



41st MRWS Conference

Clean Water. A Beautiful Future, One Drop At A Time.



Wednesday (5/19/2021) 7:30 am—5:30 pm Registration in Convention Area For All Sessions
Visit the Vendors All Day!!

Wednesday Sessions - May 19, 2021

	Canadian Room	Britain Room	American Room	Lewis & Clark Room	Missouri Room
<p>8:30 am to 12:30 pm Morning Session</p> <p>W2ASACT Funding Workshop</p> <p>Funding Agencies</p> <p>0.400 CEC's Clerks/Dual</p>			<p>Changes to Risk Assessments & Emergency Response Plans</p> <p>Kyle St. Clair, EPA Water Security Coordinator</p> <p>With the passage of AWIA, community water supply systems serving 3300 or more must have risk assessments & ERPs in place & refreshed every 5 years. An explanation of the implementation of this.</p> <p style="text-align: center;">0.1 CEC's Dual</p>	<p>Chemical Free Odor Control Along Conveyance Systems</p> <p>Lewis Titus</p> <p>TITUS Industrial Group, Inc. This presentation will look at several case studies conducted over the last few years, in both public and private systems. Technologies like aeration, ozone, mixing, & more will be explored.</p> <p style="text-align: center;">0.1 CEC's Wastewater</p>	

Lunch on Your Own 11:30 am - 1:00 pm - Lunch on Your Own

<p>1:00 PM to 2:00 pm</p>	<p>Upgrading Lagoon Based Treatment Systems to Meet More Stringent Limits for BOD, TSS and Nutrient Removal</p> <p>Tom Birkeland, LEMNA</p> <p>The discussion will provide data and specific case studies demonstrating the predicted performance vs. actual data, using the calibrated model. Regional case studies will be used to demonstrate the benefits of modeling practices for lagoon design.</p> <p style="text-align: center;">0.1 CEC's Wastewater</p>		<p>How to Plan, Design, Build, & Modernize Your Enterprise GIS</p> <p>David Holdstock, Geographic Technologies Group; Kolten Knatterud, IMEG</p> <p>This presentation is a GIS roadmap to the who, what, when, where, and why of location intelligence, & how it can transform organizations.</p> <p style="text-align: center;">0.1 CEC's Dual</p>	<p>Air Driven Floating Aerators/Mixers</p> <p>Lewis Titus, TITUS Industrial Group, Inc.</p> <p>A brief overview of mixers for water and wastewater. Will include discussion on versatility, new technologies, and mobility.</p> <p style="text-align: center;">0.1 CEC's Dual</p>	<p>H₂S: Managing Odors & Reducing Corrosion - What's That Smell?</p> <p>Rick Allen, BioLynceus</p> <p>This session is a look at the underlying issue of management and safe handling of H₂S in collection systems and wastewater plants.</p> <p style="text-align: center;">0.1 CEC's Wastewater</p>
<p>2:30pm to 3:30pm</p>	<p>Backwash & Filtration Methods for Minimizing Water Waste</p> <p>Marc Hatfield, Filter Tech Systems</p> <p>This presentation discusses various backwash methods & filter maintenance procedures that can be used to optimize these processes & minimize waste of potable water during filtration & backwash.</p> <p style="text-align: center;">0.1 CEC's Water</p>	<p>New AWWA Standards & Revisions & Their Implications</p> <p>Randy Moore & Mike McKeever Tnemec Company, Inc.</p> <p>A review of the new standards and discussion of their implications. A data driven protocol will be offered that tank owners and coating specifiers can use to decide which coating systems to select and specify.</p> <p style="text-align: center;">0.1 CEC's Dual</p>	<p>Removal of PFAS "Forever Chemicals" with Ion Exchange</p> <p>Bailey Nelson, De Nora Water Technologies</p> <p>A discussion on the nature of PFAS compounds and how single pass ion exchange media (or IX) can affect the removal down to nondetectable levels.</p> <p style="text-align: center;">0.1 CEC's Dual</p>	<p>Delegate Assembly Meeting</p> <p>All members are welcome to attend!</p> <p>Old Business. New Business. Legislative Issues. Election of Board Members!</p>	<p>Ammonia Permits and Lagoons: Fromberg</p> <p>Nick Janous, Nexom</p> <p>Through a case study of Fromberg's lagoon-based wastewater treatment plant, this presentation digs into the factors that limit lagoon-based nitrification, discuss the merits and challenges of mechanical plants, and introduces the SAGR post-lagoon nitrification option.</p> <p style="text-align: center;">0.1 CEC's Wastewater</p>
<p>4:00pm to 5:00 pm</p>	<p>Flotation Without Dissolved Air: Charged Microbubbles</p> <p>Jeff Knollenberg, Heron Innovators, Inc.</p> <p>Case studies will be presented showing increased removal performance, reduced power consumption, reduced maintenance, less chemical requirement, increased solids loading, reduced operator attention, and capital cost avoidance.</p> <p style="text-align: center;">0.1 CEC's Dual</p>	<p>Chemical Feed Systems and Feed Pumps</p> <p>Etienne E. Prehoda, ProMinent Fluid Controls</p> <p>This presentation will examine typical chemistries, do's and don'ts, best practices, and individual components for proper chemical metering. It will also look at different pumps available for applications such as high viscosity, low & high flow; low & high pressure.</p> <p style="text-align: center;">0.1 CEC's Dual</p>	<p>Retrofitting a 1960's Water Treatment Plant - Glasgow</p> <p>Jeff Ashley, Morrison-Maierle</p> <p>This presentation will focus on the pilot testing, pre-design, design, construction of the WTP upgrades, and initial operation. All components of the upgrade at the WTP were constructed within the existing building footprint, without expanding the building.</p> <p style="text-align: center;">0.1 CEC's Water</p>		<p>Design Practices for MBRs</p> <p>Mark Gehring, Fibracast</p> <p>Discussion on what MBR is, types of MBR, applications and best fit, benefits and challenges, problems solved, and some case studies.</p> <p style="text-align: center;">0.1 CEC's Wastewater</p>








