ENS Arilyn Lee JRCOSTEP Summer 2025 Colorado River Service Unit Parker, Arizona

My name is Arilyn Lee, and I am from the small town of Chickamauga in northwestern Georgia. I am a senior at Eastern Kentucky University (EKU) studying Environmental Health Science and Sustainability with a minor in Agriculture. I first heard about the U.S. Public Health Service (USPHS) when I attended an EKU student Environmental Health symposium my freshman year of college in the spring of 2023. After



sitting down with my advisor, Jamie Hisel, she began to tell me about the Junior Commissioned Officer Student Training and Extern Program (JRCOSTEP). She later shared details on the information sessions, and after attending, I knew this was something I wanted to pursue. This program was an amazing opportunity to gain hands-on experience in so many unique areas.

Last summer (2024), I completed an externship with the Indian Health Service (IHS) in Bemidji, MN, with the Bemidji Area Office (BAO) under my preceptor, CDR Greg Calvert. I had a life-changing experience, and after my time spent working with the Minnesota tribes, I wanted to see what this job would look like in a completely different geographic area.

This summer (2025), I was placed with IHS in the Phoenix area with the Colorado River Service Unit in the town of Parker, Arizona, under my preceptor, LT Justice Lambon. I had the privilege of working alongside LTJG Devin Temple, LT Jonathan Harris, and his COSTEP, ENS Jason Bak. During my externship, I had the opportunity to work with five tribal communities: Havasupai, Hualapai, Chemehuevi, Fort Mojave Indian Tribe (FMIT), and Colorado River Indian Tribes (CRIT).



My responsibilities included helping to serve multiple tribal communities through environmental health and safety fieldwork, conducting mosquito surveillance, delivering public health education, engaging with the community, and inspecting local facilities to support health and safety efforts.

Culturally, the experience was invaluable! I had the opportunity to sit down with a few tribal representatives, where I had the opportunity to listen to stories and discussions about both historical and current issues impacting their communities. These conversations helped my understanding of Native American culture and gave me a more meaningful perspective on the real events shaping their lives, past and present.

I assisted LT Lambon and LTJG Temple survey seven institutions, four food establishments, one pool, a discussion of the Blue Water & casino water reduction plan, and two vector control events, where we focused on preventing the spread of Rocky Mountain spotted fever (RMSF) and conducted monthly surveillance of mosquitoes for West Nile virus (WNV).

The Rocky Mountain spotted fever prevention campaign in the Eastern Arizona District was such a unique experience. We split into four teams of about three to five people. I worked with several folks from the CDC, which was a really neat opportunity. Our work involved going house to house on the reservation, putting flea and tick collars on dogs, and applying tick treatment around homesites. I felt like I was making a meaningful impact.

Mosquito trapping for WNV surveillance was also unique. LTJG Temple showed me how to identify and speciate each mosquito, and how to efficiently complete the tests to determine if any were carrying WNV. Luckily, we didn't find any positives during my time here!

One of the most impactful moments was visiting a family's home to help reduce a child's exposure to lead. It was powerful to see first-hand the kind of difference, Environmental Health Specialists, can make in people's lives. One of my favorite experiences was riding a helicopter into Supai and seeing the incredible views from above. Supai was such a special place, and I'm incredibly thankful I had the opportunity to see both Mooney and Havasu Falls in person while completing meaningful work. It was truly an unforgettable experience!

The main project I worked on this summer was a WNV Data Analysis for CRIT Reservation. I analysed and compared annual WNV data, reviewed mosquito trapping locations and examined the species and counts of mosquitoes collected at eight locations for 2023, 2024, and 2025. I also used GPS to record the coordinates of all trapping locations. Using Excel, I created pie charts to visually compare the data across the three years. The goal of this project was to provide a consistent, year-over-year comparison to help identify areas that may require increased surveillance or vector control.







Another project I worked on was an Ice Machine Cleaning Fact Sheet for a local convenience store. In this project, I developed a step-by-step fact sheet outlining the proper cleaning method for the specific type of ice machines used at the convenience store. This location has experienced several water line breaks in the past, which led to ice contamination. My goal was to provide clear, actionable guidance to help staff properly clean their ice machines and prevent future contamination.

Throughout my time at IHS, I worked with amazing colleagues who were professional and talented at what they do. The atmosphere was positive, and each day I had something new to learn about. I could see myself returning to IHS in the future. I would recommend this internship opportunity to any of my peers because I would love nothing more than for them to have the eye-opening experience that I had over the past two summers.

I'd like to acknowledge the support from the Colorado River Service Unit staff, especially LT Justice Lambon and LTJG Devin Temple, EHO for both their mentorship throughout this experience. I also want to recognize LT Jonathan Harris, Field Engineer & Jason Bak, COSTEP for their support. Thank you to Vincent Slayton-Garcia, District EH Officer and David Cramer, Area DEHS Director, for their help and leadership. Finally, a thank you to Cori Crocker, EHS, San Carlos (EADO) for her guidance and encouragement. Each of you played a role in making this experience meaningful, educational, and unforgettable.