water by MURRAY

April/May 2024

THE WATER INDUSTRY LABOUR REPORT 2024

This reports aims to assist employers within the national framework to develop a strategic recruitment plan to tackle current and future challenges, and leverage emerging opportunities in the water sector.

FOREWORD

Welcome to our inaugural Water Industry Labour Report.

The water industry is, like many other fields, undergoing a major transformation as the UK looks to boost ageing infrastructure, align itself with a growing focus on sustainability, and leverage available technology.

Within recruitment specifically, several acute issues need to be tackled – particularly as AMP 8 approaches and the demand for resource increases. The water industry is already facing significant skills shortages, and that's before it is impacted by a wave of retirements that are expected over the next two decades and the alarming reality that almost 70% are looking to move away from the sector in the next two years.

In this report, we look into some of the key drivers within the water recruitment market and review the growing disconnect between employers and specialist engineers which is seemingly exacerbating resourcing difficulties.

As a specialist recruiter operating within the water sector, we developed this report to provide a clearer insight into the state of the hiring market, what motivates engineers and where they see the sector heading in the coming years. We hope this helps employers within the national framework to develop a strategic recruitment plan to address current and future challenges, and capitalise on emerging opportunities available in the water sector.

Teo de la Cruz

ASSOCIATE DIRECTOR - WATER & UTILITIES ENGINEERING

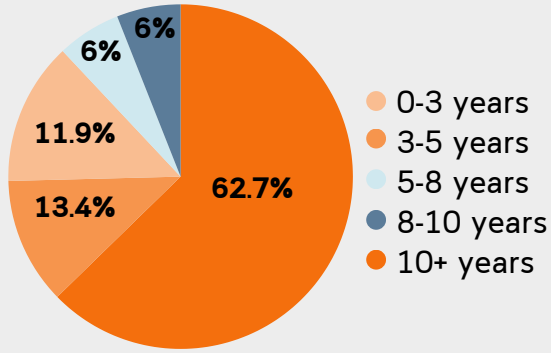
METHODOLOGY

To produce data for The Water Industry Labour Report, we surveyed 3,900+ engineers from across the water industry, on an anonymous basis, with professionals from a range of backgrounds and experience levels.

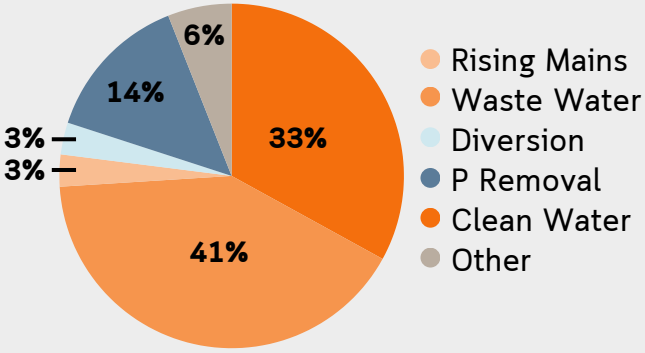
The graphs below outline the demographics, experience and employment type of all respondents.

A more detailed breakdown is available to download on request.

