

NEWEA 2023 Annual Conference Call for Abstracts Topics

NEWEA invites the submission of abstracts for professional papers or presentations at its Annual Conference and Exhibit. **This year, the conference's focus is the 50th anniversary of the Clean Water Act.** See below for a list of abstract topics. We invite you to submit your abstract under the primary and secondary category that best fits your subject.

Committee	Topic Ideas
Asset Management (AM)	Technology including: Choosing and integrating AM software (horizontal and/or vertical), data-driven decision-making (energy/resource optimization), and security. Planning including: Asset replacement and lifecycle planning strategies, capital financing, and long term planning.
Collection Systems	Planning; design; construction; operation and maintenance; rehabilitation; CMOM/SSOs; aging infrastructure solutions; inflow & infiltration; FOG; technology tools for planning, design, and construction; regulatory issues/updates; Preventative Maintenance & Technology measures rather than emergency responses; Non-Dispersables/Non-Flushables/Wipes
Contaminants of Emerging Concern	Environmental occurrence, fate and transport; fate in engineered systems-removal and degradation in reclaimed water and biosolids; land applications of biosolids; ecological impacts; advances in analytical methods and integration of microconstituent analyses in WRRF operations; pharmaceuticals return and disposal; federal and state positions and policy; risk communication for contaminants. Contaminants of interest include endocrine disruptors, pharmaceuticals, personal care products, flame retardants, microplastics, nanomaterials, plasticizers, PFAS, and pesticides, among others.
CSO/Wet Weather Issues	Focus on innovative and integrated wet weather solutions to manage and balance regulatory burdens; the public discussion/notification of CSOs in the context of risks and benefits; comprehensive system modeling; receiving water impact/compliance studies; integrated Long-Term CSO Control Planning and affordability studies; strategic implementation (including final assessment and required compliance monitoring) of wet weather system improvements with real-time flow control, sewer separation, wet weather storage (and tunnels), and high capacity wet weather treatment.
Diversity, Equity, & Inclusion	Topics relating to discussions, projects, research, case studies, community actions, and workforce efforts that promote Diversity, Equity and Inclusion, including but not limited to race, ethnicity, gender identity and expression, sexual orientation, socio-economic background, immigration status, religious beliefs, and mental and physical disabilities.
Energy	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.

Government Affairs	Federal or state newly implemented or proposed legislation or regulation related to wastewater facility financing and management, regulatory challenges (TMDLs, NPDES permits).
Industrial Wastewater	Industrial pretreatment, process water management, wastewater reuse and recycle case studies, innovative membrane technology applications, source reduction, new treatment technologies, PFAS removal (source reduction and treatment), whole effluent toxicity, and industrial stormwater management.
Laboratory Practices	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.
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.
Plant Operations	Methods of improving plant operations, process monitoring and control techniques including online 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 benefits/application to other facilities.
Public Awareness	Success stories of public education or outreach campaigns (brochures, flyers, posters, warrant articles, etc.), program rollout (FOG, stormwater, PFAS, etc.), public engagement (workshops, site tours), and community events (Imagine a Day Without Water).
Residuals Management	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. COVID-19 impacts to residuals management.
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.
Small Community	Seasonal applications (schools, resort areas, etc.), innovative technologies, natural systems for wastewater treatment and disposal, Continuity of Operations, Planning, best practices, and lessons learned during a pandemic.

Stormwater	MS4 permits, regulation, stormwater collection, stormwater treatment, stormwater utilities (creation and management), BMPs, TMDLs, modeling, rule making, sampling, and monitoring. NPDES Stormwater permits, regulation, stormwater collection, stormwater treatment, stormwater utilities (creation and management), BMPs, TMDLs, green infrastructure, flood resilience, modeling, rule making, sampling, and monitoring.
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.
Sustainability	Projects that focus on the three responsibilities of sustainability (i.e., social well-being, environmental stewardship, economics) during the following phases: Planning and Development (sustainable communities, low impact development, resiliency); Engineering Design (standards, specifications, materials, water reuse, residuals); Construction (methods, materials); Operations (energy conservation, collection systems, asset management); or End of Life (reuse, recycle). Or projects that incorporated or used Sustainability Metrics and Rating Systems (LEED, Envision, WaterSense, EnergyStar) to evaluate the project during the planning or design phases.
Utility Management	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, infrastructure funding and implantation, Capital Project Planning, Remote Workforce, people management systems, utility performance measures, infrastructure security, customer satisfaction programs, ISO certification, Environmental Management Systems, and crisis management techniques.
Water Reuse	Water Reuse projects, processes and/or infrastructure for reclamation and reuse planning, implementation, and operations; Emerging technologies and zero liquid discharge (ZLD); Energy savings and carbon footprint reduction; Regulatory drivers, State and local regulations, and subject matter that incorporate the EPA's "Fit for Purpose" principals 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.
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 online 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.
Youth Education	Success stories of youth education and outreach focusing on promoting stewardship of one of our most precious resources, Water. Sharing programs, ideas and other resources that can be used, as individuals or committees, to not only educate, but also attract the next generation of environmental champions to our industry.