NICK THIROS TRANSCRIPT

My mom was actually a hydrologist at the USGS. She even has funny stories where like I gave zero interests in terms of rocks and hydrology, you know, in my high school years. It definitely had an impact on me, especially later in life—kind of trying to pick a career pathway and seeing firsthand what the USGS does and how interesting and cool that work is. And it's kind of ironic that I'm now in that field.

My name is Nick Thiros. I study Groundwater Hydrology in the Geosciences program.

So, I'm originally from the Salt Lake City area in Utah. I ended up at the University of Utah. I got my undergraduate degree in chemistry there and, kind of during that time, is when I really found the geoscience sort of pathway. I was involved in research there. And, through a connection at the USGS, I met up with a geoscience professor there and just kind of started talking to them on how you can meld the chemistry with the geoscience and that really sparked my interest. And, of course, as a Geoscientist scientist, you get to stay and work outside a lot, which is always fun and attractive.

Personally, I use chemistry, I use computer modeling, computer science, physics. So, it's kind of just a big melting pot and, you know, you can heavily be involved in one of those sub-disciplines, but in general, it just allows a lot of freedom to inquire new things.

Lately I've also been diving deep into computer modeling and asking questions, like how can we predict groundwater systems, which is fascinating and really fun for me. My dissertation is broadly thinking about how we can use chemical tracers to make better predictions on groundwater systems. Groundwater is an incredibly important resource that, you know, everyone uses. We don't know everything about it and especially how it's going to change in the changing climate.

One of the big things that happens, right is, especially around here—it snows up in the mountains and then we know that snow melts and eventually makes it into rivers. And that's our primary water source around here as well as many parts of the world. So, one way you can think about, think about it is that we don't know precisely what's happening up in the mountain. So, if climate's going to change precipitation in the future, we want to know how that will impact water resources and a major part of that is knowing what the groundwater system will do. So, we need to use our models to predict the future. And, you know, that's a very hard thing to do. There's all sorts of challenges in it, but it's something that needs to be done—it’s important—if we want to keep people safe.

One thing that I've really enjoyed—and it has been a big standout for me—is being part of the UM Bridges program. So, it's a graduate student kind of fellowship opportunity here at the University of Montana, specific to here that trains graduate students to think interdisciplinary about food, energy, and water and how it is all related to each other. So, that's really provided me the opportunity to, you know, get outside my discipline, my department, and meet all sorts of people from social scientists, ecologists. And it's been, it's been a great experience to think more broadly about where my science fits into the broader picture.

Bottom line for me, I really enjoy the research and that's what I want to do as a career—research in the, kind of, groundwater environmental scientist. At least for me, it's much more exciting than a, you know, quote-unquote normal job—to be able to be doing something that's at the frontier of science.