

**ENS Seneca Toms  
JRCOSTEP Summer 2020  
East Carolina University  
Rhineland District Office  
Rhineland, Wisconsin**

My name is Seneca Toms and I am graduate student working on a Master of Science degree in Environmental Health (MSEH) at East Carolina University. This summer I had the honor of serving as a U.S. Public Health Service Commissioned Corps Officer in the the Junior Commissioned Officer Student Training Externship Program (JRCOSTEP). My duty station was with the Indian Health Service, Bemidji Area, Division of Environmental Health Services, Rhineland District Office, located in Rhineland, WI. The office provides environmental health services in support of tribes primarily in Wisconsin and the Upper Peninsula of Michigan.



I heard about JRCOSTEP and the great opportunities the program has to offer, so after returning to school to pursue my MSEH degree, I decided to apply. I submitted my application and was contacted a few months later by CAPT Timothy Duffy, Director, Division of Environmental Health Services, Bemidji Area. Several months later, I was offered and accepted an assignment. My preceptor throughout the summer was Barry Hugo, RS, an Environmental Health Specialist. Mr. Hugo was an incredible resource with a wealth of knowledge which he was always willing to share.

Over the summer, I learned about and conducted a wide variety of environmental health work, including: conducting surveys of retail food establishments; safety surveys; surveys of water and solid waste facilities; vector surveillance; and respirator fit testing. I also earned the ServSafe food protection manager and instructor certifications, and contributed to guidance for schools, Head Start and preschools programs for responding to a COVID-19 outbreak.



I conducted surveys primarily of restaurants, schools, casinos, bars, and convenience stores. During the surveys, I identified food and general safety violations and communicated them to establishment's management in person and in written reports. I also had the opportunity to accompany LTJG Garrett Steiner (a former JRCOSTEP officer himself) to conduct a survey of an aquaponics facility (a combination of hydroponic and aquaculture). The Rhineland District Office staff provided excellent training on conducting surveys, and before long I was given the go ahead to take

the lead on conducting surveys and writing reports on my own.



I conducted mosquito surveillance using Centers for Disease Control and Prevention (CDC) light traps and gravid traps. After collecting the mosquitoes, I identified and counted the different types and conducted tests to see if any of the mosquitoes carried diseases such as West Nile, Saint Louis encephalitis, or Eastern Equine Encephalitis viruses. I also conducted tick dragging to collect ticks, which we then identified. We were primarily looking for deer ticks and any found were sent to the CDC to test for Lyme disease. Conducting vector surveillance was really neat because it allowed to apply what I

learned in my college studies and gain extensive experience with vector surveillance.

My JRCOSTEP experience occurred during the COVID-19 pandemic. In addition to the general environmental health activities, I had the opportunity to learn about and work on activities related to the pandemic including an action plan guidance document for tribal schools, child care, and Head Start programs to use in responding to suspected or confirmed cases of COVID-19.

This summer was extremely fulfilling in many ways. I applied what I learned in my college classes while helping protect the public. I worked with an incredible group of individuals in the Rhinelander District Office. I also was given ample leave time and was able to explore all the beauty of northern Wisconsin and the Upper Peninsula of Michigan. Last but not least, while wearing the Commissioned Corps uniform is not required for JRCOSTEP officers, I requested to wear it to gain a more overall esprit de corps experience. Wearing the uniform made me feel a sense of honor to know I was working as part of a group that has a long history of protecting and promoting public health.

