Michael Brophy

Written by Tom Gillis, MSc. Trainee

Michael Brophy earned a Bachelor of Science in Environmental Science with Honours from Acadia University in 2015. His interest in research led to his participation in the co-op program, where he began gaining valuable experience in the water treatment industry. He focused his honours project on characterizing natural organic matter in drinking water sources that had previously been used for wastewater discharge in Nova Scotia. His drive for research and creating change in an impactful field were ultimately what led him to continue his education. Upon earning his undergraduate degree, Michael continued with similar research at Dalhousie University while working towards earning his Master's of Applied Science in Civil Engineering. His masters project incorporated field work with wet chemistry and compound analysis to observe the seasonal and environmental impacts on organic compounds and algal toxins in drinking water sources.

Shortly after finishing his graduate studies, Michael entered the work force as a policy analyst at the Atlantic Policy Congress of First Nations Chiefs Secretariat (APCFNC). As a policy analyst, Michael worked to provide quality advice, strategic direction, and advocacy in the areas of water and wastewater treatment. During his time at APCFNC, Michael assessed federal policies and regulations to see how they might affect First Nations communities. He also spearheaded a project on Water Safety Planning with Dalhousie University and served as a member of the planning committee for a First Nations Water Monitors & Operators training. Here he was able to apply theory and skills from his education to the real water and wastewater treatment problems that First Nations people are faced with. Michael notes that this position encouraged him to spread out his pool of knowledge and help create meaningful change. Though his expertise thus

far were largely focused on field and lab work, his experience with APCFNC expanded his perception of opportunities within the water and wastewater treatment industry.

In 2019, Michael accepted a process specialist position from CBCL Limited - the leading multidisciplinary engineering and environmental consulting firm in Atlantic Canada. They work with clients to develop and provide engineering and environmental services that positively impact the environment and surrounding communities. Michaels position allows him to blend skills from his previous positions with his science and engineering background. Day to day operations include creating various form of documentation for water treatment plants to run smoothly. He designs standard operating procedures, maintenance procedures and maintenance schedules for each piece of equipment. Along with site visits and equipment walkthroughs, Michael oversees support and offering solutions to clients that may run into issues. The job requires strong communications skills and ability to understand a multitude of equipment and operating procedures. Along with writing reports for clients and project managers, much of his work is hands on and rather fast-paced.

Michael says he appreciates many aspects of his current position and career path thus far. His studies in the sciences and engineering drive his curiosity for analytics and developing support plans for his clients. He has found it very helpful to pursue opportunities that encourage learning and advancement in the industry. Helping colleagues with lab work or project management, attending presentations slightly outside of his field has all presented him with learning opportunities that have proven to be applicable to his own, meaningful work. Since the water and wastewater treatment industry is so broad, he has found it advantageous to "test the waters" of the various aspects of the industry surrounding him. Reflecting on his career thus far, Michael notes that a lot of opportunities he has had were not presented to him. He stresses the importance of actively looking for opportunities, networking, and putting yourself out there.