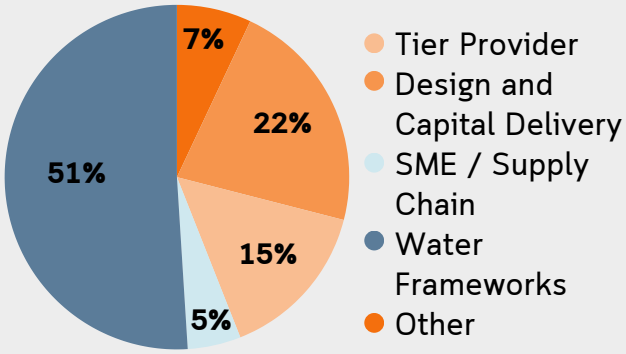
EXPERIENCE LEVELS



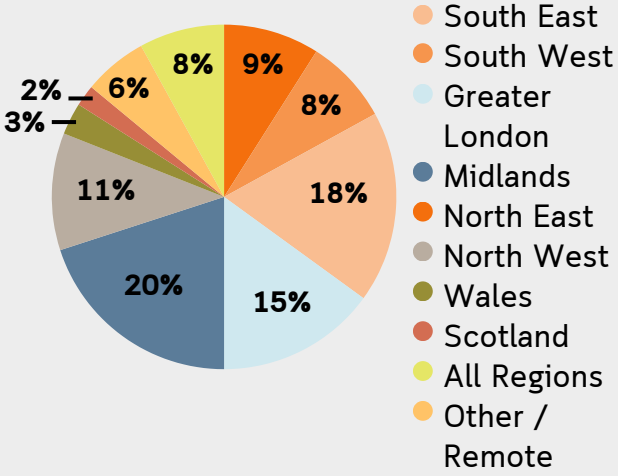
TYPES OF SCHEMES MOST RECENTLY INVOLVED WITH



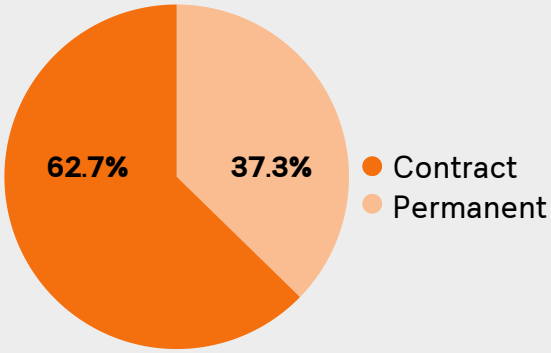
CURRENT EMPLOYER CATEGORY



UK REGIONS PROFESSIONALS OPERATE WITHIN



EMPLOYMENT TYPE



EXECUTIVE SUMMARY

- **Talent shortages are rife in the water industry, with more than a quarter of respondents saying this is the single largest issue facing the sector.**

- **This problem won't be resolved quickly, with two-thirds of engineers considering work in other sectors, most notably nuclear and oil & gas, suggesting that a 'brain drain' is on the cards.**

- **Water engineers are motivated to move jobs by pay and job satisfaction, with management being the key factor affecting the latter.**

- **There appears to be a disconnect between employers and employees, with engineers focusing on boosting their leadership capabilities, while organisations are seeking improved softer competencies.**

- **While over 68% state their roles allow them to innovate, 42% said they don't have the relevant training with respondents citing organisation structure, culture and Ofwat regulation as key barriers to innovation.**

While the water industry gains regular publicity and, more often, scrutiny, the skills shortages within this field are often overlooked in broader reports. However, with 26% of respondents suggesting this is the greatest issue the sector faces, talent shortages need to be investigated and remedied.

This is echoed by other water framework experts, with Watertrain, a provider of technical training and qualification programmes to the water sector, revealing that the industry is struggling to fill over 35% of its skilled roles, in comparison to a national average of 23%.

The reasons behind this shortfall are varied, but overall, there are three key influencing factors to address:

- An ageing workforce
- An exodus of talent into other sectors
- Limited numbers of new workers entering the industry.

AN ISSUE WITH TALENT ATTRACTION

It's no secret that water is facing a short supply of new talent entering the workforce. In fact, Watertrain's research revealed that **workers under the age of 24 account for just 8% of the UK water sector's workforce.** To compound the issue, the same study also showed that more than a fifth of the industry's current skilled workforce expect to retire within a decade. Merit Skills, an organisation that delivers apprenticeships within the industry, also revealed similar findings and found that just 1% of current university graduates are going into the energy sector and a fraction of them choose the water industry.

Looking at the demographics of our survey respondents, we can see the imbalance in those with little experience who are at the beginning of their water career, and those with more than a decade of experience.

Just 12% of our respondents had under three years of experience, while **almost two-thirds (63%) have been in the industry for more than ten years.**

A TALENT BRAIN DRAIN

Our report also looked into the sectors that water is competing with, showing that the majority of engineers connected to the industry are considering roles in the Oil & Gas and nuclear markets. This is exacerbating the skills shortages that we're already seeing in the sector. Indeed, the Future Water Association, one of the trade bodies for the industry, recently held its 'taking the pulse of the water sector' health check and found that while 64% of employers are seeing stable growth, a worrying 76% said they are experiencing difficulty recruiting and capacity building.

