In 2011 Anglian Water transformed a crucial part of its operations at its central laboratory, putting the focus squarely on quality. Until that point, quality had fallen under the umbrella of customer services. The decision from senior management to create an independent, dedicated, quality function and, crucially, to invest in that team and its ethos, would transform the way the lab operated.

With reputations at stake, the importance of proper sampling is non-negotiable. Sampling and testing commercial and public water supplies (both clean and recycled water) calls for the highest standards. With that in mind, Rosie Felton was appointed Quality Manager and Amanda Pinkney was recruited as her deputy in 2014. A Quality Technician followed, Shona Kirkwood, and the new team operates under Support Services Manager Louise Ward.

Their task is to deliver quality assurance for more than 500,000 water samples every year, across a geographical area covering 20% of England and Wales — the largest of any supplier. The all-female team brings a broad range of expertise to the operation, as QMS discovered at Anglian Water’s lab in Cambridgeshire.

What does the quality team do?
Amanda: Our job is to translate, implement and monitor all the requirements of the regulations into the daily work activities in the lab. The water supply regulations and standards are translated into processes — essentially, our governance procedures and standard operating procedures. We establish feedback loops across those to make sure that everything is fit for purpose and compliant.

Rosie: There are two sides to the business: clean water and used water. Water supply regulations for drinking water are part of European legislation which the Drinking Water Inspectorate (DWI) interprets in order to offer guidance and regulate. The clean water side is primarily structured around our water treatment works.

There’s also a requirement from the Environmental Agency (EA) to conduct ‘operator self-monitoring’, which means we have to take samples on their behalf and submit the findings and data to them. These are taken by our own samplers and analysed in our labs.

Our quality management system (QMS) captures ISO 17025 and DWI regulations for the competency of staff. The QMS for our water analysis and sampling is independently audited by UKAS and they feed their reports back to the DWI and EA.

What is the biggest challenge you face as a team?
Rosie: Because we cover a larger area than any other supplier, we have more samples to process. We have to comply with the UKAS requirements to ensure sample integrity is maintained — so one of our biggest challenges is deviating samples. We need to have full traceability from tap to analysis. The procedures are set so our samplers have confidence that the samples are consistent and correct — for example, that they’re in the correct bottles, whether that is plastic, glass or sterile.
Amanda: In terms of representative samples, if we’re told that a sample has been taken from a particular geographical location then we want
“Changing the way our staff think about quality is a challenge but we see it as a huge opportunity to engage with the wider business.”

all our samplers must pass. It gives us confidence in our sampling team when they’re working independently.

What impact can a deviating sample have?
Rosie: Important decisions are made based on the results we produce. The data that we provide might, for example, be used to assure a standard of drinking water quality in terms of public health. Or it could be a water sample from a source that’s being discharged into a river and we need to check it’s not harmful to the environment. It’s crucial that the data is robust and that we know that the sample is truly representative.
Louise: If we have a deviating sample we would notify the customer and warn them that all we can provide is an indicative result. We would ask commercial customers if they would want that type of result at all. We’re always thinking about the customer and their needs.
Amanda: A lot of decisions hinge on a single sample. There could be legal implications in terms of polluting or concerns about public safety. It could really affect the reputation of a business.

How do you communicate the importance of that to staff?
Rosie: Louise is at the sharp end. Between her and me, we’ve tried to engage other business units by giving presentations to get them on board.
Louise: Yes, it’s about educating our staff about how samples are taken and transported back here. We’re focusing their training around why it’s important to store samples correctly, at the right temperature, using the correct bottles and the right bottles. I think we’re really getting somewhere.

How do you change perceptions of quality?
Rosie: There is no quick fix. Some of the old processes are ingrained and will take a long time to turn around. People sometimes struggle to
“As the manager of the team, it’s great for me to have two people (Amanda and Shona) who come from different disciplines and are so focused on quality. They can bring so much more to the team because they’ve worked outside the water industry.”

Louise Ward
Job: Support Services Manager
Career path: 19 years at Anglian Water. Started in the soil and sludge lab, worked in the registration department, then as a chemist in clean water, before moving into customer services.

“As a technician, quality felt like somebody else’s job, but as a team we’ve changed that at Anglian Water. We’ve moved tasks that used to sit in the quality department out to the lab to get people involved and give them ownership.”

It’s about delving into the knowledge of quality and trying to empower people to recognise and use these tools. It can be a challenge because sometimes there is resistance and people don’t see the benefits but I’m confident we can change those views and improve the culture.

What have you learned through your change initiative?
Amanda: Changing the way our staff thinks about quality is a challenge but we see it as a huge opportunity to engage with the wider business. We get to meet other people and start to understand their challenges and how it all ties together. It helps
Amanda Pinkney
Job: Deputy Quality Manager
Career path: A biological sciences graduate who began work as a UKAS Quality Technician in the poultry breeding industry before joining Anglian Water in 2013. Currently taking a Master’s in Quality Management at Robert Gordon University.

“I’ve been learning about introducing change respectfully. If you’re going to change the culture to focus on quality, you have to do it respectfully – an organisation only exists because of its people.”

Shona Kirkwood
Job: Quality Technician
Career path: A chemistry graduate with a postgraduate in forensic materials. Worked as an analyst in the Food Testing industry, before moving to Anglian Water eight months ago. Working towards QCI Practitioner grade.

“When I was working in a lab I didn’t really appreciate the work of the quality team, but now I can see how hard people behind the scenes work to make sure everything works properly.”

Amanda: It’s so interesting hearing about Shona’s experience because as a team we’ve all come from different places and are at different stages of our careers in quality.

We can get so wrapped up in quality lingo and regulations that we forget how important communication and clarity is. You need to speak the same language as the rest of the business and see things from their point of view.

us to understand the consequences of our work on the wider business and enriches our knowledge.

Shona: I’ve learned that the clarity of language is so important. From experience, if people don’t make their message relatable to others, they won’t listen.

For instance, we’re familiar with situations where changes to processes approved by management are communicated in notes or memos to staff but the interaction and understanding of the change isn’t communicated as effectively as it can be.

We have to try to be more approachable – as a team and as an industry. If we explain why we are asking them to follow certain processes they’re more likely to understand and put it into practice.