

California: Overview

Everything in the main manual and the skill guides applies in California exactly as written. What's different here is the specific hazard profile and the state, local, and legal context around it. This page is the starting point; the other three pages under California go deeper on laws, local resources, and the data behind the risks named here.

Earthquake risk that sits directly under the state's two biggest population centers

California's earthquake risk isn't a single fault the way the Wasatch Fault or Cascadia are; it's a dense network of faults, the San Andreas foremost among them, running through or near nearly every major population center in the state. The USGS-led Uniform California Earthquake Rupture Forecast (UCERF3) puts the 30-year probability of at least one magnitude 6.7+ earthquake at 60% for the Los Angeles region and 72% for the San Francisco Bay Area, counting all faults capable of producing one in each area, not just the San Andreas itself.

The USGS's own ShakeOut planning scenario, built around a magnitude 7.8 rupture of the southern San Andreas, projects roughly 1,800 deaths, 50,000 injuries, and more than \$200 billion in losses, with the strongest shaking funneled directly into the Los Angeles basin. Unlike a single-fault risk, this is a standing, structural feature of living almost anywhere in urban California, not a coastal-only or regional concern.

Wildfire risk that's no longer a future projection

The January 2025 Southern California firestorm, the Palisades and Eaton fires chief among 14 separate destructive fires that month, killed 31 people, burned more than 57,000 acres, and destroyed or damaged over 18,000 structures across the Los Angeles metropolitan area and San Diego County. The Palisades Fire alone is the most destructive fire in the city of Los Angeles's history. A separate epidemiological study estimated the total mortality impact, counting indirect deaths from smoke exposure and disrupted medical care, at closer to 440; that figure is a statistical estimate, not a confirmed count, and the two numbers measure genuinely different things, direct versus total attributable mortality, not a correction of one by the other.

A third, slower-moving stressor: water

California's chronic water stress, drought cycles, an aging reservoir and aqueduct system, and a water-rights system genuinely more complicated than most other states', shapes long-term planning here in a way that doesn't have a single dramatic case study the way earthquake and fire do, but affects far more of the state, far more continuously. See the Laws page for how California's water-rights system actually works.

What this means for how you use the rest of this manual

The manual's Tier structure and the skill guides apply without modification. What's different in California: earthquake preparedness (Tier 1's basic supply kit, Tier 2's extended self-sufficiency) matters across nearly the entire state's urban population, not a specific fault corridor, and wildfire evacuation planning needs to account for the kind of fast-moving, wind-driven fire behavior the January 2025 fires demonstrated, hours of warning at most, sometimes less.

Sources

- USGS / UCERF3, 30-year earthquake probability for Los Angeles and San Francisco Bay regions: USGS
- USGS ShakeOut Scenario, magnitude 7.8 southern San Andreas planning scenario: shakeout.org
- January 2025 Southern California wildfires, confirmed death toll, acreage, and structure loss; Palisades Fire specific figures: Wikipedia, sourced to contemporary reporting

California: Laws & Legal Considerations

Rainwater harvesting: simple rooftop rule, like Oregon’s

California’s Rainwater Capture Act of 2012 (Water Code §10574) does the same job Oregon’s rooftop exemption does: collecting rainwater from a building’s roof for later use on the same property doesn’t require a state water-right permit at all.

Rule	California
Source water	Rooftop catchment specifically
Permit required	No, for residential/commercial/governmental rooftop systems used on-site
Permitted uses	Non-potable uses; check local code for anything plumbed indoors
Underlying statute	Water Code §10574, via the Rainwater Capture Act of 2012

The practical rule is nearly identical to Oregon’s: a rain barrel or cistern fed by your own roof, used on your own property, for non-potable purposes, doesn’t need state permission. This is meaningfully simpler than Utah’s tiered registration system.

Water rights: the one genuinely different legal system among the states covered so far

Utah and Oregon both use pure prior-appropriation water law. California uses a hybrid of two systems at once, and which one applies to a given water source changes the analysis entirely.

System	Who holds it	Key feature
Riparian rights	Owners of land bordering a water source	Shared equally among riparian landowners; not lost through nonuse; senior to appropriative rights in a shortage
Appropriative rights	Anyone, land ownership not required	"First in time, first in right" priority; can be lost after 5 years of nonuse if not transferred

Why this matters more than it might seem

In a genuine water shortage, riparian rights holders get water before appropriative rights holders do, regardless of who has the older claim, then appropriative rights are honored in strict priority order among themselves. This two-tier structure doesn’t exist in Utah or Oregon’s pure appropriative systems, and it’s the reason California water litigation is often more complex than in neighboring states.

