

NEWEA 2019 Annual Conference Call for Abstracts/Papers Idea List

NEWEA invites the submission of Abstracts for professional papers or presentations at its Annual Conference and Exhibit. See below for a list of abstract ideas organized by council. We invite you to submit your abstract under the primary and secondary category that best fits your subject.

Committee	Topic Ideas
Collection Systems/Water Resource Council	
Collection Systems	Planning, design, construction, operation and maintenance, rehabilitation, CMOM/SSOs, aging infrastructure solutions.
CSO/Wet Weather Issues	Real-time control of CSOs, CSO Long-Term Control Plans, CSO project implementation, nine minimum controls, short-term and long-term CSO control planning, modeling, affordability, innovative wet weather solutions, regulations, and water quality impacts.
Industrial Wastewater	Industrial pretreatment, process water management, wastewater reuse and recycle case studies, innovative membrane technology applications, source reduction, new treatment technologies, mercury removal (source reduction and treatment), whole effluent toxicity, and industrial stormwater management.
Stormwater	MS4 permits, regulation, stormwater collection, stormwater treatment, stormwater utilities (creation and management), BMPs, TMDLs, modeling, rule making, sampling, and monitoring.
Sustainability	Institute for Sustainable Infrastructure Envision rating system, experiences with green community committees and sustainability committees, green certification for WWTFs (LEED or other), innovative and green wastewater treatment, low impact development/environmentally sensitive design, opportunities for/sustainability of decentralized treatment, sustainability aspects of water reuse, estimating WWTF carbon footprints.
Water Reuse	Projects, processes and/or infrastructure for wastewater reclamation and water reuse solutions for municipalities, universities, power plants, cooling plants, food and beverage plants; water reuse planning; groundwater recharge and aquifer storage; emerging technologies and zero liquid discharge (ZLD); stormwater harvesting and reuse; regulatory drivers; corrosion control and applying EPA's "Fit for Purpose" principal in reuse applications.
Watershed Management	Integrated water resources planning, risk based watershed management strategies, stressed watersheds and embankments, pathogens and pathogen indicators, illicit connection detection, and TMDLs.

Committee	Topic Ideas
Treatment Systems, Operations and Management Council	
Asset Management	<p>Technology including: Choosing and integrating AM software (horizontal and/or vertical), data acquisition (collecting the right data, using your data to make decisions, using your data to optimize energy, chemicals, resources and other investments), Implementing tools, CMMS, GIS / IMS, SCADA, technology interface, energy optimization techniques, and security.</p> <p>Planning including: Asset replacement, lifecycle planning strategies, financing, long term planning (tips, success stories)</p>
Energy	<p>Energy efficiency and alternative applications at wastewater treatment facilities, case studies for rehab and upgrades at WWTFs, designing efficiencies and alternatives for new facilities, case studies of new technologies for saving or generating energy and facilities working towards zero net energy, CHP applications, heat pump applications, biosolids to energy.</p>
Laboratory Practices	<p>Lab safety, lab QA/QC procedures, developing a lab QA/QC program, compliance sampling, new analytical methodologies, activated sludge microbiology, troubleshooting analytical problems, and laboratory ethics.</p>
Microconstituents	<p>Environmental occurrence, fate and transport; fate in engineered systems -- removal and degradation water reclamation and biosolids processing facilities; ecological impacts; advances in analytical methods and integration of microconstituent analyses in WRF operations; pharmaceuticals return and disposal; federal and state positions and policy; risk communication for microconstituents (e.g., endocrine disrupters, pharmaceuticals, personal care products, flame retardants, nanomaterials, plasticizers, PFOAs, pesticides)</p>
Plant Operations	<p>Methods of improving plant operations, process monitoring and control techniques including on-line instrumentation, troubleshooting techniques, low level nutrient removal experience, metals and emerging contaminant removal, advanced treatment technologies, pretreatment to reduce influent loadings, wet weather operations, upgrade success stories with focus on demonstrating the potential benefit/application to other facilities.</p>
Residuals	<p>Biosolids treatment and reuse, microconstituents, sustainability, new technologies, regulatory changes, public acceptance, environmental management systems, enhancing biosolids products, energy from biosolids or increasing energy output, odor management, and biosolids management case studies, academic research, and financial realities of biosolids management.</p>
Small Community	<p>Seasonal applications (schools, resort areas, etc.), innovative technologies, natural systems for wastewater treatment and disposal.</p>
Utility Management	<p>Utility leadership, employee development, aging workforce & institutional knowledge transfer, addressing the new talent gap, staffing, alternative training techniques, New England/State WARN, the Utility Council, utility optimization (strategic energy purchasing, process optimization, enterprise software systems, procurement), alternative project delivery, creative financing, people management systems, utility performance measures, infrastructure security, customer satisfaction programs, ISO certification, Environmental Management Systems, and crisis management techniques.</p>

Committee	Topic Ideas
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Outreach Council	
Government Affairs	Federal or state newly implemented or proposed legislation or regulation related to wastewater facility financing and management, regulatory challenges (TMDLs, NPDES permits).
Public Education	Success stories of public outreach (during planning, design, construction, or operations), how to develop and implement programs that build public support, ways to inform public about current issues (e.g., nutrients, new regulations, etc.) that effect operations and budgets, and programs to promote the wastewater/water resource industry.
Safety	Topics relating to safety, security, and health, including but not limited to: OSHA regulations and consensus standards (e.g., confined space entry, hazard communication, electrical safety, etc.), risk assessment, safety management systems, liability, workplace violence, emergency preparedness and response, sleep deprivation, aging workforce, behavioral based safety approaches, industrial hygiene, multi-employer worksites, and examples of site-specific best practices.
Water For People	Case studies in rural and/or small-scale urban sustainable watershed management, wastewater treatment and public health issues/solutions in developing countries.
Young Professionals: The Future of the Industry	Innovative programs and approaches to deal with the transition of the older generation going into retirement and younger engineers and operators moving into positions as Town Engineers, Project Managers, and Head Operators. Key discussion point may include mentoring programs designed to pass along the experience and knowledge of the outgoing generation while implementing the new approaches of the incoming generation, discussions regarding the impacts of technology and on-line networking on the industry, and the use of other technologies such as 3D design and how firms are keeping up with technology in a cost-driven industry.

Other	
Operator Ingenuity	Projects, tools, equipment and methods developed by operators to: assist with maintenance and/or sampling; avoid expenditures for costly specialty equipment/supplies; reduce labor cost and/or physical exertion; improve safety; improve process performance/efficiency; reduce chemical or electrical costs.
Student Poster Board Competition	Research topics on dealing with water pollution control, water quality, wastewater, storm water, hazardous waste, or other water-related topics are requested for Graduate and Undergraduate poster competition.