



ONLINE TRAINING/WEBINAR SPEAKER INFO, BIO & TOPIC ABSTRACT

Please provide the following information and email to support@nwmoa.com.

If you are presenting on multiple topics during this event, please fill out one form for each topic.

Name: Chelsea Stewardson

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Checking this Box confirms that I agree to be videoed and recorded for the duration of the Online Training/Webinar.

1. *Speaker Biography* (please provide one paragraph – 150 words or less)

Chelsea currently works as an Applications Engineer in the Membrane Filtration Group at WesTech Engineering providing preliminary designs and budgets for ultrafiltration and reverse osmosis treatment systems. Prior to making the Membrane Group her home, she worked with the Sedimentation and Anaerobic Digestion Groups which has given her a wide breadth of knowledge for 17 WesTech process equipment products and systems. When she's not geeking out over water chemistry, she's most likely playing/coaching volleyball or hiking in the beautiful Utah mountains.

2. *Topic Title* (please provide the topic title for your presentation)

Review of Backwash Capture Methods to Increase System Recovery

3. *Topic Abstract* (please provide a minimum of 250 words for your presentation and describe how it relates to membrane technology)

Recycle and recapture options can help increase process recovery and reduce costs associated with waste disposal and transport. From simple sedimentation processes to low-pressure filtration, there are many ways in which water and wastewater treatment plants are looking at reprocessing backwash streams either by utilizing existing resources or implementing additional treatment process without compromising on operating costs or available footprint. Big Timber Water Treatment Plant in Big Timber, MT and Basin Creek Water Treatment Plant in Butte, MT are two local case study examples utilizing two different treatment methods to increase overall system recovery and reduce backwash waste. This presentation will address the overall design, application, highlights, and results of each of these case studies.



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4. Polling Questions (please provide up to 5 questions you might ask the audience, relative to your topic, which you would like to engage with them on. Questions are multiple choice. A right or wrong answer is not required. If you do provide a question with only 1 correct answer, please indicate which answer is correct.. Provide 3 answers to choose from.)

1. Q. What is one example of a source of backwash waste?
A 1 Hydraulic BW waste
A 2 Chemical cleaning BW waste
A 3 Prestrainer or media filter BW waste
2. Q. What is the purpose of a backwash?
A 1 Remove solids / foulants
A 2 Lower TMP
A 3 Increase permeability
3. Q. Why would you want to capture backwash?
A 1 Increase production / recovery
A 2 Cost savings opportunities or sustainability credit
A 3 Reduce solids handling
4. Q.
A 1
A 2
A 3
5. Q.
A 1
A 2
A 3