

B.C. Agricultural Drainage Manual

Appendix D - Conversion Tables

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Limitation of Liability and User's Responsibility

The primary purpose of the B.C. Drainage Manual is to provide farmers as well as water management professionals and consultants with technical information on the design, installation and maintenance of agricultural drainage systems.

Individual chapters may rely on information that is presented in other chapters of the manual. There is a risk that downloading individual chapters may not present all of the required information in its entirety. A complete bound manual is available from the Irrigation Industry Association of BC.

While every effort has been made to ensure the accuracy and completeness of these materials, additional materials may be required to design and implement more advanced subsurface drainage systems. Advice of appropriate professionals and experts may provide additional local or site information that is not covered in this Manual.

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Appendix D.

Conversion Tables

Metric to Imperial Units Table

Metric

Imperial

Length

1 kilometer	(km)	=	0.621	miles	
1 meter	(m)	=	3.281	feet	(ft)
1 centimeter	(cm)	=	0.394	inches	(in)
1 millimeter	(mm)	=	0.039	inches	(in)

Area

1 hectare	(ha)	=	2.47	acres	
1 square meter	(m ²)	=	10.76	square feet	(ft ²)
1 square centimeter	(cm ²)	=	0.155	square inches	(in ²)

Volume

1 hectare-meter	(ha-m)	=	8.108	acre-feet	(ac-ft)
1 cubic meter	(m ³)	=	264.2	U.S. Gallons	(gal)
1 cubic meter	(m ³)	=	35.31	cubic feet	(ft ³)
1 liter	(L)	=	0.0353	cubic feet	(ft ³)
1 liter	(L)	=	0.264	U.S. gallons	(gal)
1 liter	(L)	=	0.220	Imp. gallons	(gal)

Flow

1 cubic meter per sec	(m ³ /s)	=	15852	U.S. gallons per min	(U.S. gpm)
1 cubic meter per sec	(m ³ /s)	=	35.31	cubic feet per sec	(cfs)
1 liter per sec	(L/s)	=	15.85	U.S. gallons per min	(U.S. gpm)
1 liter per min	(L/min)	=	0.265	U.S. gallons per min	(U.S. gpm)
1 liter per min	(L/min)	=	0.0006	cubic foot per sec	(cfs)

Drainage Coefficient

1 millimeter per day	(mm/day)	=	0.039	inches per day	
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Pressure

1 kilopascal	(KPa)	=	0.145	pounds per square inch	(psi)
1 kilopascal	(KPa)	=	0.335	feet head of water	(60°F)
1 meter of water (at 15.55°C)	(m)	=	1.42	pounds per square inch	(psi)

Energy

1 kilowatt	(kW)	=	1.34	horsepower	(hp)
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Conversion Tables

Imperial to Metric Units Tables

Imperial

Metric

Length

1 mile		=	1.61	kilometers	(km)
1 foot	(ft)	=	0.3048	meters	(m)
1 inch	(in)	=	2.54	centimeters	(cm)
1 inch	(in)	=	25.4	millimeters	(mm)

Area

1 acre		=	0.405	hectares	(ha)
1 square foot	(ft ²)	=	0.0929	square meters	(m ²)
1 square inch	(in ²)	=	6.452	square centimeters	(cm ²)

Volume

1 acre-foot	(ac-ft)	=	0.1233	hectare-meters	(ha-m)
1 U.S. gallon	(gal)	=	0.0038	cubic meters	(m ³)
1 cubic foot	(ft ³)	=	0.0283	cubic meters	(m ³)
1 cubic foot	(ft ³)	=	28.33	liters	(L)
1 U.S. gallon	(gal)	=	3.79	liters	(L)
1 Imp. gallon	(gal)	=	4.55	liters	(L)

Flow

1 U.S. gallon per min	(U.S. gpm)	=	0.000063	cubic meters per sec	(m ³ /s)
1 cubic foot per sec	(cfs)	=	0.028	cubic meters per sec	(m ³ /s)
1 U.S. gallon per min	(U.S. gpm)	=	0.063	liters per sec	(L/s)
1 U.S. gallon per min	(U.S. gpm)	=	3.77	liters per min	(L/min)
1 cubic foot per sec	(cfs)	=	1666.6	liters per min	(L/min)

Drainage Coefficient

1 inch per day		=	25.4	millimeters per day	(mm/day)
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Pressure

1 pound per square inch	(psi)	=	6.90	kilopascals	(KPa)
1 foot head of water	(60°F)	=	2.98	kilopascals	(KPa)
1 pound per square inch	(psi)	=	0.70	meters of water (at 15.55°C)	(m)

Energy

1 horsepower	(hp)	=	0.75	kilowatts	(kW)
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