

Legal Rainwater Harvesting in Utah

Rainwater harvesting in Utah isn't illegal, the way the old rumor goes, but it is regulated, and the rule itself is simple enough to just know. This is a Stage 3 self-sufficiency skill from the Water & Food chapter and its addendum, and unlike most of what's in that stage, the "how" here is a bureaucratic process, not a hands-on course, so it's genuinely teachable on one page.

The two tiers of Utah's rule

Storage amount	What's required
Up to 200 gallons (2 covered containers, 100 gallons each, max)	Nothing. No registration, no paperwork, completely legal on its own.
Up to 2,500 gallons total, on one parcel	Free registration with the Utah Division of Water Rights
More than 2,500 gallons, or water for other parcels	A full water right, a genuinely different and more involved process

Read these as two separate options, not additive tiers: two 100-gallon covered containers requires nothing at all, while a setup you register can hold up to 2,500 gallons total on its own. Almost every household system fits inside the 2,500-gallon registered tier without ever needing an actual water right.

How to register

1. Go to waterrights.utah.gov/forms/rainwater.asp.
2. Fill out the form: your name, phone number, property address, and email. That's the whole information requirement.
3. Submit it. Registration is free, and you'll get a certificate to print and keep with your other household documents.
4. Register again if you significantly increase your total storage capacity later; the registration covers the capacity you declared, not an open-ended allowance.

Where you can use it

Collection and use are limited to the same parcel of land where the water is captured and stored. You can't collect rainwater at one property and truck or pipe it to use on another, registered or not.

Building a system that doesn't create a mosquito problem

The legal part is the easy part; a poorly built system creates a real, separate problem: standing water breeds mosquitoes within days. A few basic components prevent that instead of causing it.

- **A gutter screen** at the inlet catches leaves, sticks, and roofing debris before they reach the container.
- **A first-flush diverter** routes the initial, dirtiest runoff (dust, pollen, bird droppings that accumulated on the roof since the last rain) away from your storage, before clean water starts filling it. The standard design is a vertical standpipe mounted on the downspout: it fills with the dirty first flush, a floating ball inside then rises and seals off the pipe once full, and subsequent clean water diverts past it into the tank. A small bleed hole, roughly 3–5mm, drilled at the base of the standpipe slowly drains it between storms so it resets on its own before the next rain. A rough sizing rule: divert at least 12.5 gallons for every 1,000 square feet of roof area being collected from.
- **Screened openings and vents**, 1/16-inch mesh or finer, on every point where the container is open to the outside. Bond rigid mesh to vent caps and openings with PVC cement or an adhesive sealant rather than just laying it over the opening, and caulk any remaining gaps around lids, vents, or pipe penetrations. This is the single most important anti-mosquito measure; an unscreened or loosely-fitted opening is an invitation.
- **A "dry" system**, meaning no standing water left sitting in exposed pipes or fittings between rains. Stagnant water anywhere in the system, not just in the main container, is a potential breeding site.
- **Overflow routed away from your foundation**, with a real minimum size: at least 1½ inch in diameter, since anything narrower clogs easily, positioned 2 to 4 inches below the container's rim, sloped at least ¼ inch per foot, and routed at least 10 feet from the foundation.

Connecting the gutter to the container itself usually means a mid-downspout diverter kit: drill a hole in the downspout (the front face for a 2x3 inch downspout, the side face for a 3x4 inch one), fasten the diverter fitting in place with the self-tapping screws it comes with, and run the included fill hose down to the container's inlet, positioned level with the intake so the diverter's own overflow works correctly once the container is full.

Use an opaque, UV-stabilized, food-grade HDPE container (often sold in the industry-standard blue for exactly this reason) rather than an unrated plastic drum, even for water you don't plan to drink without treatment first: food-grade plastic won't leach chemicals into stored water over time, and opacity blocks the sunlight that would otherwise grow algae inside the tank.

Where to find it: first-flush diverters, gutter screens, and mesh screening are sold at hardware stores, home improvement retailers, and specialty rain-barrel suppliers online; a basic setup for a single rain barrel costs well under \$100 in parts.

Watch it: Utah State University Extension, "How to Install a Rain Barrel Diverter".

This water isn't automatically safe to drink

Registering and collecting rainwater legally doesn't make it potable on its own; roof runoff picks up whatever was sitting on your roof. Treat it with one of the methods in the water purification guide before drinking it, the same as any other questionable source. It's genuinely useful untreated for irrigation, flushing, or other non-drinking uses without that extra step.

Sources

- Utah Division of Water Rights, rainwater harvesting registration rules and process: waterrights.utah.gov
- Unregistered vs. registered storage thresholds: ABC4; USU Extension
- First-flush diverter sizing and rainwater system design: Oklahoma State University Extension
- Mosquito-prevention design for rainwater harvesting systems: NC State Extension
- First-flush diverter floating-ball/standpipe mechanism and bleed-hole sizing: Rain Tanks; Clean and Native
- Why food-grade rain barrels are blue (UV resistance and algae prevention): BlueBarrel Rainwater; BlueBarrel Rainwater