

Iowa: Overview

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

The 2008 flood: a record crest, and no deaths

In June 2008, the Cedar River crested at 31.12 feet in Cedar Rapids, more than 11 feet above the previous record, flooding 10 square miles of the city and displacing more than 18,000 residents. Statewide, the flooding caused \$10 billion in damage across 16 counties, yet no deaths were directly attributed to it, a genuine credit to warning and evacuation systems given the flood's unprecedented scale. See the Risks page for the full data.

The 2020 derecho: the costliest thunderstorm event on record

Twelve years later, Cedar Rapids took a direct hit from a completely different kind of disaster. On August 10, 2020, a derecho, essentially an inland hurricane of straight-line thunderstorm winds, produced gusts up to 140 mph in the Cedar Rapids area, damaging nearly every building across 75 square miles of the city and destroying an estimated 676,000 trees, roughly 70% of its tree canopy. The storm caused \$11.2 billion in damage nationally, the costliest thunderstorm event ever recorded in the United States, and killed 4 people in Iowa.

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 Iowa: river flood risk deserves the same seriousness this manual gives coastal flood risk elsewhere, Cedar Rapids's 2008 experience shows how quickly a "record" flood level can be redefined, and this manual's backup power and debris-clearing guidance carries extra weight given how long derecho-related outages can last, more than 1 million customers lost power in 2020, some for over two weeks.

Sources

- 2008 Cedar Rapids flood crest, displacement, and statewide damage: City of Cedar Rapids

- 2020 Iowa derecho winds, deaths, and damage: Wikipedia, sourced to NWS; Washington Post

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Iowa: Laws & Legal Considerations

Rainwater harvesting: no state-level restrictions

Iowa places no state regulation on residential rainwater harvesting and actively encourages the practice.

Rule	Iowa
Source water	Rooftop or other catchment
Permit required	No, at the state level
Permitted uses	Non-potable: irrigation and similar uses
Local variation	Municipal building and plumbing codes and zoning laws may still apply

Where to find it: the Iowa Department of Natural Resources (iowadnr.gov) publishes general water conservation guidance.

Water rights: “modified riparian,” a genuinely distinct label from other states covered here

Iowa’s water law is often described specifically as “modified riparian,” a hybrid combining elements of appropriation and riparian doctrine under a single beneficial-use framework, distinct in its own terminology from Oklahoma’s explicitly dual riparian/prior-appropriation system covered elsewhere on this site.

Concept	How it works in Iowa
Ownership	All waters are "public waters and public wealth" of Iowa citizens under state law adopted in 1957
Governing standard	Beneficial use: water must be put to beneficial use, waste or unreasonable use is prohibited, and conservation is required
Permit threshold	Withdrawals exceeding 25,000 gallons/day from a stream or aquifer require an Iowa DNR permit

Where to find it: the Iowa Department of Natural Resources administers water withdrawal permits.

Permitless carry since 2021

Iowa adopted permitless carry effective July 1, 2021.

Requirement	Detail
Standard	Permitless carry, open or concealed, for anyone 21+ legally eligible to possess a firearm
Optional permits	A Permit to Acquire Pistols and Revolvers and a Nonprofessional Permit to Carry Weapons remain available through the county sheriff
Why get an optional permit anyway	Reciprocity while traveling to states requiring a permit from Iowa residents; can help avoid delays from a NICS background check hold when purchasing from a licensed dealer

Sources

- Iowa rainwater harvesting rules: Survival Sullivan
- Iowa’s modified riparian water law and 25,000-gallon permit threshold: Iowa DNR
- Iowa permitless carry (HF 756, 2021): Iowa DPS; Giffords Law Center

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Iowa: Local Resources

HSEMD and Ready Iowa

The Iowa Department of Homeland Security and Emergency Management, active since 1965, runs public preparedness outreach through Ready Iowa, built around four steps: be aware, make a plan, build a kit, and get involved.

Where to find it: ready.iowa.gov.

Iowa State University Extension: Iowa's version of the other states' land-grant Extension programs

Iowa State University Extension and Outreach runs the same category of program as every other state covered on this site.

- **Iowa Master Gardener Program:** 40 hours of initial training (webcast, in-person, and hands-on formats), followed by 40 hours of volunteer service to become an active Master Gardener, then 20 volunteer hours and 10 continuing-education hours annually to maintain it. A non-volunteer "Iowa Home Gardener" track is also available for those who just want the education.

Where to find it: extension.iastate.edu/mastergardener lists the program by county.

CERT: standardized statewide through the Iowa Disaster Human Resource Council

Iowa's CERT training follows standards set jointly by the Iowa Disaster Human Resource Council's CERT Support Committee and HSEMD, giving the state a more centrally coordinated instructor and curriculum standard than some fully county-by-county models covered on this site.

Where to find it: iavoad.org/resources/cert-guides; search "[your county] CERT" for a local team.

Sources

- Ready Iowa campaign and HSEMD history: Ready Iowa
- Iowa State Extension Master Gardener Program requirements: Iowa State University Extension
- Iowa CERT program standardization: Iowa Disaster Human Resource Council

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Iowa: 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 2008 flood: Cedar Rapids’s record crest

Metric	Figure
Cedar River crest at Cedar Rapids	31.12 ft (previous record: ~20 ft)
Area of Cedar Rapids flooded	10 sq mi (14% of the city)
Cedar Rapids residents displaced	18,000+
Statewide residents displaced (16 counties)	38,043
Homes flooded (Cedar Rapids)	~6,000 (1,300 later demolished)
City facilities damaged	310
Statewide damage	\$10 billion
Deaths	0

The 2020 derecho: the costliest thunderstorm event on record

Metric	Figure
Date	August 10, 2020
Path length	~700-770 mi (South Dakota to Ohio)
Peak winds (Cedar Rapids area)	140 mph
Iowa deaths	4
National damage total	\$11.2 billion, the costliest thunderstorm event on record in the U.S.
Cedar Rapids area damaged	~75 sq mi, nearly every building
Cedar Rapids trees lost	~676,000 (~70% of the tree canopy)
Iowa farmland destroyed	~6 million acres (~20% of the state's farmland)
People in the overall damage footprint	20 million+
Peak power outages	1 million+ customers, some for 2+ weeks

What these two have in common

Separated by 12 years, the 2008 flood and the 2020 derecho both struck Cedar Rapids specifically with force well beyond anything the city’s existing infrastructure and expectations were built for, one redefining the city’s flood-crest record by more than 11 feet, the other flattening the majority of its urban tree canopy in a matter of hours. Together they demonstrate that a single Midwest city can face both catastrophic water risk and catastrophic wind risk within the span of a little over a decade.

Sources

- 2008 Cedar Rapids flood statistics: City of Cedar Rapids
- 2020 Midwest derecho data: Wikipedia, sourced to NWS; Washington Post