Where to find it: the State Water Resources Control Board (waterboards.ca.gov) administers water rights statewide; for anything beyond basic rooftop rainwater capture, a water rights attorney or the Board directly is worth consulting given the system’s real complexity.

Concealed carry: a system that changed fundamentally in 2022, and is still moving

California’s concealed carry law looked completely different before 2022. Following the U.S. Supreme Court’s *NYSRPA v. Bruen* decision, California was forced to drop its old “may issue” system, which let local authorities deny a permit at their discretion even to qualified applicants, in favor of an objective “shall issue” standard.

Requirement	Detail
Standard	Shall-issue: if you meet the statutory criteria, the issuing authority must issue
Minimum age	21
Training, new applicants	Minimum 16 hours, including firearm safety, state law, 1 hour of mental health awareness, and live-fire qualification
Training, renewals	Minimum 8 hours
Governing statute	Penal Code §§26150–26155, §26202

The 'sensitive places' list is genuinely unsettled

SB 2 (effective January 2024) created an extensive list of locations where CCW holders cannot carry even with a valid permit, including parks, playgrounds, places of worship, bars, stadiums, museums, libraries, and public transit. Multiple federal court challenges have resulted in injunctions blocking parts of this list, and the situation was still actively being litigated as of this writing. Don’t treat any single source, including this one, as the final word on where carry is currently permitted; check current status before relying on it.

Defensible space: the most detailed rule of any state covered so far

Under Public Resources Code §4291, anyone who owns, leases, controls, or maintains a structure in a State Responsibility Area must maintain up to 100 feet of defensible space around it, structured into three distinct zones.

Zone	Distance from structure	Requirement
Zone 0	0–5 ft	Ember-resistant: non-combustible ground surfaces, no dead vegetation, no combustible fencing attached to the home
Zone 1	5–30 ft	Reduced fuel load, spaced/maintained vegetation
Zone 2	30–100 ft (or to the property line)	Reduced fuel load, standard defensible space practices

Zone 0 specifics are still being finalized

Zone 0 doesn’t require bare dirt; hardscape (pavers, gravel, concrete), non-combustible fencing, and well-maintained fire-resistant plants are all allowed, the requirement is that materials within 5 feet of the structure be non-combustible or ember-resistant, not that the area be empty. As of this writing, some Zone 0 implementation details remain subject to state rulemaking; confirm current requirements with CAL FIRE or your local fire authority before treating any specific checklist as final.

Where to find it: CAL FIRE publishes the official defensible space guidance at fire.ca.gov/dspace.

Sources

- California Water Code §10574 and the Rainwater Capture Act of 2012: California Legislative Information
- California’s hybrid riparian/appropriative water rights system: Union of Concerned Scientists; El Dorado Irrigation District
- California concealed carry law post-*Bruen*, Penal Code §§26150–26155/§26202, SB 2 sensitive places litigation status: USCCA
- Public Resources Code §4291 and Zone 0 defensible space requirements: FindLaw; Ember Pro

California: Local Resources

Cal OES and Listos California

California's Governor's Office of Emergency Services (Cal OES) runs the state's preparedness campaign under the name Listos California, the direct analog to Be Ready Utah and Oregon's Be 2 Weeks Ready. It's specifically built to reach populations that generic preparedness campaigns often miss.

A specific focus most other states' campaigns don't emphasize

Listos California has invested more than \$100 million in community preparedness since 2019, delivered through a network of community-based organizations, Tribal governments, and CERT programs, with material specifically designed for low-income households, people with disabilities, language barriers, older adults, and residents of high-risk disaster areas, rather than a single one-size-fits-all campaign.

Where to find it: listoscalifornia.org publishes readiness guides in multiple languages alongside the standard English materials.

UC ANR Cooperative Extension: California's version of USU/OSU Extension

The University of California's Division of Agriculture and Natural Resources runs the same category of program Utah's USU Extension and Oregon's OSU Extension do, administered through county-level Cooperative Extension offices.

- **UC Master Gardener Program:** active in more than 52 California counties, requiring roughly 50+ hours of training in plant science, soils, irrigation, pest management, and related topics before volunteers begin community outreach, comparable in scope to Utah's and Oregon's Master Gardener programs.

Where to find it: ucanr.edu lists every county program; availability, cost, and schedule vary by county, the same pattern as Utah's and Oregon's Extension programs.