AGEING INFRASTRUCTURE

Of course, it's not just access to people impacting the UK's water sector. Our study showed that aside from hiring difficulties, dealing with an ageing physical infrastructure is also a major problem, with one in five listing this as the single biggest factor facing the industry. This view was supported by a recent analysis from British Water which revealed the strain that dealing with an ageing infrastructure was placing on the industry across the UK. The need for round-the-clock management of existing infrastructure —including 88,000 kilometres of pipes— and an ever-growing population, combined with rapid urban development across our towns and cities, means that **physical infrastructure is falling behind in terms of capabilities.** On top of these issues, the climate crisis poses an additional challenge to the sector, as hotter and drier weather places further strain on stretched water supply and infrastructure.

FINDING A WAY FORWARD

Addressing these issues will necessitate a rethink of water frameworks as to how infrastructure is being developed and maintained, and how skills requirements will need to adjust as a result. **Delivering the new era for the water industry will require digital transformation of systems,** but as most employers are already too aware, those with digital attributes and expertise are also in increasingly short supply, not just in water, but across several industries. This means that the water industry either needs to build its own pipeline of talent aligned with the shifting skills demands, or find more effective methods of sourcing people from other industries.

In this context, it's important to drill down into the detail and build a clearer picture of the water sector, its barriers to employment and how it fairs against competitors and related sectors.

KEY FINDINGS

TALENT SHORTAGES RIFE IN WATER

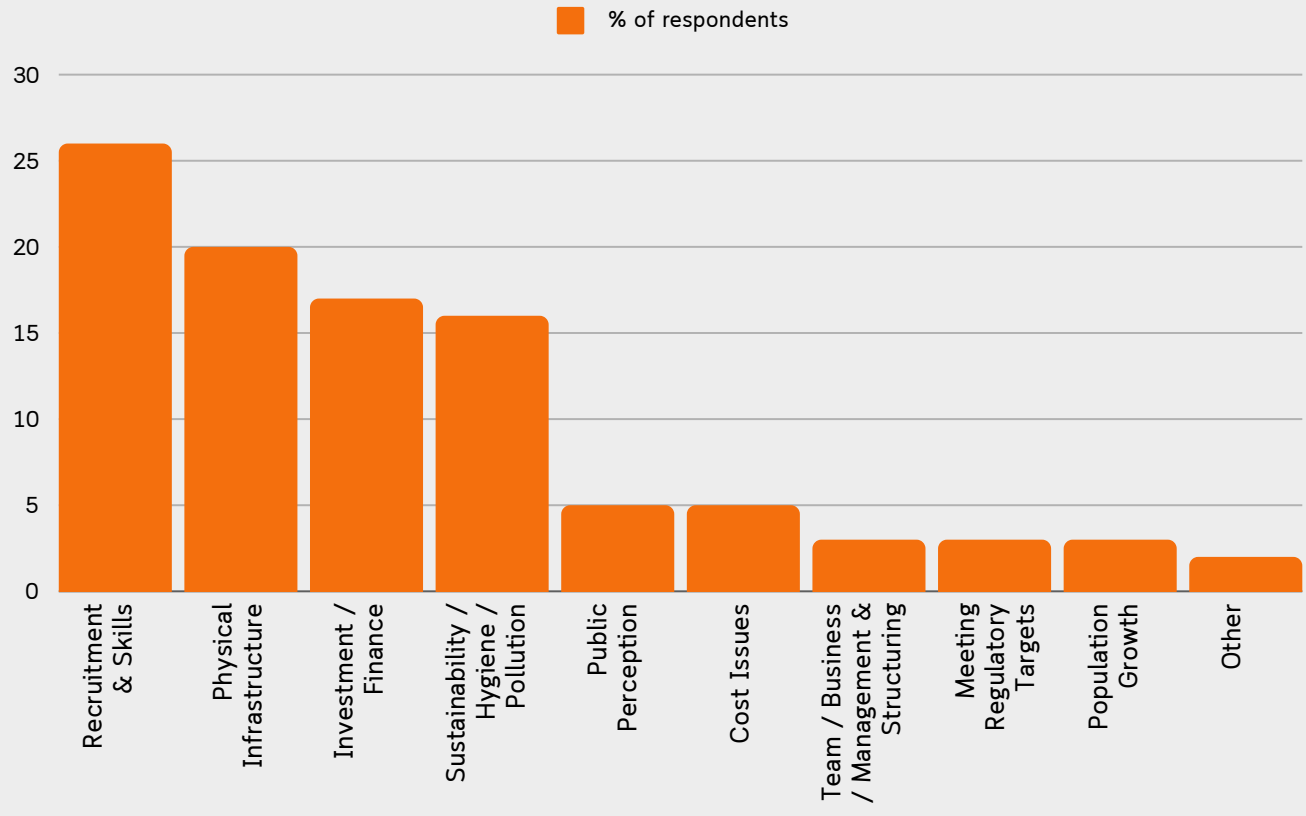
▶ Recruitment & Skills listed as the biggest challenge in the water industry

