Crystal Tulley-Cordova

Principal Hydrologist for the Navajo Nation Department of Water Resources

What is your current occupation?

I am a Principal Hydrologist for the Navajo Nation Department of Water Resources – Water Management Branch, the largest land-based and populated tribe in the United States. The mission of the Water Management Branch is to protect and manage the Water Resources in the Navajo Nation. I work on watershed characterization, technical support for water rights, and help develop sustainable water projects across Arizona, New Mexico, and Utah.

What is your educational background?

I received a doctoral degree in Geology and an Interdisciplinary Graduate Certificate in Sustainability from the University of Utah. I also received a Master of Water Resources in Hydroscience and a Bachelor of Science in Earth and Planetary Sciences from the University of New Mexico.

A key message for students is that the geoscience workforce is dynamic, and boundaries between sectors and occupations are fluid. How has this been true in your career?

Enjoy the journey. Finding your fit in geoscience careers can sometimes take trial and error, but don't give up. Do what brings joy to your life. I enjoy my job. I wake up in the morning and think wow I am getting paid to do what I love. I was on a path for a high salary but quickly realized that also came with not having a work-life balance. I enjoy where I am at now.
In the beginning, I chose a non-geoscience academic path, and I was unhappy with my proposed major. The state of my well being impacted my participation in classes and end-of-semester

grades. After a year, I reevaluated my life and found my happiness in the geosciences. I had to be honest with myself, and realize that I wasn't going to school for anyone else but myself. Therefore, I knew that I need to make the career path change even though it meant trying to resuscitate a wounded GPA.

Where do you see your sector moving in future years? How would you advise students to prepare to be competitive job applicants and successful employees?

I see my sector growing in new ways with technology. It's good to be like a chameleon and be adaptable. Like technological advances, we need to be willing to learn always. I try everyday to accept that I don't know everything, and learn what I can while I can.

What is the role of networking in your sector? Do you have advice for a student who is just beginning to build their network? What is the best way for students to get their foot in the door?

Networking is key. Jobs in my field may be advertised, but it's amazing to find out what doors open with networking. Often times, this means knowing about a job before it's even advertised or may not even be advertised. The best way to get your foot in the door is searching your network and searching on-line to see if there are opportunities that align with your education and experience. Sometimes it can be a little frustrating especially when you're nearing graduation or a recent graduate, but told you are unqualified because you don't have experience. This is when networking is key, and people can be references for your character and experience.

What does a "typical" day of work look like for you?

A typical work day for me has changed in the face of the COIVD-19 pandemic. It's a lot of virtual meetings regarding safe access to water projects. I do a lot of desktop research, technical memo writing, and proposal writing. Prior to the COVID-19 pandemic, I often participated in the field visits and team meetings in addition to the work I now do remotely.

What is the best part of your job?

The best part of my job is knowing I am helping people gain access to safe water for generations to come.

Do you have any other comments or advice for students looking to enter your sector of the geoscience workforce?

The science is just as important as the soft skills, including communication, self- motivation, leadership, responsibility, teamwork, problem solving, flexibility, ability to work under pressure, negotiation and conflict resolution, etc.

Connect:

https://www.linkedin.com/in/crystal-tulley-cordova-phd-mwr-530085158/

Learn More:

Chronic Wicked Water Problems in the Navajo Nation Heightened by the COVID-19 Pandemic

https://online.flippingbook.com/view/167753/18/

Meet the Researcher

https://nmwrri.nmsu.edu/crystal-tulley-cordova-principal-hydrologist-navajo-nation-department-of-water-resources/

Explora Interview

https://fb.watch/7iCZGwzXBd/

CARE Tuesday Talks: Water Access & Systems

https://podcasts.apple.com/us/podcast/care-tuesday-talks-water-access-systems/id1550793562?i=1000531626231

Using technology to cope with drought

https://www.pbs.org/wgbh/nova/podcast/

Infrastructure in Real Life: Water

https://www.pantsuitpoliticsshow.com/show-archives/2021/6/29/infrastructure-in-real-life-water

The Navajo Nation and Clean Water: The Story of Two Sisters

https://www.mrsgreensworld.com/podcast/the-navajo-nation-and-clean-water-the-story-of-two-sisters/