CERT: one of the largest programs in the country

Los Angeles alone runs one of the largest, most established CERT programs in the United States, and it's entirely free.

What LA's program actually looks like

The Los Angeles Fire Department's CERT program is free to anyone 18 or older, delivered as 17.5 hours of training over seven weekly sessions, covering fire safety, light search and rescue, team organization, and disaster medical operations, the standard FEMA-approved curriculum. Classes run continuously throughout the year across locations citywide. Los Angeles County runs its own parallel CERT network beyond the city limits through the County Fire Department and individual city partnerships.

Where to find it: within the city of Los Angeles, contact the LAFD CERT Unit directly at 213-202-3136 (lafd.org); for Los Angeles County outside city limits, see ready.lacounty.gov/cert. Other California counties and cities run their own independent programs; search “[your city] CERT training” if you're elsewhere in the state.

Sources

- Cal OES / Listos California preparedness campaign and funding: Listos California; Cal OES News
- UC ANR Master Gardener Program structure and county availability: UC ANR
- Los Angeles Fire Department CERT program details: LAFD
- Los Angeles County CERT network: Ready LA County

BY STATE › CALIFORNIA

California: Risks & Trends

Same standard as every other page on this site: every figure below is independently sourced, and figures that vary across sources, or measure genuinely different things, are flagged as such rather than collapsed into one number that looks more precise than the underlying data actually supports.

Earthquake probability: UCERF3 and the ShakeOut scenario

Metric	Figure	Source
30-yr chance of M6.7+, Los Angeles region	60%	USGS / UCERF3
30-yr chance of M6.7+, San Francisco Bay region	72%	USGS / UCERF3
30-yr chance of M7.0+, Los Angeles region	46%	USGS / UCERF3
30-yr chance of M7.0+, San Francisco Bay region	51%	USGS / UCERF3
ShakeOut planning scenario magnitude	M7.8, southern San Andreas	USGS
Projected deaths, ShakeOut scenario	~1,800	USGS
Projected injuries, ShakeOut scenario	~50,000	USGS
Projected economic losses, ShakeOut scenario	>\$200 billion	USGS

Why the LA and Bay Area numbers differ, and what 'UCERF3' actually covers

These percentages count every fault capable of producing that magnitude in each region, not just the San Andreas alone, which is why the Bay Area’s figure is higher despite the San Andreas itself running directly through Los Angeles’s broader region too: the Bay Area’s fault network (San Andreas, Hayward, Calaveras, and others) produces a higher combined probability across all sources considered together.

The January 2025 Southern California firestorm

Metric	Figure
Confirmed deaths, all fires combined	31
Separately estimated total mortality (direct + indirect, one epidemiological study)	~440
Total acres burned, all fires	~57,500
Structures destroyed or damaged, all fires	18,189+
Palisades Fire: deaths / acres / structures	12 / 23,448 / 7,854 destroyed or damaged
Eaton Fire: deaths / acres / structures	18 / 14,021 / 10,491 destroyed or damaged

The 31-versus-440 gap is not a data error

The 31 figure is the confirmed direct death toll, people who died from the fires themselves. The roughly 440 figure comes from a separate epidemiological study estimating total attributable mortality, deaths from smoke exposure, disrupted medical care, and other indirect effects layered on top of the direct toll, not a revision or correction of the confirmed count. Both numbers are real and both are useful, but they measure different things, and citing one without the other’s context risks a misleading impression either way.

Two things stand out from the fire-by-fire breakdown: the Eaton Fire killed more people despite burning fewer acres than the Palisades Fire, and the Palisades Fire, while smaller in structures lost than Eaton, is specifically the most destructive fire in the city of Los Angeles’s own history, a distinct record from the county- or state-wide totals.

What these two have in common

Both of California’s defining risks share a structural feature this manual’s own framing is built around: they’re not single, bounded events with a clear before-and-after, they’re standing conditions of living in the state’s major population centers. A magnitude 6.7+ earthquake in the Bay Area or LA region isn’t a remote possibility on a 500-year timescale, it’s a better-than-even chance within 30 years by the state’s own modeling; a wind-driven wildfire capable of the January 2025 event’s speed and scale isn’t confined to remote wildland, it reached deep into dense Los Angeles neighborhoods with hours of warning at most.

Sources

- UCERF3 earthquake probability figures: USGS
- USGS ShakeOut Scenario projections: shakeout.org
- January 2025 Southern California wildfires, confirmed and estimated death tolls, acreage, and structure loss, overall and by individual fire: Wikipedia, sourced to contemporary reporting