▶ Particular lack of experienced engineers is emerging

The findings from our survey of water specialists echo some of the data seen in other sector-based reports. Perhaps unsurprisingly, our survey of engineers revealed that 26% of respondents believe that the single biggest challenge facing the water industry are talent-related issues.

Diving into the responses in more detail, however, reveals that respondents believe there is a particular lack of technical and digital expertise amongst the workforce and, notably, a significant dearth of experienced engineers at the senior end of the market, which was listed by 75% of those highlighting hiring and skills issues. This in particular should sound alarm bells for water employers; the sector is struggling to recruit new talent, with a fifth of the workforce now within 10 years of retirement. Significant efforts will need to be made to find experienced professionals and attract them back into the water sector.

WHAT DO YOU THINK IS THE BIGGEST ISSUE FACING THE INDUSTRY?



But why are shortages biting so hard in the water industry?

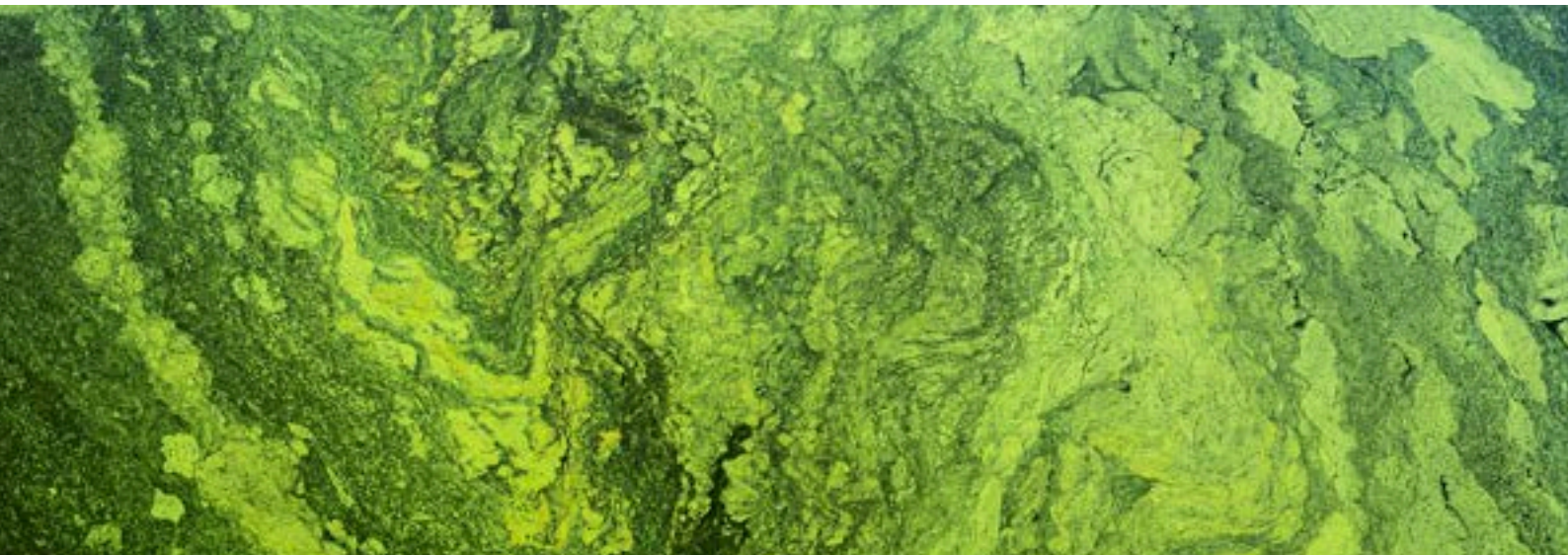
Firstly, there simply aren't enough newly qualified professionals considering water as a viable, long-term career choice. It would be fair to say that the efforts made by the industry as a whole to attract new people to work within it have not been successful. Water isn't seen as the most glamorous or appealing industry to start a career in, and employers have not yet done enough to differentiate themselves and the industry as a whole from other sectors. A career in water offers numerous possibilities and potential pathways to follow and those joining it can realistically say they operate within one of the country's truly pivotal industries. However, to those outside the industry, water is a relatively well-kept secret, and you would be hard-pressed to find many young professionals proudly choosing this field over the likes of technology, renewables and others that are more "on trend", aligned to the values of a younger generation and do far more to develop pipelines of talent.

