

Name: Emily

Job Title: Funding & Strategy Senior Advisor - Flood & Coastal Erosion Risk Management

Organisation: Environment Agency

A short summary of your role

I'm preparing an investment and asset management strategy for all flood risk and water level management structures along a major river (think sluices, weirs, locks!).

I'll be bringing diverse teams together to plan for the future, taking into account climate change, population growth, and land use change.

An important step is monetising the ecosystem services that a well-managed river brings, think recreation for boat users, flood risk reduction, drinking water resources, habitat improvement, tourism, health and well-being.

I'll use this to support negotiations to draw in investment for the river, including a range of organisations from across the public and private sector.



Your background (field of study, previous roles, interests)

I studied Physical Geography (BSc) at University. Over this time I developed my interest in the intersection between human and physical geography – particularly natural disasters and climate change. I therefore read a Masters in Risk and Environmental Hazards (MSc), specialising in hydrological hazards.

From University I have developed a career in UK flood risk management, through working for a range of organisations:

- *flood modelling in the private sector - producing flood risk maps for the insurance industry,*
- *The National Flood Forum - a charity which advises communities recovering from flooding and lobbies government,*
- *a County Council – managing surface water flood risk from rain, undertaking risk reduction projects, consulting on planning applications and regulating works in minor rivers,*
- *and now the Environment Agency, where I am supporting their strategic overview role for flood and coastal erosion risk management for our rivers and seas.*

What skills are needed to do the job that you do?

It's important to understand scientific concepts, the maths and physics behind flooding and statistics that define flood risk zones, etc. Being able to manipulate data in 'Geographic Information Skills' are important, and flood modelling experience has been helpful. I use project management and business skills that I have developed on the job and through professional training.

In my role communication skills are also really important, from being able to explain risk to the public, to supporting individuals going through very difficult times after a flood, but also to help bring together different professional partners to negotiate and achieve common aims.

What do you enjoy most about your job?

No day is the same. The sector is diverse, overlaps many other industries, and is developing quickly, so I feel I am always learning and building experience. Every day I work to protect the environment, and to protect people from environmental disasters such as flooding. It's a very rewarding field.

What would be your advice be for anyone who would like to pursue this career path?

There are lots of opportunities in the flood risk management sector, work experience can help you decide which part exactly sparks your interest - modelling and coding? Sustainable development? Climate change adaptation? Engineering and design? Emergency response? There are so many options. The sector is consistently growing and so I'd keep on top of current events and emerging trends by subscribing to geographical publications / websites, and reading the news! It might be helpful to know that there are Flood and Coastal Risk Management degree places that are part or fully funded by the Environment Agency! Look into applying to these or read the curriculum to understand more about different parts of the sector.

In your opinion, why is geography important in the world of work?

Geographers have a great set of skills. As both a science and humanity, we are adaptable and informed. These are helpful in they mean lots of applicable skills to large number of careers - my peers on the degree have gone on to be successful in a range of fields - Interest in the people and the world around us, encouraged by excellent peers.