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Texas: Overview

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

Hurricanes and the Gulf Coast

Texas has more than 350 miles of Gulf Coast, and every hurricane season carries a real chance of landfall somewhere along it. Hurricane Harvey, which struck the Houston area in August 2017, is the reference case: it stalled over southeast Texas for days, dropping rainfall totals as high as 60.58 inches near Nederland, the highest storm-total rainfall ever recorded in the continental United States, flooding more than 300,000 structures and causing an estimated \$125 billion in damage. Harvey was a flood disaster more than a wind disaster, a distinction that matters for how you prepare: wind-rated construction doesn't protect against a storm that simply refuses to move.

A grid that has already failed once, statewide

Texas runs its own electrical grid, managed by ERCOT and largely isolated from the two interconnected grids covering the rest of the continental U.S. That isolation was central to Winter Storm Uri in February 2021, when a deep cold snap outside the grid's typical planning range triggered cascading power plant failures and left millions without power, some for days, in freezing temperatures. The manual's Case for Preparedness page covers Uri in detail as a national case study; the short version for Texas specifically is that it's the state where it happened, and the grid structure that made it possible hasn't fundamentally changed.

Flash flooding: the Hill Country's defining hazard

The Texas Hill Country, including Kerr County and the areas around the Guadalupe River, sits in a region meteorologists sometimes call "flash flood alley," where thin soil over rock, steep terrain, and Gulf moisture combine to produce some of the fastest-rising floodwaters in the country. The July 2025 Central Texas floods, when a mesoscale storm system dropped roughly four months' worth of rain in a few hours, killed at least 136 people, the deadliest inland flooding disaster in the U.S. since 1976. 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 Texas: households on or near the Gulf Coast need hurricane-specific evacuation and flood planning in addition to the manual's general Tier 1-2 supply guidance, households anywhere on the ERCOT grid should treat extended winter power loss as a real, not hypothetical, scenario, and anyone in flash-flood-prone terrain, the Hill Country especially, should treat "move to higher ground immediately" as a standing instruction for any period of sustained heavy rain, not something to decide in the moment.

Sources

- Hurricane Harvey rainfall totals, damage estimate, and structures flooded: NOAA NESDIS; Wikipedia, sourced to NHC and contemporary reporting
- ERCOT grid isolation and Winter Storm Uri: see this site's Case for Preparedness
- July 2025 Central Texas floods, death toll and meteorological cause: Wikipedia, sourced to contemporary reporting

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Texas: Laws & Legal Considerations

Rainwater harvesting: actively encouraged, not just permitted

Where Utah, Oregon, and California each carve out a narrow rooftop exemption from a broader permit system, Texas goes further: the state actively incentivizes rainwater collection.

Rule	Texas
Source water	Rooftop or other catchment; no state permit required for collection or on-site use
Sales tax	Exempt: equipment, labor, and materials for a rainwater harvesting system are exempt from state sales tax
Property tax	Local option: taxing units may exempt part or all of the assessed value added by an approved rainwater harvesting system
HOA restrictions	Barred: a homeowners association cannot prohibit a rainwater harvesting system
Underlying statutes	Tax Code §151.355 (sales tax); Tax Code §11.32 (property tax); Property Code §202.007 (HOA protection)

How to actually claim the sales tax exemption

It isn't automatic at checkout. The purchaser fills out Texas Comptroller Form 01-339 (the sales tax exemption certificate) and gives it to the supplier at time of purchase, covering rain barrels, cisterns, tanks, gutters and diverters routed into a collection system, roof washers, and filtration screens.

Where to find it: the Texas Water Development Board maintains rainwater harvesting guidance at twdb.texas.gov.

Water rights: a genuinely distinct third system

Utah and Oregon use pure prior-appropriation law for their water. California splits surface water between riparian and appropriative rights. Texas does something different again: it treats groundwater and surface water as two

entirely separate legal regimes, governed by different rules and, in the case of groundwater, largely different logic than any other state covered so far.