As such, water sector employers aren't just competing with each other for skills, but also with these other markets, and that needs to be considered when developing employee value propositions and building employer brands.

Placing a greater internal focus on the importance of the water industry, and then promoting this effectively to the wider world, is one significant step, however, organisations should also be looking at the individual elements that attract engineers to roles, notably access to technology, sustainability and innovative schemes.

Employers also need to reflect on internal culture. According to our data, behind pay, **the number one factor attracting professionals to roles is the level of job satisfaction, with 42% listing this as a key priority.** A further 38% indicated that the main factor that dictates levels of job satisfaction, is management.

These statistics suggest that, if firms are to both retain existing water engineers and attract new ones from the competition, they need to think more about how they nurture talent, reward talent and how their wider reputation either adds to or detracts from their employer branding.



ARE TALENT POOLS BEING DRAINED?

▶ Two-thirds of contractors are tempted by roles in other sectors

▶ Oil & Gas and Nuclear industries are top competing sectors for water engineers

Another key finding that will be of concern for employers is the proportion of the engineering workforce considering taking on work in other sectors.

More than **two-thirds of respondents (70%) indicated that they were tempted to take roles in other industries,** notably oil & gas, nuclear, renewables, and transport.

The lack of new people entering the industry, coupled with pre-existing skills shortages, and the likelihood of growing workloads as key infrastructure projects come to a head, should be a major concern for employers.

But what factors are luring professionals away from water?

Oil & gas, along with the nuclear industry, were the top two industries for professionals considering an industry move, with 28% selecting these sectors as their area of choice, if they were to leave water.

Firstly, it should be said that working in the likes of the oil & gas and nuclear industries can often lead to increased pay opportunities, largely due to the significant income and profits that these sectors can generate.

However, it should also be noted that employers in these fields, and others where engineers are considering moves – i.e. renewables, transport and technology - also promote projects and career opportunities better than water.

In fact, marketing – or more so recruitment marketing - is an issue for the entire water sector. Engineers understandably want to work on the biggest, high-profile projects available, but other industries do a better job of promoting their schemes, with only really the Thames Tideway Tunnel catching the wider public imagination in recent years.

October 2023 saw confirmation of the £60 billion Storm Overflows Discharge Reduction Plan, however, that went relatively unheralded outside of the sector itself, despite being one of the largest infrastructure projects since Victorian times. This is, in part, a result of the lack of long-term, strategic focus by the industry as a whole on tackling its hiring issues. Our data reveals that **75% of water engineers value the visibility of the scheme when considering a new job opportunity,** suggesting that employers need to positively promote their projects more widely.

The third most popular sector for professionals considering leaving water, was renewables. The green industries are naturally closely aligned with the sustainability agenda and are attractive to workers looking for a job that aligns with their values or future career trajectory. However, the water sector has failed to market itself in this remit and will therefore be likely overlooked by professionals seeking employers with significant ESG credentials and sustainability-based job opportunities. To retain these skills, employers, and the industry as a whole, need to promote the water sector's close ties to net zero targets much more effectively than has been done in the past.

WATER ENGINEERS: WHAT ARE THEIR PRIORITIES?

