

ENS Chris Bishop
JR COSTEP Summer 2013
Western Carolina University
Lawton Service Unit
Lawton, Oklahoma



My name is Chris Bishop and I am a second semester senior at Western Carolina University about to earn a Bachelor's degree in Environmental Health (with a previously earned Associate's degree in Environmental Science). I got the privilege to participate in the JRCOSTEP program during the summer of 2013 in Lawton, Oklahoma at the Lawton Service Unit. My preceptor and first supervisor was LT Dustin Joplin and secondary supervisor was Katie Tompkins who both serve the Caddo, Comanche, Apache, Delaware, Fort Sill Apache, Texas Kickapoo, Wichita & Affiliated Tribes, and Kiowa tribal nations. My individual project for the summer was conducting water quality monitoring at a tribally owned water park located about 1/2 mile from the office. In addition to this, I learned to do a variety of surveys including Food Sanitation and Protection surveys, Environmental Health/Life Safety surveys, participated in rabies clinics and car seat inspection events, taught Food Handlers Training courses, attended an Integrated Pest Management training, as well as improved my technical writing skills. The experience provided a newfound confidence in my abilities to accurately identify and explain health and safety issues.



When I first learned that I had been accepted into the program I pulled up a map of the area and realized that Lawton was a city. Although most people that live here don't consider it a true city. For me it was the most developed place I have ever lived. Being an avid outdoorsman, I was truly concerned that I wouldn't have daily access to wild lands where I could release excess energy, reconnect with the Earth, and refocus the mind. In a twist I did not expect, the Wichita Mountains Wildlife Refuge located just outside the city provided me with endless exploring opportunities and wildlife encounters. Having this refuge located so close to a decently sized city makes the Lawton

Office an ideal spot for the JRCOSTEP program because it provides a variety of modern services, extracurricular activities, and cultural experiences a COSTEP might not otherwise have.

My water monitoring project at the water park involved sampling three water systems: a lazy river, a wave pool, and a kiddie pool. I sampled for total, free, and combined chlorine as well as pH. I also viewed the records from the daily samples done by the water quality specialists at the park to cross reference them with my results. The tribe which runs it recently took over operations from a private company and was having issues setting up a smoothly functioning chemical operations program. That is where my position with the IHS as an Environmental Health Officer came into play. Rather than just doing monitoring, I had to become a resource on the subject and advise the water quality specialists about the best chemical application strategy and why it was so important to keep daily sampling records. It was a struggle in the beginning but as a trusting working relationship developed over the course of the summer I began to see positive strides in the operation of the water systems.





When it comes to doing inspections, I participated in MANY. There are more than a few casinos in the area which require both an Environmental Health Survey and a Food Sanitation Survey, each requiring a separate report. In addition to casinos, our office inspected daycares, senior citizen centers, community buildings, powwow ground and temporary food vendors, a boarding school, responded to community members concerns about environmental health issues, and a host of other topics. I completed and filed the majority of the reports for the inspections with comments and

feedback from my preceptor and other environmental health specialists. This provided me with ample opportunity to refine my writing skills. The variety of daily activities is the greatest part (for me) of the Environmental Health Officer position. One day I would be out doing an open dump inspection walking through mud and rain, while the next day I would be doing a Life Safety inspection at a daycare. My most rewarding work related experience was when I began to take the lead conducting Food Sanitation Surveys. This allowed me to apply both course work and on the job training into ‘real-job’ experiences identifying hazards and explaining the reasons behind the dangers and associated regulations to owners, operators, and community members.

It is said that, to teach, one must be a master of the subject. Teaching a Food Handler’s Training course not only educated the food workers on food protection, but the preparation for teaching re-enforced the many concepts which I had learned in coursework as well as on the job. It prepared me for leading Food Safety Surveys. I have never been afraid of public speaking yet teaching a course where the students must learn the material and pass the course to receive their card for food handling puts a responsibility on the speaker that I had not experienced before. It gave me a new perspective on how important it is to be on the leading edge of scientific knowledge and have the ability to explain it plainly. This leading edge was shown to me at a conference we attended about Integrated Pest Management (i.e. roaches, rats, ticks...). The conference covered a vast array of the best ways to remove and keep out pests. I got practice this in my own life as, shortly after moving into an apartment in the city, I found I was in the company of cockroaches.

Going to community health events was always a fun part of my duties. I participated in two rabies clinics and two car seat safety events. The rabies clinics involved filling out paper work on the owners and their pets, assigning rabies tags to each animal vaccinated, and filling syringes with vaccine. Strangely, this paperwork was slightly difficult because I was unfamiliar with many of the breeds that appeared at each clinic but it became easier as I saw many of the same breeds repeatedly. At the car seat clinics I learned how to properly install car seats for a variety of ages as well as the mistakes parents make when doing self-installs. I even realized I had once installed a car seat improperly for my niece! Through these events I got to talk with many different types of people and hear fascinating stories of their lives, their children, and their pets.



The whole process of transplanting life to a place I had never been, practicing a field which I am still relatively new to, gaining great insight into how an environmental health professional views the world around them, and making awesome memories I never expected to make will stay with me for the rest of my life. Everyone that I had the pleasure of meeting and working with in the Indian Health Service are phenomenal individuals and a big thanks goes out to all of them. I don’t have the words to describe how highly I recommend this program to anyone interested. All I will say is that the decent amount of paper work, all of the waiting, and any other headaches involved with applying for a government position will be totally outweighed by the phenomenal experience of the COSTEP program. Happy Trails!