

B.C. IRRIGATION MANAGEMENT GUIDE

Appendix A – Unit Conversions

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The primary purpose of this B.C. Irrigation Management Guide is to provide irrigation professionals and consultants with a methodology to assess the irrigation system performance and manage the system effectively.

While every effort has been made to ensure the accuracy and completeness of these materials, additional materials may be required to complete more advanced assessments. Advice of appropriate professionals and experts may assist in completing assessments that are not covered in this Guide.

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A

UNIT CONVERSIONS

The table below lists the conversion between Imperial and metric units used throughout this Guide.

Imperial	Metric
LENGTH 1 foot [ft] = 12 inches [in]	= 0.3048 metres [m]
1 inch [in]	= 2.54 centimetres [cm] = 25.4 millimetres [mm]
AREA 1 acre [ac] = 43,560 square feet [ft ²]	= 0.405 hectares [ha]
	1 hectare [ha] = 10,000 square metres [m ²]
VOLUME 1 acre-foot [ac-ft] = 43,560 cubic feet [ft ³]	= 0.1233 hectare-metres [ha-m]
1 acre-inch [ac-in] = 27,152 US gallons [US gal]	
1 US gallon [US gal]	= 0.0038 cubic metres [m ³] = 3.79 litres [L] = 0.833 Imperial gallons [Imp. gal]
1 cubic foot [ft³] = 7.48 US gallons [US gal]	= 28.33 litres [L]
1 Imperial gallon [Imp. gal]	= 4.55 litres [L]
FLOW 1 US gallon per min [US gpm]	= 3.79 litres per min [L/min] = 0.063 litres per sec [L/sec]
1 Imperial gallon per min [Imp. gpm]	= 4.55 litres per min [L/min]
1 cubic foot per sec [cfs]	= 1,666.6 litres per min [L/min]

Imperial	Metric
PRESSURE 1 pound per square inch [psi] = 2.31 feet of water [ft]	= 0.70 metres of water [m] = 6.90 kilopascal [KPa]
1 foot head of water [ft]	= 2.98 kilopascal [KPa]
1 atmosphere [atm] = 14.7 pounds per square inch [psi]	= 101.3 kilopascal [KPa]
ENERGY 1 horsepower [hp]	= 0.746 kilowatts [KW]
CONCENTRATION 1 parts per millions [ppm]	= 1 milligram per litre [mg/L]

Typical sprinkler spacings are given in ft x ft and m x m conversions as below:

ft x ft	m x m
30 x 30	9.15 x 9.15
30 x 40	9.15 x 12.2
30 x 60	9.15 x 18.3
40 x 40	12.2 x 12.2
50 x 50	15.2 x 15.2
40 x 50	12.2 x 15.2
40 x 60	12.2 x 18.3
60 x 60	18.3 x 18.3