▶ Pay and job satisfaction are the biggest drivers for engineers

▶ Job satisfaction is largely impacted by management

▶ MMB, United Utilities, Anglian Water and Severn Trent listed as top employers

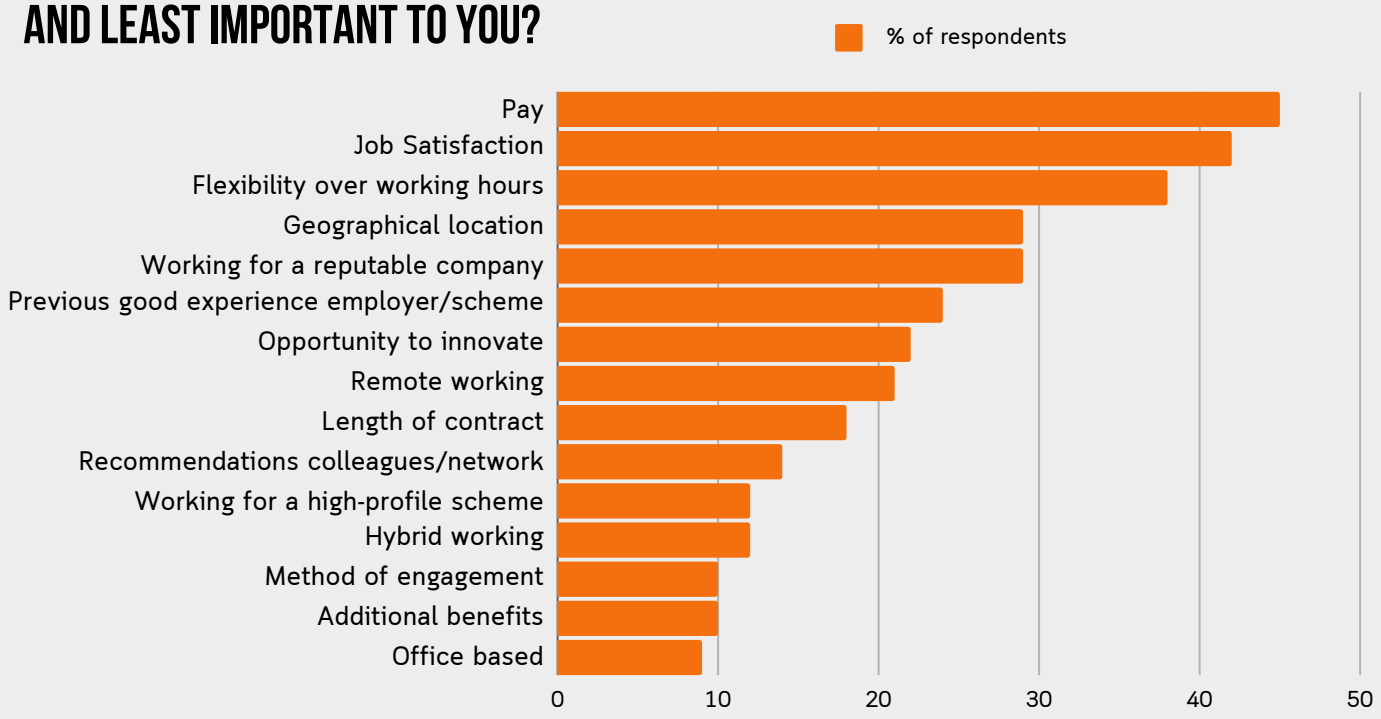
Our survey of water engineering specialists delved into worker priorities, and what attracts individuals to specific roles and organisations.

Perhaps unsurprisingly, pay comes out as the leading factor (45%), but it was very closely followed by job satisfaction (42%), suggesting that high rates alone won't attract many professionals.

Interestingly, in the follow-up question looking at 'what impacts job satisfaction', management was the clear leader, with over a third (38%) of engineers listing this as their top factor. This means that poor engagement and communication between leaders and workers could exacerbate shortages of talent and drive even further movement in the job market.

