

Montana: Overview

Everything in the main manual and the skill guides applies in Montana 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 Montana go deeper on laws, local resources, and the data behind the risks named here.

The 1959 Hebgen Lake earthquake: the deadliest quake in Montana history

On the night of August 17, 1959, a magnitude 7.3 earthquake struck near West Yellowstone, triggering a massive landslide in the Madison Canyon that swept roughly 50 million cubic yards of rock and debris down the mountainside. The slide dammed the Madison River overnight, creating what's now called Earthquake Lake. It remains the deadliest and most severe earthquake on record in Montana and the broader Intermountain West, killing 28 people, most of them campers at a full campground buried by the slide. See the Risks page for the full data.

The 2017 Lolo Peak fire: a major modern wildfire season case study

Montana's 2017 wildfire season was one of its worst in decades, and the Lolo Peak fire, burning nearly 54,000 acres across the Lolo and Bitterroot National Forests, was among its most significant single fires, killing one firefighter, destroying two homes, and forcing more than 3,000 evacuations. The nearby Rice Ridge fire that same season burned even more acreage, together illustrating how quickly a Montana fire season can escalate from routine lightning starts to megafire conditions. See the Risks page for the full data.

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 Montana: seismic risk here is real and historically severe, not a hazard limited to the West Coast, and this manual's evacuation and go-bag guidance applies just as directly to a fast-escalating summer wildfire season as it does to California or Oregon's fire risk.

Sources

- 1959 Hebgen Lake earthquake data: USGS; Wikipedia
- 2017 Lolo Peak fire data: Wikipedia; Northern Rockies Fire Science Network

Montana: Laws & Legal Considerations

Rainwater harvesting: unrestricted

Montana places no permit requirement on residential rainwater harvesting for typical household use.

Rule	Montana
Source water	Rooftop or other catchment
Permit required	No, for typical residential collection
Permitted uses	Non-potable, typically irrigation and similar uses

Where to find it: the Montana Department of Natural Resources and Conservation (dnrc.mt.gov) administers water rights generally.

Water rights: prior appropriation, written directly into the state constitution

Montana follows prior appropriation, the same “first in time, first in right” doctrine as Utah, Oregon, Washington, Arizona, Kansas, and New Mexico, with two features worth calling out specifically.

Concept	How it works in Montana
Basic rule	The earliest-dated appropriator holds first claim during a shortage; owning land along water doesn't itself grant a right to use it
'Use it or lose it'	A water right must be actively put to beneficial use to remain valid, a specific enforcement mechanism named explicitly in Montana law
Constitutional guarantee	Montana's water rights framework is written directly into Article IX, Section 3 of the state constitution, not left to statute alone

Where to find it: the Montana Department of Natural Resources and Conservation administers appropriation permits and the statewide water-right recording system.

Permitless carry since 2021

Montana has recognized full constitutional carry since House Bill 102 took effect February 18, 2021.

Requirement	Detail
Standard	Permitless carry, concealed, for any resident or visitor 18+ legally eligible to possess a firearm, in most locations
Applies to visitors too	Non-residents passing through Montana are covered by the same permitless standard as residents
Still applies	Prohibited-location rules, federal law overlays (e.g., federal buildings, national parks' specific restrictions), and reciprocity considerations when traveling elsewhere

Sources

- Montana rainwater harvesting and water rights administration: Montana DNRC
- Montana prior appropriation, “use it or lose it,” and constitutional guarantee: MSU Extension; University of Montana
- Montana permitless carry (HB 102, 2021): LegalClarity

Montana: Local Resources

Montana Disaster and Emergency Services (DES)

Montana DES coordinates statewide emergency planning and response, working through county-level DES offices (Cascade County, Yellowstone County, and others) that handle local implementation, training, and CERT delivery.

Where to find it: your county's DES office, or the state Department of Military Affairs's Disaster and Emergency Services Division.

MSU Extension: Master Gardener Program

Montana State University Extension runs the same category of program as every other state covered on this site, in a notably compact format.

- **Montana Master Gardener Program:** an 8-10 week course, shorter than the 40+ hour classroom standard seen on many other states' pages, followed by an open-book exam and a 20-hour volunteer commitment.

Where to find it: montana.edu/extension/mastergardener lists county-level classes.

CERT: county-run, with active programs in Cascade, Missoula, and Fergus counties

Montana's CERT programs are organized independently at the county level rather than through one statewide curriculum. Cascade County and Missoula County both run established CERT programs, and Fergus County has more recently moved to add its own, a free eight-unit course typically delivered over about three days covering first aid, disaster psychology, fire safety, and utility controls.

Coverage varies significantly by county

Not every Montana county has an active CERT program yet. Given the state's large geography and low population density outside a handful of counties, residents should check directly with their county's DES office for the nearest active team rather than assuming coverage.

Where to find it: search “[your county] Montana CERT” or check your county DES office’s website directly.

Sources

- Montana DES structure: Cascade County; Yellowstone County
- Montana Master Gardener Program requirements: Montana State University
- Montana county CERT programs: KPAX; Missoula CERT

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Montana: 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.

The 1959 Hebgen Lake earthquake

Metric	Figure
Date	August 17, 1959, 11:37 PM MST
Magnitude	7.3
Epicenter	~6.5 mi WNW of West Yellowstone, MT
Landslide volume	~50 million cubic yards of rock and debris
Deaths	28, most at Rock Creek campground, buried by the slide
Bodies never recovered	19, presumed buried beneath the slide debris
New feature created	Earthquake Lake ('Quake Lake'), formed when the slide dammed the Madison River
Historical ranking	Deadliest and most severe earthquake on record in Montana and the Intermountain West

A dam that formed in a single night

Earthquake Lake didn't exist before August 17, 1959; a landslide triggered by the quake dammed the Madison River in a matter of minutes. It's a striking reminder that seismic events can reshape a landscape's water features permanently and immediately, not just damage buildings.

The 2017 Lolo Peak fire

Metric	Figure
Start date	July 15, 2017
Cause	Lightning
Area burned	53,902 acres
Deaths	1 (firefighter Brent Witham)
Injuries	1 non-fatal
Homes destroyed	2
Residences threatened	1,150
People evacuated	3,000+
Damage	\$34.6 million

Part of a broader, worse season

The Rice Ridge fire, burning the same summer northeast of Seeley Lake, grew from 40,000 to over 100,000 acres in a single week in September 2017 and became the nation’s top wildfire priority at the time, ultimately burning 155,900 acres. Lolo Peak wasn’t an isolated event; it was one part of one of Montana’s worst wildfire seasons in decades.

Sources

- 1959 Hebgen Lake earthquake data: USGS; Wikipedia
- 2017 Lolo Peak and Rice Ridge fire data: Wikipedia; Wikipedia