Water Supply Specialist

Job Description

Water supply specialists, also often known as hydrologists or hydrologic technicians, monitor water resources within a region. This includes work in water conservation, snow hydrology, geology, engineering, soil science, electronics and climatology. Water supply specialists balance the health of natural systems with the basic needs of everyday people.

Core Tasks

- Analyze scientific data through digital programs and databases
- Interpret technical information and convey with simplicity
- Visit snow measuring sites in mountains and forests to check equipment and measure snow
- Promote water conservation and sustainable practices to community members

Workplace / Environment

- Work hours
  Approx. 40 hours/week
- Environment
  Technical Office Work is mixed with Site Visits for inspections
- Travel
  Frequent in-state overnight travel. Out of state travel may be required for meetings or special training sessions.

Education / Prerequisites

Education Level
Sometimes a bachelor’s degree is required, but entry level jobs are available

Pre-Job Preparation
Classes in environmental science, calculus, and natural resources are important, as well as public speaking skills.

High School:
- Pathways Internship Program
- Clean Water Ambassadors Internship
- Lake Washington Water Internship
- Ecology Summer Youth Corps

Experience

Soft skills
- Communication
- Public Speaking
- Organization

Technical skills
- Data analysis
- Technical terms knowledge
- Equipment knowledge

Salary

Entry – $58,000
Middle – $70-80,000
Top – $109,000+
Career Path: Scott Pattee

About Me
Water Supply Specialist with Natural Resources Conservations Service (NRCS)

Pre-Workforce Choices

“I didn’t get a degree, but I had a strong background and interest in engineering and snow science. I actually grew up farming and ranching and this tied into that with irrigation and water saving. I was also always interested in climatology-I just couldn’t do the calculus.”

“I was in FFA and 4H though when I was in high school, so I did a lot of public speaking and had the taste of it through holding officer positions. Then when it came to work for the agency, I really got thrown into it.”

Into the Real World

“When I started out, I wasn't with the agency- I was a farmer and rancher. I was running a large irrigated farm in the Pendleton area.”

“Then I went to work for the NRCS in Nevada as a soil conservation technician and primarily worked with irrigators, farmers, and cattle ranchers, which is what I grew up doing myself too. I stepped into something I already knew pretty well, and it really felt good to give, help people, and see things turn around by conservation. Then I was just in the right place at the right time and was able to promote up through the grades.”

“I was about five years into working for NRCS when I got in the snow program over in Spokane and I just never looked back. I had really good leadership at the time and they saw the opportunity in me. Instead of hiring somebody else to do the job that I was already doing, they went ahead and promoted me to continue doing the job.”

“Now I do a lot of public speaking. You have to be able to stand up in front of two people or 300 people and be able to speak confidently, clearly, and believably. There was a learning curve there. I started doing it at NRCS because the guy I was working with told me ‘Scott I hate dealing with the media, I hate dealing with people. And so, I want you to do all that.’ Then I was thrown into the middle of it, and that's what I had to do, but I've enjoyed every minute of it to tell you the truth.”

“NRCS is one of the highest-ranking agencies for employee satisfaction. We have the majority of people that started with the agency straight out of school, and, and have never looked back. The majority of people to start with this agency stay here.”
About My Job

“It’s been rewarding all the time”

Pros

• “It’s very adventurous because you meet tons of good people all over the place here. I’m always meeting new people and making new acquaintances.”
• “We get to see scenery and sights that normal people never get to see. Everyone is assigned a vehicle and you travel around, spending a lot of time in motels. We have a couple staff members that really love to camp out, so they’ll go up and work on a site and camp out at the site.”
• “In the government they provide a lot of great ongoing training and continuing education.”
• “With the federal government you start off with three weeks of vacation time and 75% of your health insurance paid. There’s also a really good retirement plan and it’s a very comfortable salary.”

Cons

• “Sometimes I have to work long days. A lot of times it’s just driving- my typical day during the summer is to drive four hours, visit a site, work at the site for an hour, drive another four hours to get to a hotel someplace and then do it all over the next day. Most people in this agency don’t travel that much though.”

Office Work

• “I provide snow survey program guidance training to analyze snow survey curves for cooperating agencies and volunteers we have working with us.”
• “I spend a lot of time disseminating data, reports, and varied snow climate information into a comprehensive correspondence to be shared via the web and with the public and media. I break convoluted scientific terms down and reshare information with my constituents and my clients in a way that everybody can understand. “

Fieldwork

• “I spent about half my time in the field (summer and winter). We have some positions that are considered to be even 90% field work. They spent a lot of time out in the field and a lot of time on the road.”
• “I provide a lot of field support for the snotel and snow course maintenance, including electronic diagnosis, snow sampling, construction, snowmobiles, ATVs, and UTVs, helicopter management and training.”
• “I spend a lot of time on the back end of a chainsaw clearing trails and fixing any damage or vandalism either by animals, Bears tend to like to tear things up sometimes, and/or people.”
Skills

- “Public speaking is very important—get on the drama club or speech club or debate club or anything that will help you do public speaking.”
- “You can start on college-level calculus and physics and if you want to be a hydrologist, for instance, or any job in one of those kinds of fields.”
- “Anything you can do that is natural resources related will really help you out.”
- “You kind of have to be a jack of all trades to have this job. It’s not hard, it’s just time consuming. It takes a lot of time to learn these field and office skills. Once you learn and you have them though, and you use them.”

Education/Experience

- “We have a really good student intern program. You can work up to four years during summer and Christmas breaks in all these disciplines. The idea is for students to get an introduction and experience within the discipline that they go to school for. Once they complete those four years and graduate, they’re pretty much guaranteed a job within the agency.”
- “After the internship program if students decide to go on for postgraduate programs, then the internship program extends with them and they can continue that all the way through a master’s and probably even a PhD degree.”
- “If someone’s been an intern, they might be able to start getting a little bit higher salary.”

The Future of Water Supply Careers

“One main benefit of federal employment is job security”

“We also need more people because we’re having major retirements going on and so they’re trying hard to backfill all those positions. Just this week, I think I saw four or five vacancy announcements come out for just here in Washington for more experienced people.”

“The new hires come on, they get a couple years’ experience, they promote up to a higher level and we have to backfill those positions too. There’s always room for promotions here.”