

Raised Bed and In-Ground Watering Conversion Table (Gallons, Drip Minutes, and Soil Texture Adjustments)

Companion Reference Sheet for: Vegetable Garden Watering: Turn One Inch Into a Schedule
Save this PDF to your phone or print a copy for field reference. Verify local conditions and manufacturer specs before use.

Key Takeaways

- **How much water does a vegetable garden need?** Use about one inch per week as a starting target, counting rain and irrigation together.
- **How do you account for rain?** Use a rain gauge, then check soil moisture to see whether the water soaked into the root zone. [Our guide to starting a vegetable garden](#) covers the basics of bed preparation and ongoing care.
- **How can you tell if roots got enough water?** Check the soil several inches down with a finger or trowel, rather than judging by the surface alone.
- **How often should you water?** Let soil texture, recent weather, mulch, and plant growth stage guide the interval.
- **How long should a sprinkler run?** Measure its output in catch cans, then calculate the time needed to apply your desired depth.
- **How do you find drip irrigation dry spots?** Compare soil moisture near the start and end of the line, and measure emitter flow when coverage looks uneven.

Translate one inch into water for your garden

Bed area	Approximate water for one inch	How to scale it
25 square feet	15.5 gallons	One quarter of a 100 square foot bed
50 square feet	31 gallons	Half of a 100 square foot bed
100 square feet	62 gallons	The reference area
200 square feet	124 gallons	Twice the reference area

Measure rain before deciding how much to add

Method	Where the water lands	How to measure output	Main tradeoff
Hand watering	Where you direct the stream, around individual plants	Time a measured volume or use a rain gauge in the bed	Precise control, but takes time across a large bed

Method	Where the water lands	How to measure output	Main tradeoff
Overhead sprinkler	Across the spray pattern, including foliage	Place straight-sided catch cans across the bed and measure depth	Covers a broad area, but wind and uneven spray can affect coverage
Soaker hose	Along the hose and into nearby soil	Check soil at several points beside the hose after a timed run	Keeps water low, but delivery can vary along the hose
Drip line	At emitters placed near the root zone	Measure representative emitter flow over a timed interval	Targets roots, but emitters need flow checks and maintenance

Follow this field checklist and troubleshoot dry spots

- ☐ **Record the week's rainfall.** Note whether it soaked into the bed or ran off, stopped at foliage, or stayed in the mulch.
- ☐ **Check the soil in several places.** Include the driest-looking area and the far end of an irrigation line, and check down near root depth.
- ☐ **Estimate what remains.** Compare useful rain with your weekly target, then use the calibrated runtime for your watering method.
- ☐ **Check moisture after watering.** Use a trowel to see how deep it reached. If only the surface is wet, extend the next run or divide it into cycles with soak pauses.
- ☐ **Compare coverage across the bed.** Recheck catch-can depth or emitter output, clear or replace blocked parts, and retest before changing the entire schedule.
- ☐ **Stop if the soil is saturated.** If plants keep wilting despite moist soil, investigate drainage or root problems instead of adding more water.

UGA Extension advises soaking the soil to a depth of at least 6 to 8 inches to encourage roots to seek water and nutrients deep in the soil.