ENS Ricky Greene Jr COSTEP Summer 2011 Western Carolina University Colorado River Service Unit Parker, Arizona

My Name is Ricky Greene I am a senior at Western Carolina University studying Environmental Health. I participated in the COSTEP program during the summer of 2011. I first heard about this opportunity through my academic advisor Dr. Burt Ogle. He suggested that I apply for the internship because of the valuable experience and knowledge you can gain by working with the Public Health Service. I decided to apply and within a few months I learned about my duty location and began to prepare for a summer I would never forget.



I was stationed at the Colorado River Service Unit (CRSU) in Parker, Arizona. CRSU is part of the Indian Health Service-Phoenix Area. The Phoenix Area gave me a well-rounded Environmental Health experience due to the diverse work settings. One week I would be flying by helicopter to the isolated Native American community of Supai and the next week I was doing an institutional inspection at the Phoenix Indian Medical Center. I was given a preceptor early in the process. LTJG David Bales helped me feel very comfortable moving to Arizona and he prepared me for what my job would entail. Our conversations during the spring semester leading into the summer set me up for success as soon as I walked into the office on day one. LTJG Bales had a wide variety of activities planned for me. According to the schedule we had surveys that consisted of restaurants, jails, markets, casinos, hotels, pools, and head starts. We also planned to do West Nile and Avian Influenza surveillance along with community education programs. I was ready to get started as soon as possible!



My favorite part of the COSTEP was the learning process. There was a healthy balance between leading and observing which helped me gain plenty of experience. I wasn't limited to being a student observer nor was I someone who had to lead every inspection. I was allowed to choose how to handle each situation. If I needed more time to learn about a facility or a certain type of survey I was free to just observe. If I wanted to learn by conducting my own survey I was allowed to do so. During my COSTEP, I initially watched LTJG Bales perform the surveys. I took ample notes throughout the first few weeks and paid very close attention on how to conduct myself as a successful officer in the field. By week three I started working side by side with David.

We both conducted inspections, disease surveillance, and trainings together. By week six David allowed me to take more of a lead role in daily activities. During this time I developed my own style that worked best for me. During the COSTEP I felt like a full time Commissioned Officer rather than a Jr. Assistant.

Another benefit from the COSTEP experience is the familiarity you gain with various codes. I primarily used the 2009 FDA Food Code, NFPA Life Safety Code, the Uniform Building Code, OSHA, and the Caring for Our Children: Health and Safety Standards (for surveys of out-of-home childcare programs). Not only was I confident in applying the correct code to the proper situation or facility type, but I also improved in spotting various violations. I participated in dozens of inspections this summer and I know that my survey skills increased immeasurably. With the help of LTJG David Bales and LT Sarah Snyder (Environmental Health

Officer) I learned a lot of helpful information that will stay with me as I continue my life in academia and eventually, my career.

Later in the summer I began work on my COSTEP project. I was responsible for providing an overall assessment of swimming pools on the Hualapai, Fort Mojave and Colorado River Indian Tribes reservations. . Categories of concern consisted of water chemistry, pool policies, and federal law compliance. This project was particularly important because CRSU needed to know how compliant reservation pools were in regards to two new federal regulations that



focused on both public/semi-public swimming pools. The new ADA law requires pools with less than 300 feet of perimeter pool wall to provide at least one means of access for someone who is handicapped. If the pool has more than 300 feet of perimeter pool wall, then it must provide two means of access. Most pools I surveyed were not aware of the federal regulation. The other federal law that I focused on was the Virginia Graeme Baker Act which deals with installing anti-entrapment drain covers in order to prevent drowning. Unfortunately, most pool owners had no documentation if their covers were compliant. I educated each pool owner about both Federal laws and handed out information to help them become compliant.

Water chemistry was another important part of my COSTEP pool project. At each pool I would measure temperature, pH, calcium hardness, alkalinity, and total dissolved solids. Chlorine and pH were the two main water quality measurements I look at when determining the risk to public health and safety. In one instance a pool had to be closed to swimmers because chlorine hadn't been used as a disinfectant for nearly a week and the pH was too acidic. An extra service I provided during my COSTEP project was a water balancing score. I analyzed the pool's chemistry and calculated a score. The score corresponds to the amount of equipment damage you can expect from current water quality readings. I spoke to each tribal business about how to attain proper water chemistry results so they can increase the lifespan of their equipment.

The COSTEP project discovered some problems with our pools in the CRSU area. We found that a majority of pools were not federally compliant with new ADA standards or the Virginia Graeme Baker Act. It was also



noted that there was a lack of Certified Pool Operators to maintain pool facilities. There was also confusion about water chemistry measurements. Facilities were keeping good records of water chemistry, but did not understand what the measurements meant. This is due to the lack of Certified Pool Operators to interpret the data. My project also found that emergency procedures for illnesses, injury, fecal accidents and evacuation were not written down in a central location for all employees to access. These policies were only verbally spoken. During the pool visits I spoke to the owners about why it's important to write down a standard protocol to deal with emergencies. Hopefully my project findings can be used to focus future efforts towards these deficiencies in order to make reservation pools safer.

This experience has provided a strong foundation going forward. I have been able to apply what I've learned in the classroom to a wide variety of real world situations due to the number of different facilities I surveyed. The best part of the program was the ability to observe and gain advice from top quality environmental health professionals. My time at the Colorado River Service Unit has provided me with a professional advantage that I'll value for my entire career.