ANOTHER STEM INTERVIEW!

Meet Eric Schneider

Principal Engineer, Generation Division

We recently interviewed Eric Schneider to find out more about his job at the PUD.

What sparked you towards a STEM career field? I was influenced mostly by family and friends and my respect and curiosity for some of the work that they were doing. My grandfather was a civil engineer responsible for some projects that were considered construction wonders. I also have always had a curiosity for how things are built and like to build stuff.

What type of training do you have?

I went to WSU and graduated with a Bachelor of Science in Civil Engineering. While going to school, I worked through the summers at a small engineering and land surveying firm in Everett. After I graduated, I continued to work there for 3 years. Through my work there, I developed working relationships with people at the PUD water department, which led me to getting a job here. That was 17 years ago and since then mostly just on the-the-job training.

What STEM skills are important in your job?

All STEM skills really are important. Science is important to every project that I work on. While I don't always get into the details of the science concepts, having background knowledge of the sciences is helpful for the foundation of understanding that is required. Technology has also become even more important. When I was in school, we were still doing some hand drafting and now all drafting is computerized using drawing software. Technology has greatly affected the way we communicate ideas from concept to reality.

Why is your career unique?

What is unique about my career, compared to other engineering type roles, is that I get to take a project from inception, where people are talking about it conceptually, and I get to see it all the way through to completion. In other engineering careers, you may only have a role in one aspect of the project and may not have the opportunity to see it get built or operate. Another unique aspect of my career is the privilege to work on renewable energy projects that are cutting-edge. Currently, I'm working on the Admiralty Inlet Tidal Energy Project where large turbines will be lowered into the marine environment and forced to spin by the moving currents. If we can keep it on schedule, our project will be the first tidal array in the world that is connected to the power grid. In order for tidal energy technology to have a future and become commercial on a greater scale, several questions around how it interacts with the marine environment need to be better understood. As part of this project, we will be collecting data and working with researchers at the University of Washington in an attempt the answer these questions.

What do you like about your job?

I'm never bored at work. There hasn't been a day when I don't have a stack of work to get done and there is so much to focus on. I like having a challenge; really it is more like multiple challenges just in one project. I'm always thinking about how I'm going to tackle a problem, think through a solution with a team, get acceptance from our internal leadership and ultimately from the resource agencies that regulate our projects. I get great pleasure out of the many small successes that occur along the process of completing a project. It is also nice being surrounded by professionals all the time who do quality work. Of course, I also feel fortunate to earn a salary that supports my family and provides us with the ability to enjoy the recreational activities that we love such as snow skiing and water sports.

Any advice for students who want to pursue a similar career? Keep learning. There were times when I was in school that I questioned: why am I learning about this? The answer does become clear. Have faith in your teachers that there is a purpose for what you are learning each day. Sometimes it's hard, but hang in there.

✓ Do whatever you can to meet professionals in the specific industry that interests you so you can get a feel of the dayto-day life that person leads. You might be surprised at what you'll find and the misconceptions you might have. As an engineer and project manager, I certainly don't spend my entire day performing calculations as you might think. In reality, I spend more time emailing and updating people on the projects I am involved with.

✓ There are also **great camps** at the University of Washington and at some of the community colleges so make sure you explore those as well.

✓ Finally, when you are eligible, **take advantage of internships** and work hard to find one. Sometimes we don't have people pursuing our internships here at the PUD. These are a fantastic way to get real working experience and exposure to industry professionals.

