Katie Boon
Technical Advisor for Flood and Coastal Risk Asset Management

Job title: Technical Advisor for Flood and
Coastal Risk Asset Management
Organisation: Environment Agency
Location: Tonbridge, Kent. UK

How did you get to where you are now?

I chose to study Physical Geography at Durham
University. I never intended to get a job in a sector
relating to geography, however, throughout my
degree I became more open and excited to the
idea of seeing where geography could take me in
the work place.

After university I applied to the Environment
Agency, not really knowing what it involved but felt
I had nothing to lose. A year and a half later, I had
embraced the work and training available and was
successful in gaining a promotion and the
opportunity to undertake a part time Master's in
Flood and Coastal Engineering over two years. I
have just completed my first year and hope to
have successfully achieved the degree by next
September. This will assist me in obtaining
another qualification with the Chartered Institution
of Water and Environmental Management
(CIWEM).

What do you do as part of your role?

The North Kent Asset Performance Team
focuses on the life cycle of flood risk assets,
including earth embankments, seawalls, pumping
stations, flood storage reservoirs and control
structures that are located on main river
watercourses within the North Kent catchment
area. Our team undertakes regular assessments
of the condition of these assets to enable us to
identify, plan and commission works.

My responsibilities are very varied and include:
identifying and bidding for future works; project
management; maintaining close relationships
with all internal teams, consulting prior to works
and taking action to enhance knowledge on all
environmental aspects that require attention;
responding to Flood Risk Activity Permits
(FRAP); using ArcGIS software to visually
present projects; and proactively engaging with
significant stakeholders.

Alongside this I am also a Category 1 Responder
as a Flood Incident Duty Officer which involves
providing 24/7 flood support every six weeks,
utilising software to monitor rain and tide levels to
aid quick and effective decision making.

What skills and characteristics do you need for this role, apart from geographical knowledge?

Project works require clear communication
between multiple internal Environment Agency
teams and with external stakeholders. Good
organisational skills are also essential for
effective project management as funding for
projects are restricted to one financial year.
Prioritising projects requires strong decision
making skills, and this can be tested when you
are dealing with an incident response, where the
decisions you make could impact the damage
caused to properties as a result of a flood event.
Leadership is also important to have when
chairing meetings, organising events or
delivering training.

How does geography feature in your work/ what difference does it make?

The geographical knowledge I gained during university has become critical in informing my decision making when carrying out an incident response. It has also given me a holistic understanding on a range of aspects including biodiversity, groundwater and geomorphological processes.

The field skills I gained while studying geography have transferred to my current role, especially during site visits. I also regularly use GIS to present the different types of works we are delivering to the assets in the North Kent Catchment, and it is a very useful tool for modelling and providing a visual form of communication to external stakeholders.

What is the most interesting or enjoyable project you've worked on, and why?

The greatest opportunity that was opened up to me is my involvement with the Thames Estuary Asset Management 2100 (TEAM2100) team. This was formed as a result of the Thames Estuary 2100 Strategy, which focuses on managing tidal flood risk in the Thames estuary to the end of the century and beyond.

The plan is trying to overcome one of the greatest challenges that we face in flood risk management; climate change. It is incredibly interesting to understand in detail how we have determined flood risk management decision pathways for the next 100 years, including factors such as the future required defence levels and timings for intervention. I find it a privilege to be involved in such an important strategy and to know that I am assisting in making a difference to protecting London in the future.

What advice would you give to someone wanting to go in to this career?

1. Don't become fixated on graduate roles.
Be open minded to all opportunities and don't feel you have to get a graduate role because that is what people do when they leave university. Explore different routes to understand what you think may suit you. If I had narrowed myself to just graduate jobs, I would not be in the role I am today.

2. Understand the needs of the career you want to pursue (if you know this in your final year).
I had no interest in staying at university to study a Master's as I was ready for a routine job and earning my own money. However, I did soon find that many of the jobs I was applying for were mainly focusing on sustainability which unfortunately often required a Master's. As a result I got rejected from a lot of places. I learnt that if you do know what you want to specialise in, it is worth investing time into exploring whether a Master's is likely to be necessary.

3. Accept rejection and make the most of it.
It is almost inevitable that you will receive some rejection when applying for jobs. My advice is to look at this positively and use it to your advantage. Do everything you can to contact the interviewers to gather feedback on your performance. This will give you the information you need to go in more confidently next time… and it might just land you your dream job.