Water type	Governing rule	Key feature
Groundwater	Rule of capture	A landowner may pump essentially unlimited water from beneath their own land, regardless of the effect on a neighbor's well or the water table, subject only to local Groundwater Conservation District rules where one exists
Surface water	Prior appropriation	State-owned; "first in time, first in right" permits issued and administered by TCEQ, the same underlying doctrine as Utah's and Oregon's systems

Rule of capture is not the same as 'no rules at all'

The rule dates to a 1904 Texas Supreme Court ruling and remains the default, but it isn’t absolute in practice: roughly 177 counties fall under a local Groundwater Conservation District with permitting and pumping-limit authority, and regional Groundwater Management Areas set longer-term availability targets. Whether a given well is meaningfully regulated depends entirely on which district, if any, covers that specific property.

Where to find it: the Texas Commission on Environmental Quality (tceq.texas.gov) administers surface water rights; check the Texas Water Development Board’s district map for groundwater regulation in a specific county.

Permitless carry since 2021

Texas is one of the states, alongside Utah, that allows most adults to carry a handgun, openly or concealed, without any permit at all.

Requirement	Detail
Standard	Permitless ("constitutional") carry for handguns; a License to Carry remains available and is useful for reciprocity when traveling to other states
Minimum age	21, with narrower exceptions for 18-20-year-olds following a 2025 federal court ruling and for active-duty military 18 and older
Disqualifiers	Federal or state firearm prohibition; certain misdemeanor convictions within the past 5 years; active criminal street gang membership
Governing statute	House Bill 1927 (2021), effective September 1, 2021

Permitless carry applies to handguns only

HB 1927 changed the default rule for handguns specifically; it didn't alter separate state and federal rules governing rifles, short-barreled firearms, or carry in specifically restricted locations (schools, courts, polling places, and others). A License to Carry still matters for anyone who travels regularly to a state that recognizes Texas LTC reciprocity but not permitless carry itself.

Sources

- Texas rainwater harvesting sales and property tax exemptions, HOA protection: Texas Tax Code §151.355; Texas Water Development Board
- Texas groundwater rule of capture and Groundwater Conservation Districts: Texas Water Resources Institute; Texas Living Waters Project
- Texas surface water prior appropriation and TCEQ administration: Texas Policy Foundation
- Texas permitless carry, HB 1927, age requirements: Versus Texas; federal court ruling on 18-20 year olds: NPR

Texas: Local Resources

TDEM: the state agency, and a large open training catalog

The Texas Division of Emergency Management coordinates state and local emergency response and runs public preparedness outreach under the banner “Prepare Today For A Safer Tomorrow.” Its most useful feature for an individual household is scale: TDEM’s training arm maintains a catalog of more than 1,000 courses, most free, covering everything from basic disaster preparedness to specialized response skills, open to the public as well as emergency responders.

Where TDEM's training actually lives

Course registration runs through [PreparingTexas.org](https://preparingtexas.org) rather than TDEM’s main site. Not everything in the catalog is aimed at ordinary households, much of it targets responders and local officials, but the all-hazards preparedness sections are open to anyone and free to attend.

Where to find it: preparingtexas.org for training and course registration; tdem.texas.gov for general preparedness guidance and current alerts.

Texas A&M AgriLife Extension: the state’s version of USU/OSU/UC ANR Extension

Texas A&M AgriLife Extension runs the same category of program Utah’s USU Extension, Oregon’s OSU Extension, and California’s UC ANR do, delivered through county-level offices across all 254 Texas counties.

- **Texas Master Gardener Program:** administered county by county, with initial training ranging from roughly 35 to 72+ hours depending on the county, covering soils, water conservation, pest management, vegetable and fruit production, and related topics, followed by a volunteer service commitment to earn certification.

Where to find it: agrilifeextension.tamu.edu lists every county office; the specific hours, cost, and schedule for Master Gardener training vary by county, the same pattern as every other state’s Extension program covered on this site.