Thursday Sessions - May 20, 2021

<p>8:00 am to 9:30am</p>	<p>*Invocation, Star Spangled Banner and Welcome from Mayor Bob Kelly - City of Great Falls</p> <p>*Program Changes, Vendor Announcement, Theme & MRWS—Salute to Operators "30 Years of Service" Awards</p> <p>*EPA - Darcy O'Connor, Region 8 Water Division Director</p> <p>*USDA/RD - Steve Troendle, Director, Community Programs - Invited</p> <p>*DEQ - Chris Dorrington, Director - Invited</p> <p>*DNRC - Amanda Kaster, Director</p> <p>*NRWA - Cameron "Cam" McKay, Director</p> <p style="text-align: center;">0.150 CEC's Dual</p>
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9:30 am to 10:30 am >>>>>>>>>BREAK<<<<<<<<<<<

<p>10:30am to 11:30am</p>	<p>Clean Water. A Beautiful Future, One Drop at a Time.</p> <p>Building an Apprenticeship Program for Montana Water/Wastewater Operators</p> <p>Speakers - Shannan Walton, Apprenticeship Program Director</p> <p>Mike Broad, US DOL Office of Apprenticeship from Wyoming</p> <p style="text-align: center;">0.100 CEC's Dual</p>
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<p>11:30am to 12:45pm</p>	<p>MRWS LUNCHEON</p> <p>Guest Speaker - Governor Gianforte</p>	
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Thursday Afternoon Sessions - May 20, 2021					
	Canadian Room	Britain Room	American Room	Lewis & Clark Room	Missouri Room
1:00pm to 2:00pm	Hydraulic Control Valve Basics Mike Uthe, Mueller Water Products A discussion on hydraulic fundamentals of these valves, basics of a pilot system, & diverse valve/pilot set up solutions to help control & protect water system assets. 0.1 CEC's Water	Emulsion Polymer Activation: The Science & Technology Etienne Prehoda ProMinent Fluid Controls Understanding emulsion polymer activation, having an introduction to polymer science, & being aware of today's equipment technology will significantly improve water & wastewater treatment processes. 0.1 CEC's Dual	Overview of CISA & Other Cybersecurity Services Richard Gardner, Region 8 CISA Discussion of no-cost Cybersecurity resources available to water & wastewater systems. 0.1 CEC's Dual - Clerks	Apprenticeship Program in Montana Shannan Walton, NRWA A more indepth look at what a water/wastewater operator apprenticeship program could mean for Montana systems and operators. 0.1 CEC's Dual - Clerks	Lift Station Upgrades: New & Emergency Condition Case Studies Matt Mudd, Great West Sewer lift stations are one of the most critical infrastructure components used by wastewater systems across Montana. This presentation is not intended to focus on a single project but rather give a high-level overview of several types of lift station improvement projects encountered in Montana. 0.1 CEC's Wastewater
2:30pm to 3:30pm		Footprint Matters: Membranes for a New Generation Mark Gehring, Fibracast A discussion on how a hybrid ultrafiltration immersed membrane is able to filter mixed liquor in MBR applications in half the footprint or less required by other immersed membranes. 0.1 CEC's Dual	Distribution System Water Quality Improvements with the Use of Active Tank Mixing Jeff Rhodes, UGSI This session will point to real-world case studies & data that underscore powerful tank mixing as an important and necessary step to water quality improvement and distribution asset protection. 0.1 CEC's Water	Infrastructure Funding & Project Development Collette Anderson & Craig Erickson, Great West Engineering The presentation will inform of basic requirements of Montana's infrastructure funding programs. Also will discuss the steps needed to successfully develop & implement infrastructure projects in Montana. 0.1 CEC's Dual - Clerks	Retrofitting the MOB™ Process for Improved Treatment Jason Calhoun, Nuvoda Municipal WWTPs across the US are faced with increasing pressure to upgrade treatment capacity and stability while maintaining cost efficiency. Nuvoda's MOB™ Process is an innovative & sustainable ww treatment technology designed to tackle such challenges. 0.1 CEC's Wastewater
