

Environmental scientist

Deborah Rowley is an environmental scientist at MWH, one of the country's consultancy firms specialising in the engineering, environmental, management and technology sectors. As an environmental scientist with a water focus, Deborah investigates the impact of human activities on streams, rivers and aquifer systems.



Who do you work for?

I work for a global consulting company called MWH. Our main clients are central and local government and the private sector.

So what do you actually do?

My job is quite varied with lots of different types of projects. The majority of my work is project based. I've recently finished an AEE (Assessment of Environmental Effects) for a leachate discharge. I'm currently working on an aquifer study for the regional council, which involved locating the bores and sampling them on a monthly basis, sending the samples to the lab, then analysing the results and reporting the data. I've also just finished an aquatic ecology project, assessing the effects of a hydrocarbon spill on a stream.

With the guidance of the senior scientists, I design the projects, collect any data, analyse the data and then write a report for the client. On an average basis I probably spend 1-2 days out of the office each week doing field work or visiting sites.

With the supervision of a senior scientist, I manage my own smaller projects or work as part of a team on larger scale projects. Project management generally involves writing a proposal, managing the budget, and making sure we deliver a project to the client on time and meet the client's expectations.

What hours do you work?

Generally I work a 37.5 hour week. Sometimes longer, but we're able to take time-in-lieu.

What equipment do you use?

I use various bits of equipment, such as dip levels for measuring bore water levels, groundwater bailers for taking samples, conductivity meters and kick nets.

What skills do you need?

Time management is an important skill, as I'm generally juggling several projects at the same time. You also need good communication skills, both written and oral. One thing I've learnt is that it's important to make and maintain good contacts, particularly within the company. I'm in the graduate programme so I'm not expected to look for projects myself; they come through groups within the company. For example, there's a local government group that liaises with the regional and city councils. So in order to continue getting local government projects, I need produce

Deborah's route



- ◆ Bachelor of Applied Science Hons (Environmental Management major and Geology minor) which included surface water hydrology, soil and groundwater, and resource management

Deborah's tips



- ◆ Don't have too narrow a focus when picking university papers. I studied a broad range of topics and as a consequence I can generally help out in some way or another with a lot of the projects that we undertake.
- ◆ This industry is all about contacts so utilise your lecturers and their contacts and become proactive in meeting a broad range of people.
- ◆ Create opportunities for yourself - don't wait for things to come to you.



quality work and keep in touch with my colleagues who are securing projects.

Do you work alone or as part of a team?

It depends on what the project is and who the client is, but if I do work on my own, there's always help available.

Do you have a mentor?

I've got a mentor within my group, who helps me with the "big picture". We get together on a monthly basis and chat about how things are going or any obstacles I'm faced with.

Is there any on-the-job training?

I'm in the graduate programme, so we get training every month. There are about 20 of us in the Central Region and we all get together for training days. We've done courses on time management, presentation skills and things like that. We can also attend technical courses run by other organisations. There are about 10 or so other graduates in the Wellington office and more coming in all the time. We socialise a lot together and help each other out.

What travel opportunities are there?

Within New Zealand there are opportunities to attend conferences and training courses. Due to the nature of our work, jobs may be based anywhere within New Zealand. In addition, because we're a global company, there are work exchanges with other offices. So after a couple of years working you might be eligible for an exchange to an overseas office.



Salary information



- ◆ You could expect a salary for a position like mine in the range of \$40, 000 to \$75, 000 depending on experience and qualifications. Pay rises are annual and are based on performance and market rates.

Getting in



- ◆ Each year, in about June, there are graduate expos at the universities. I applied through one of these, and knew that I had a job to go to before I finished my degree.
- ◆ Another way to get a job is use your contacts. So tap into what your lecturers and recent graduates know and the contacts they have. It's often a case of who knows whom in this industry.

For more information – careers profiles, info on hydrology courses, thesis database, water information directory and other watery stuff – take a look at www.h2know.org.nz and www.hydrologynz.org.nz