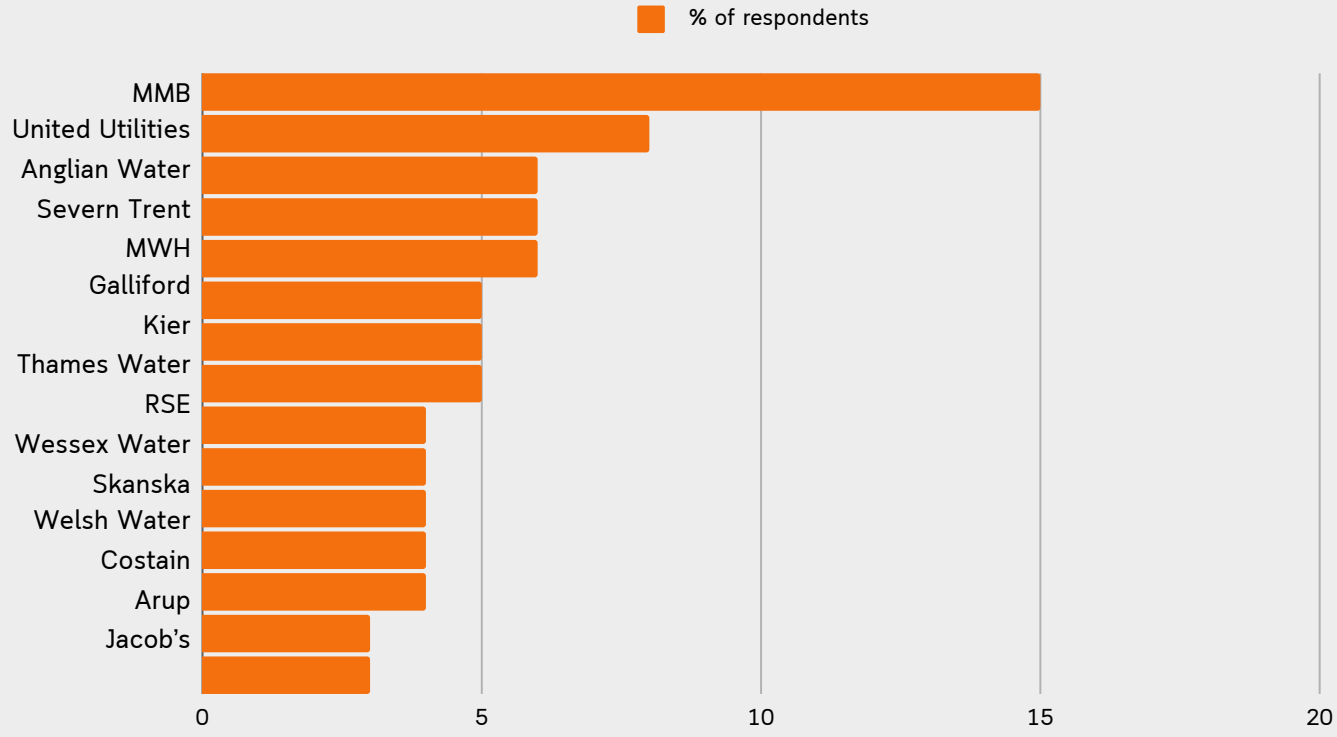
Flexibility around working hours is also a major factor that attracts professionals to roles (38%), as is the geographical location (29%). Equally, being required to be in the office for a role ranked as the factor least likely to draw a professional to a job, suggesting that employers that force their staff back to work will struggle to compete for skills with their more flexible rivals.

WHEN CONSIDERING A NEW ROLE WHICH OF THE BELOW ARE MOST AND LEAST IMPORTANT TO YOU?



WHAT FIRMS ARE THE IDEAL EMPLOYERS WITHIN THE WATER INDUSTRY?*

*TOP 10 - FULL LIST AVAILABLE ON REQUEST



Professionals within the water industry are still relying on previous good experiences with employers or on specific schemes, and the opportunity to innovate also scored well, both making the top ten factors for engineers when considering a new role. Interestingly, working for a reputable company was ranked as the fifth most important factor, underlining the value and importance of public perception, with **MMB, United Utilities, Anglian Water and Severn Trent** all leading the way as the most popular employers in a later question. These three were praised for their management of workers.

The data also showed significant variations between engineers with differing experience levels.
For professionals with 10+ years in the water industry, pay was the key factor, however less experienced engineers seem to seek a more holistic recruitment package.

For them, our data found that pay was considered as important as other factors, like the ability to work remotely and to have more free time and less rigid working hours. Engineers with under three years' experience also listed reducing carbon emissions and tackling the carbon crisis as a key issue for the sector at a much higher rate than their more experienced counterparts. These findings align with external data showing that younger groups are more focused on the sustainability agenda than their more senior peers.
Looking at the least important aspects of a job, the method of engagement, additional benefits and an office-based role all rounded off the bottom of the list for the water engineering community.

