



Developer and Owner – WWOTC

Online Course – Instructor Led

**Understanding System Hydraulics
December 12-13, 2022 (8:30 – 12:30 AST)**

Course Objective / Description

The objective of this course is to better understand how distribution or collection systems work, and in order to do that, a basic understanding of hydraulics is essential. This course will allow operators to better understand how water moves through pipes and how pressure size and biofilm can affect system operations. It contains information on potential and kinetic energy within these systems, how the amount of energy at any point can be determined, and how we use that energy to distribute water. Students will also gain a clear understanding of simple math calculations as they relate to day to day operations.

What will be covered:

- How is pressure created in a water system
- Pressure and its affect on flow in service pipes
- Flow and its affect on pressure in pipes
- Pressure as it relates to backflow and backsiphonage
- Restoring diminished flows

Lesson	Description	Contact Hours
Lesson 1	Introduction and Overview	0.5
Lesson 2	How Pressure is Created	1.0
Lesson 3	Effect of Pressure on Flows	0.5
Lesson 3 con't	Effect of Pressure on Flows	0.75
Lesson 4	Effect of Pressure on Service Pipes	1.0
Lesson 5	The Effect of Flow on Pressure	1.0
Lesson 6	Backflow and Back Pressure	0.75
Lesson 7	Restoring Flow in Watermains	1.0
	Test	0.5
	Total Instruction/Contact Time:	7.0

CEU: 0.7

Understanding System Hydraulics

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Name: _____

Company: _____

Company Mailing Address _____

City, Province: _____ Postal Code: _____

Phone: _____ Email: _____

ACWWA Membership #: _____ WEF Membership #: _____

If no membership number is listed, you will be invoiced as a non-member. See pricing below.

Fee for ACWWA or WEF Members & Employees of UTILITY Members

Course: $\$355.00 + \$53.25 \text{ HST (15\%)} = \408.25

Fee for Non – Members

Course: $\$380.00 + \$57.00 \text{ HST (15\%)} = \437.00

Invoices will be sent to the address listed above.

PO number to be included on the invoice _____

Payment can be made by Visa, Master Card or cheque.

Card Holder's Name _____

Credit Card Number _____ Expiry _____

Signature _____

Email address for credit card receipt _____

Cheques should be made payable to:

ACWWA

PO Box 28141 · Dartmouth, NS · B2W 6E2

Phone 902-434-6002 Fax 902-435-7796