

COMMON UNITS OF MEASUREMENT USED IN THE WATER INDUSTRY



Water Equivalents Table

1 gallon = 0.13 cubic feet = 8.34 lbs. of water
1 cubic foot = 7.48 gallons = 62.4 lbs. of water
1 acre-foot = 43,560 cubic feet = 325,861 gallons (an acre-foot covers 1 acre of land 1 foot deep)
1 cubic foot per second (cfs) = 449 gallons per minute
1 cubic foot per second = 646,317 gallons per day
For 24 hours = 1.983 acre-feet
For 30 days = 59.5 acre-feet
For 1 year = 724 acre-feet
1 million gallons = 1,336.9 hundred cubic feet = 3.07 acre-feet
1 million gallons per day (gpd) = 1,120 acre-feet per year
1 million gpd = 1.55 cubic feet per second
An acre-foot supplies a family of 5 for 1 year

Metric Equivalents

1 U.S. gallon = 3.785 liters
1 liter = 0.264 U.S. gallons (A liter is slightly more than a U.S. quart)
1 cubic foot = 28.317 liters
1 cubic meter = 1,000 liters = 35.315 cubic feet
1 million U.S. gallons = 3,785.4 cubic meters
1 acre-foot = 1,233.5 cubic meters

Water Quality Units

1 part per million (ppm) = 1 milligram per liter (mg/L)
1 part per billion (ppb) = 1 microgram per liter (ug/L)
1 part per trillion (ppt) = 1 nanogram per liter (ng/L)
1 ppm = 1,000 ppb = 1,000,000 ppt
1 gram = 1,000 mg = 1,000,000 ug = 1,000,000,000 ng

NOTE: These units represent extremely small amounts. To put things in perspective, consider that: 1 ppm is like 1 minute in 2 years. 1 ppb is like 1 inch in 16,000 miles. 1 ppt is like 1 penny in \$ 10 billion