CERT: real, but genuinely decentralized

Unlike Los Angeles's single large citywide program, Texas doesn't run CERT through one dominant statewide or metro-wide system. Instead, dozens of individual cities and counties, Fort Worth, Burleson, and Houston among them, run their own independent CERT chapters, each following the same FEMA-approved curriculum but with its own schedule, cost (usually free), and application process.

What this means in practice

There's no single statewide CERT hub to check first. The most reliable path is searching "[your city or county] CERT" directly, or contacting TDEM's training office at training@tdem.texas.gov or 512-377-0011 if a direct local search doesn't turn up a program near you.

Sources

- TDEM preparedness mission, public outreach, and training catalog scale: TDEM; TDEM training registration
- Texas A&M AgriLife Extension Master Gardener Program structure and county variation: Texas A&M AgriLife Extension; Fort Bend County AgriLife
- Local CERT program examples and structure: Fort Worth CERT; Burleson, TX

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Texas: 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.

Hurricane Harvey (2017): the wettest tropical cyclone on record in the U.S.

Metric	Figure
Direct deaths, Texas	89
Additional indirect deaths in the following months	35
Peak rainfall total (Nederland, TX)	60.58 in, a U.S. record
People who experienced 30+ inches of rainfall	~7 million
Structures flooded	300,000+
Estimated total damage	~\$125 billion (2017 USD)

Harvey’s defining characteristic wasn’t wind speed, it made landfall as a Category 4 but weakened quickly. The damage came from the storm stalling over southeast Texas for days, turning a normal hurricane’s hours-long rain event into one that lasted the better part of a week over the same ground.

The July 2025 Central Texas floods: deadliest U.S. inland flood since 1976

Metric	Figure
Total confirmed deaths, all counties	136+
Kerr County deaths	117
Camp Mystic deaths (campers and counselors)	~27
Peak rainfall in a few hours	20.33 in, roughly four months' typical rainfall
AccuWeather preliminary total economic loss estimate	\$18-22 billion

Why the damage figures vary so much across sources

Wikipedia’s infobox-style figure for this event (roughly \$1.1 billion) reflects a narrower, more immediately confirmable category, direct infrastructure and insured-loss estimates available soon after the event. AccuWeather’s \$18-22 billion is a broader preliminary total-economic-loss estimate, covering business disruption, tourism loss, and long-term health costs alongside direct property damage. Both figures come from real methodologies measuring different things; neither is a rounding error of the other, and the wide range on the AccuWeather figure itself reflects that it was issued while the disaster was still unfolding.

The mechanism matters as much as the rainfall total: a mesoscale convective system pushed tropical moisture over the Hill Country’s thin soil and steep terrain, the same regional combination behind the area’s informal name, “flash flood alley,” and the Guadalupe River rose dozens of feet in under an hour in several towns.

A third standing risk: the ERCOT grid

Texas’s electrical grid is deliberately isolated from the two interconnected grids covering the rest of the continental United States, a structure that avoids most federal interstate regulation but also means Texas can’t easily import power from neighboring states during a shortfall. Winter Storm Uri in February 2021 demonstrated the consequence directly: see this site’s Case for Preparedness page for the full data on that event, 210 confirmed deaths statewide and roughly \$195 billion in property damage, mostly from cold exposure and frozen or burst water pipes during days of grid failure.

What these have in common

All three of Texas's defining risks, hurricane flooding, flash flooding, and grid failure, share the same practical lesson: none of them are rare, remote-probability events on the scale this manual otherwise treats as background risk. Texas has a named Atlantic hurricane season every single year, the Hill Country's flash-flood geography doesn't change, and the ERCOT grid's structural isolation is a standing design choice, not something fixed after 2021.

Sources

- Hurricane Harvey death toll, rainfall records, and damage estimate: NOAA NESDIS; National Hurricane Center tropical cyclone report
- July 2025 Central Texas floods, death toll by county, Camp Mystic, and meteorological cause: Wikipedia, sourced to contemporary reporting
- AccuWeather preliminary total economic loss estimate: AccuWeather
- Winter Storm Uri death toll and damage: this site's Case for Preparedness