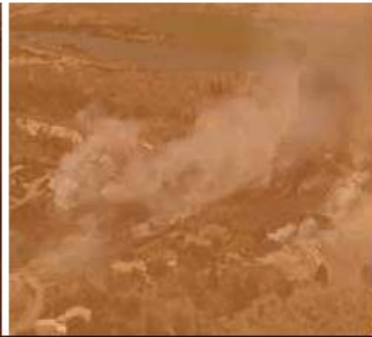
WILDLANDS



INTERMIX



INTERFACE



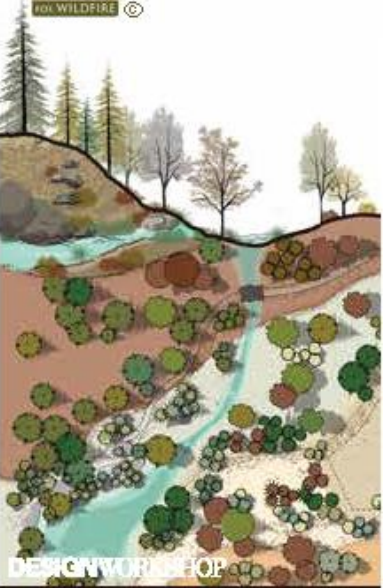
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EMBER ZONE



## CONTINUUM OF WILDLAND TO URBAN DENSITIES



WILDLANDS



RURAL



SUBURBAN



GENERAL RESIDENTIAL



URBAN / TOWN CENTER



# Research Findings

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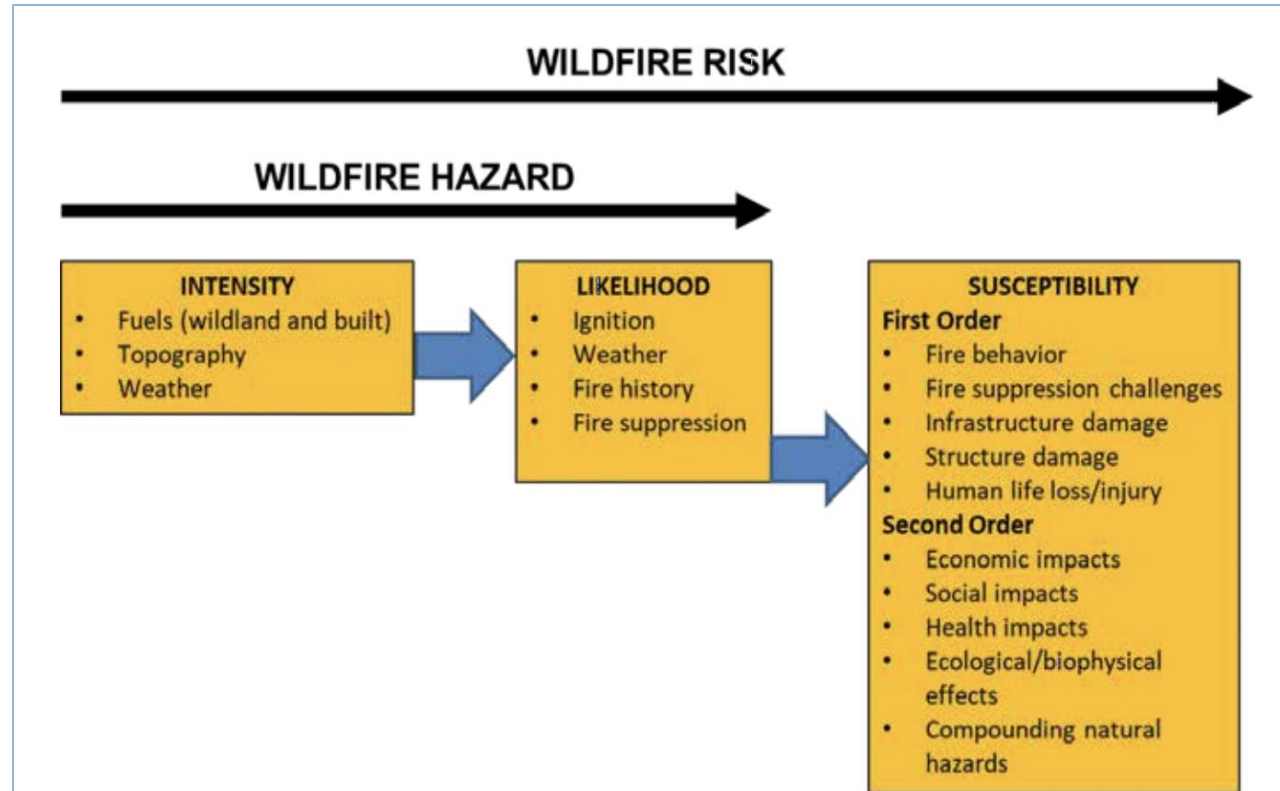
- ❑ 1 / 3 of California's population lives in the WUI
- ❑ Lower-density development experiencing higher wildfire losses
- ❑ Interface WUI damage appears more prevalent than intermix WUI
- ❑ Climate change: temperate change, extreme wind-driven conditions, ember-casting and ignitions happening now over longer distances
- ❑ Models and mapping not accounting well for non-natural conditions (i.e., homes and landscaping becoming fuel in wildfire events).
- ❑ Defensible space, WUI Code, other regs applicable are helping to reduce risk
- ❑ Insurance and financial markets are responding to recent losses and growing risks



# TA Update Concepts

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- **Early and ongoing engagement** with community and responsible agencies
- Prepare a robust **fire hazard and risk assessment**, coordinated with climate vulnerability assessment
- Identify wildfire hazards + values and assets at risk



# TA Update Concepts (cont'd)

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- ❑ Land use - avoidance, smarter project siting, resilient design
- ❑ Increase emphasis on implementation: codes, ordinances, enforcement... but also programs, partnerships, and incentives
- ❑ Reduce risk in both existing and new development
- ❑ Harmonize conservation and fuels management to reduce hazard severity
- ❑ Access, evacuation, and shelter-in-place
- ❑ Prioritize needs of vulnerable communities in disaster preparedness, response and recovery
- ❑ **Ultimate goal: Fire-adapted and resilient communities**





# State Resources

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- **WUI Planning and Enforcement: Best Practices Inventory and Case Studies (OPR and CAL FIRE)**
  - ▣ To be completed by 2022
  - ▣ Case Studies to be published in Adaptation Clearinghouse
  - ▣ Wildfire “Compass” Tool: alignment across plans, codes, and standards
  
- **California Adaptation Planning Guide (APG) 2.0**





# Other Resources

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- **Community Planning Assistance for Wildfire (CPAW) Program**
  - Los Angeles County (2020)
  - City of Redding (2019)
  - Mariposa County (2019)
  - Mammoth Lakes (2018)
  - City of San Diego (2015)
  
- **Fire-Adapted Communities Learning Network**
  
- **APA PAS Report – “Planning the WUI” (April 2019)**



# New CAL FIRE Grants (GGRF)

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- **\$6 million: new block grant program** to county groups to support **implementation of fire prevention and preparedness & community action** in collaboration with UC fire advisors, resource conservation districts, and others.
- **\$1 million: new fire outreach and fire extension advisors** program in 17 selected counties
- **\$2.5 million to reimburse counties for maintenance of evacuation routes + develop standards** for evacuation routes, create and maintain signage, and other necessities.
- **\$250K training reimbursement for local county planners:** training on land use planning issues in the WUI



# Thank You

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