

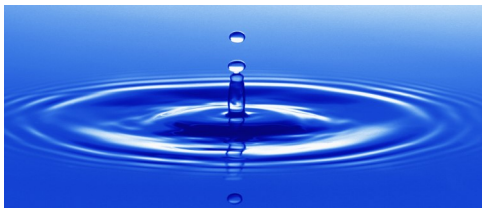
**This Training Session** Will increase your knowledge on identifying leaks on water mains or force mains for sewer. You will learn the theory of leak detection, how to identify a leak, and how to utilize available equipment for locating lines and leaks.

By attending, you will also learn how to conduct a water audit of your system. The audit will assist you in determining water loss, cost of water production, cross connections, and employing water conservation methods.

We will touch on some of the general aspects of conventional water rate setting methods and give you guidance on where to find more detailed information.

**NOTE:**

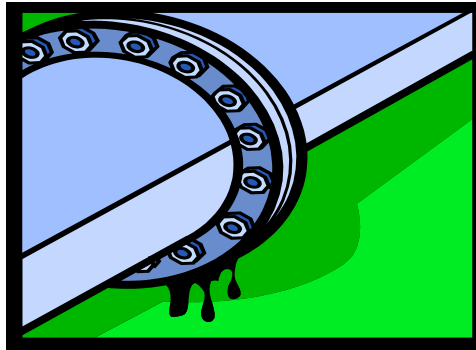
Please bring a high visibility vest if you have one available, as we will be conducting part of the class out in the distribution system and we may have to be in the streets at times.



**Pre-Registration**

Please e-mail or call the MRWS office at: [MRWS@bresnan.com](mailto:MRWS@bresnan.com) or 406-454-1151 w/Your Name & System You are Attending from.

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**Session is FREE of Charge!**



*This training session is designed for "Awareness Training" and is not intended to be your only source for information!*

**Montana Rural Water Systems**

Presents

**2018 Leak Detection, Water Audits, And Water Loss Management Workshop**

Speakers Include:

**Michael Carothers**  
Leak Locators of Montana



**Leak Locators of Monta...**  
Leak Locators of Montana LLC  
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125 N Washington ST  
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**Nick Clos**  
MRWS Circuit Rider

**Julie Allen**  
MRWS Water Training Specialist

**0.7 CEC's Dual**

## Date & Location:

**Belgrade, MT**  
**Wednesday, Sept 5, 2018**  
@  
**Belgrade Central Valley Fire**  
**Training Center**  
**95 N Davis St.**  
**Belgrade, MT**



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Leak Locators of Montana LLC

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424 Buckskin RD  
Belgrade, Montana 59714  
125 N Washington ST  
Plentywood, Montana 59254  
leaklocatorsofmontana.com

### ADA Meeting Announcement Statement:

MRWS will make reasonable modifications for persons with disabilities who wish to participate in this public training. If you would like to request an accommodation, contact Rory Schmidt at least 5 days prior to the event to advise us of the nature of the accommodation that you need.

## Morning Session

**8:00 AM** Registration

**8:30 AM - Water Loss Management**

- ⇒ Controlling Water Loss
- ⇒ Water Conservation
- ⇒ Reducing Water Costs

**10:00 AM - Water Audits**

- ⇒ Water Audits—Why, How, Where
- ⇒ Reducing Water Loss/Costs
- ⇒ Setting Water Rates—Why, How

**11:00 AM - Cross Connection/Backflow**

- ⇒ Identifying Cross Connections
- ⇒ Types of Devices



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(12:00 - 1:00 PM - Lunch on Your Own)

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## Afternoon Session (1:00—4:30 pm)

**A) Utility Locating Theory**

- 1) 5 Methods of Verifying Round Electro-Magnetic Field
- 2) 3 Methods of Energizing the Utility
- 3) Types of Locating Instruments

**B) Leak Detection**

- 1) Various Tools: From Geophone to 'SmartBall'
- 2) Proper Application for Your Scenario
- 3) Leak Detection Process

**C) Hands-On Training with Various Leak Detection Tools**

**Training Ends @ 4:30 pm**

**0.7 CEC's Dual**

## About Our Speakers:

**Michael Carothers...** is the owner of **Leak Locators of Montana**. Michael has conducted hundreds of leak detections, line locates, and surveys around Montana. Additionally, Michael has generously participated in several training sessions for MRWS for many years.

**Nick Clos...** has been a Circuit Rider with Montana Rural Water Systems (MRWS) since 1993 and has been in the water/wastewater industry since 1980. He has worked with hundreds of communities providing technical assistance. Nick has vast experience with chlorination systems, leak detection, water audits, and rate structures, and VA/ERP's, just to name a few.



**NOTE:** Due to the field portion of the training, morning & afternoon sessions may be swapped depending on weather conditions.

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**For additional information contact:**  
**Julie Allen at (406) 438-2070**