

## Why does DWR use different conversion numbers from USGS? Compare converting CFS to gallons per day

1 cfs = 646,320 gallons per day per DWR  
1 cfs = 646,272 gallons per day per USGS

difference of 48 gallons per day  
difference of 48,000 gallons per day when computing millions of gallons per day  
difference of 17,520,000 gallons over one year period

### Conversion Factors

<http://www.water.ca.gov/swp/operationscontrol/docs/annual/annual01.pdf>

Quantity	Multiply	By	To obtain	
Area	acre	43,560	square feet	
	Volume	cubic foot	7.481	gallons
		cubic foot	62.4	pounds of water
		gallon	0.13368	cubic feet
		acre-foot	325,900	gallons
Flow	acre-foot	43,560	cubic feet	
	million gallons	3.07	acre-feet	
	cubic foot/second (cfs)	450	gallons/minute (gpm)	
	gallons/minute	0.002228	cubic feet/second (cfs)	
	million gallons/day	1.5472	cubic feet/second (cfs)	
	cubic foot/second (cfs)	646,320	gallons a day	
	cubic foot/second (cfs)	1.98	acre-feet a day	
Pressure	million gallons/day (mgd)	1,120	acre-feet a year	
	feet head of water	.433	pounds/square inch (psi)	
Power	kilowatts (kW)	1.3405	horsepower (hp)	

<http://md.water.usgs.gov/cfscal/>

**USGS CFS Conversion Calculator**

Convert to

CFS Value (ft<sup>3</sup>/s)

Result:

Conversion factors for cfs calculations: 1 cfs =

7.48	gallons per second
448.8	gallons per minute
26,928	gallons per hour
646,272	gallons per day
28.32	liters of water per second
1,699.2	liters of water per minute
101,952	liters of water per hour
2,446,848	liters of water per day
2.446848	million liters of water per day
0.646272	million gallons per day
62.5	pounds of water per second
3,750	pounds of water per minute
225,000	pounds of water per hour
5,400,000	pounds of water per day

<http://ks.water.usgs.gov/waterwatch/flood/conv.html>

**Conversion from Cubic Feet Per Second (ft<sup>3</sup>/s)**

*NOTE: This conversion is approximate due to rounding. To see the actual conversion factors, go to [the conversion values](#) section of this page.*

First, select the units you want to convert to:

Second, enter the cfs value to convert from:  
ft<sup>3</sup>/s:

Result:

Please use Netscape or Internet Explorer

Conversion factors for the above calculations:  
1 ft<sup>3</sup>/s =

1.9835	acre-feet per day
7.48	gallons per second
448.8	gallons per minute
26,928	gallons per hour
646,272	gallons per day
28.32	liters of water per second
1,699.2	liters of water per minute
101,952	liters of water per hour
2,446,848	liters of water per day
2.446848	million liters of water per day
.646272	million gallons per day (Mgal/d)
62.5	pounds of water per second
3,750	pounds of water per minute
225,000	pounds of water per hour
5,400,000	pounds of water per day