



**2020**  
**WEBINAR**  
**SERIES**

**NEWEA CLEAN WATER CASE STUDY SERIES**

# **AN INNOVATIVE APPROACH TO BREWERY WASTEWATER TREATMENT**

**Wednesday,  
September 16, 2020**  
**Noon – 1:00 PM ET**  
**\$20 Members |**  
**\$30 Non-Members**



Speaker: **Michael A. Smith, PE**, Weston & Sampson—(Smitty) is a team leader and senior engineer with over 30 years of engineering experience in wastewater

facilities planning, alternative treatment, process design and control, system evaluation, construction administration, and construction inspection. He also has an extensive background with municipal facilities, anaerobic digestion, hydraulics and facilities construction, and state and federal permitting. He has supported numerous combined sewer overflow (CSO) abatement projects throughout New England.



Moderator: **David Elmer**, Weston & Sampson—David is a vice president and is the Wastewater Discipline Leader. He has more than 25 years of experience with

wastewater and stormwater systems. David has an undergraduate degree in Civil Engineering from Worcester Polytechnic Institute and is a registered professional engineer in multiple states. He lives in Nahant, MA with his wife and two boys.

**Craft brewing has grown substantially in the U.S.** over the past three decades. Microbreweries have gone from being relatively unknown to taking up over 24% of a market worth over \$114 billion per year. Due to the nature of the craft brewing business, there are many small breweries springing up throughout the country, each looking for a place to discharge high-strength wastewater. Brewery owners find themselves in a position where they need to focus much of their effort and resources on wastewater management, instead of devoting time to the craft that brought them into the business. Communities are concerned with microbreweries because, while they may have a nearly insignificant impact on hydraulic capacity of the Publicly Owned Treatment Works (POTW), this small amount of wastewater is high in strength, impacting a community’s ability to connect new system users. State regulators are becoming more involved with brewery siting and wastewater connections since they are responsible for enforcement of discharge permit compliance at the POTW that receives brewery wastewater.

This presentation will highlight how Weston & Sampson developed an innovative approach to this issue including:

- Design and performance testing details of the installed system
- Best management practices within the brewery to minimize wastewater discharge and organic load
- Overview of the preliminary treatment system used to minimize pH and BOD fluctuations, and reduce system influent load
- Summary of the State and local permitting requirements that this system needed to meet

Lastly, the discussion will include the process optimizations and operational lessons learned during start-up and initial operation, which has enabled this system to exceed expectations.



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