4:00pm to 5:00pm	Ion Exchange vs Reverse Osmosis Austin Houser, Filter Tech Systems The information contained in this presentation is intended to help water plant operators better understand how to best treat for nitrates based on their specific groundwater sources using ion exchange or reverse osmosis. 0.1 CEC's Dual	Big Sky WRRF Project Development Scott Buecker, AE2S This presentation will cover development of the project, from conceptual studies in 2018 through preliminary and final design and bidding. Specific challenges to be discussed will include effluent reuse and disposal alternatives. 0.1 CEC's Dual	Beat Ultra-Low Phosphorus & Metals Targets w/Reactive Filtration Nick Janous, Nexom This session will cover a broad overview of the available techniques proposed for phosphorus removal and how installations currently meet end-user limits. 0.1 CEC's Wastewater	Financing Water & Sewer System Improvements Dan Semmens, Courtney Ellis Dorsey & Witney LLP This session will focus on developments under the State's infrastructure bonding bill and how local government funding packages will be affected by that bill. 0.1 CEC's Dual - Clerks	
Thursday Night Banquet - Awards - Montana's Best Tasting Water					
Friday Morning Sessions - May 21, 2021					
8:00am to 9:00am		Asset Management for Operations Mike Uthe, Mueller Water Products Asset management is only as good as the data that is available, & this presentation will focus on how to collect the data, and how to use it to improve service & plan for the future. 0.1 CEC's Dual	On-Site Sodium Hypochlorite Generation Jeff Rhodes, UGSI Lessons learned from over yrs of OSHG installations will be shared. Issues such as salt handling, salt purity, water softener reliability, ongoing maintenance & system layout will be addressed specifically. 0.1 CEC's Dual	Corrosion Inhibition Chemistry Andy Strand, Hawkins Inc. What causes your system to corrode or form scale and what can be done to solve these issues? 0.1 CEC's Water	Updates on Rates, Charges, & SRF Funding Anna Miller, DNRC A discussion on what's new in the State Revolving Fund funding and utility rates and charges. 0.1 CEC's Dual/Clerks
9:30am to 10:30am	Chemical Metering Pumps Operation & Maintenance Joe Schmidt, Hawkins, Inc. How to operate and maintain your chemical feed system to save money and provide the best quality water to your customers. 0.1 CEC's Dual		Wastewater BNR: Biological Nutrient Removal/Monitoring Tony Magnusen, ABB The removal of ammonia from wastewater is normally achieved through nitrification. All nutrient removal systems require continuous monitoring to achieve highest removal efficiency. On-line ammonia and phosphate analyzers are the fastest and most accurate methods of measuring both components. 0.1 CEC's Wastewater	Reviving the Heart of the Collection System - Reserve Street Lift Station Jason Mercer, Morrison-Maierle The focus will be presenting & discussing the change in flow conditions in 10 yrs, the operation of the 4-pump system, lessons learned from the past system, the layout of the new wet-well and valve vault, and connections to the main. 0.1 CEC's Wastewater	American Rescue Plan Act Anna Miller, DNRC This bill provides additional relief to address the continued impact of COVID-19 on the economy, public health, state and local governments, individuals, and businesses. 0.1 CEC's Dual/Clerks
10:45am to 11:45am	The Particulars to Lead Particulate David Carlson, AE2S The Revised Lead and Copper Rule (LCR) has been a hot topic of conversation recently. This presentation will focus on breaking down the concepts to lead in water systems, dissolved and lead particulates, water quality, and key modifications that systems should start considering in preparation for the Revised LCR. 0.1 CEC's Water	Small Utility Networks Erik Ongstad, Sensus; Miquelle Bernard, Ferguson; Ron Edwards, Big Sky How to extract real value from your data. Tips for making the case to invest in analytics software. Five key factors to consider when evaluating analytics software. 0.1 CEC's Dual	MBR Implementation for Class A-1 Effluent Eric Blanksma, Morrison-Maierle A discussion of design, permitting, & construction of a MBR treatment plant to produce Class A-1 reuse effluent meeting strict turbidity, total nitrogen, & total coliform limits. 0.1 CEC's Wastewater	New Process Train Raises Bar for Lagoon-Based Intensification Nick Janous, Nexom Lagoon wastewater treatment across North America are facing increased ammonia scrutiny & loading, and many have no ability to expand their footprint. Absarokee asked Great West Engineering to design a plant upgrade with exactly these constraints. 0.1 CEC's Wastewater	Security Hardening Isn't Tough Conor Smith, First Call Organizations are facing new threats and the big questions of What do we need to do to protect ourselves? How will we set a strategy? How will we implement it? How much will it cost? This presentation hopes to answer those questions for you. 0.1 CEC's Dual/Clerks
11:45am to 1:15pm		MRWS LUNCHEON & DRAWINGS Speaker Invited			
1:30pm to 5:30pm			STATE OPERATOR CERTIFICATION EXAMS CANADIAN & BRITAIN ROOMS		