SKILLS ASSESSMENT: ARE EMPLOYERS AND EMPLOYEES ALIGNED

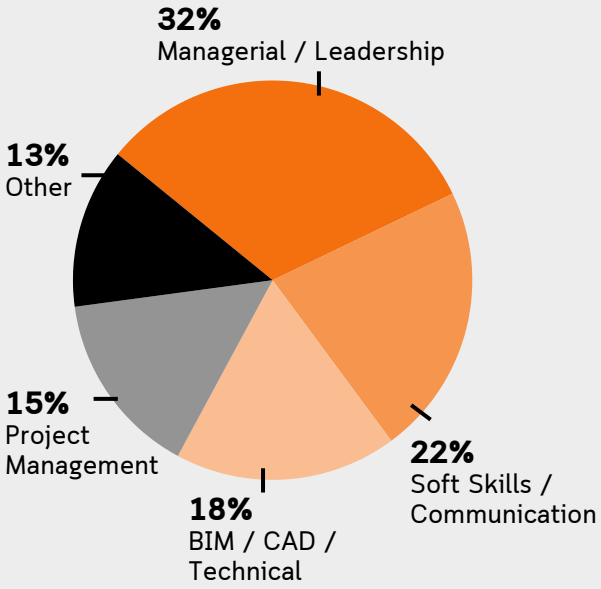
- **Employees prioritised project and people management, as well as leadership skills development**
- **In comparison employers are seeking improved 'soft' competencies**
- **One-third of engineers unable to show innovation in their roles**
- **43% do not have access to relevant training opportunities**

Now we have a better understanding of the motivators of the workforce, are their desires, skills and needs being met by employers? And, perhaps more crucially, are businesses and workers aligned when it comes to core skills requirements?

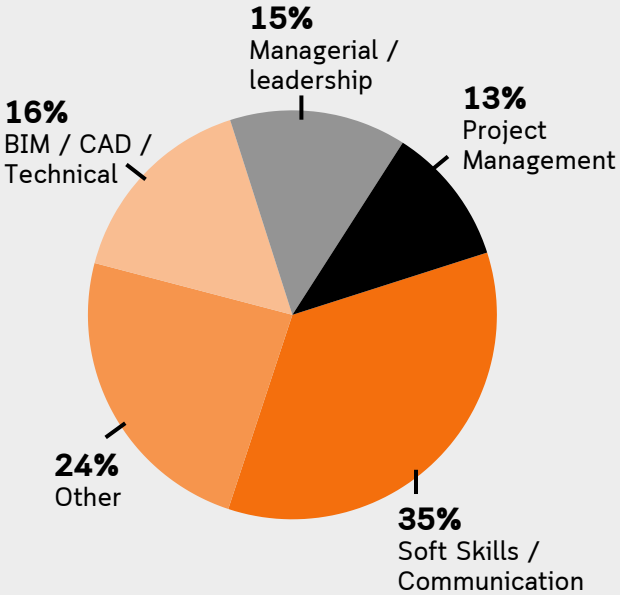
When asked for information on the skills they were looking to develop over the next 12 months, and the attributes that employers were seeking over that timeframe, answers fell into four clear categories; managerial and leadership expertise (32%) soft skills, notably communication (22%), technical competencies – including CAD and BIM (18%) and project management (15%) managerial & leadership expertise, project and people management and soft skills, notably communication.

From analysing responses from engineers, it's clear there are some areas of difference. While 35% of

WHAT SKILLS ARE ENGINEERS LOOKING TO DEVELOP?



WHAT SKILLS DO ENGINEERS THINK EMPLOYEERS ARE SEEKING?



engineers believe that employers are seeking improved soft skills, notably communication, just 22% are focused on developing these competencies over the next twelve months. Equally, there seem to be disagreements over the significance of managerial and leadership attributes. Almost **a third (32%) of water engineers want to boost their leadership and managerial expertise,** but only 14% of the same group believe that employers are seeking those with these attributes. This disharmony between employee skills and employer requirements could be contributing to staff retention levels within the water industry.

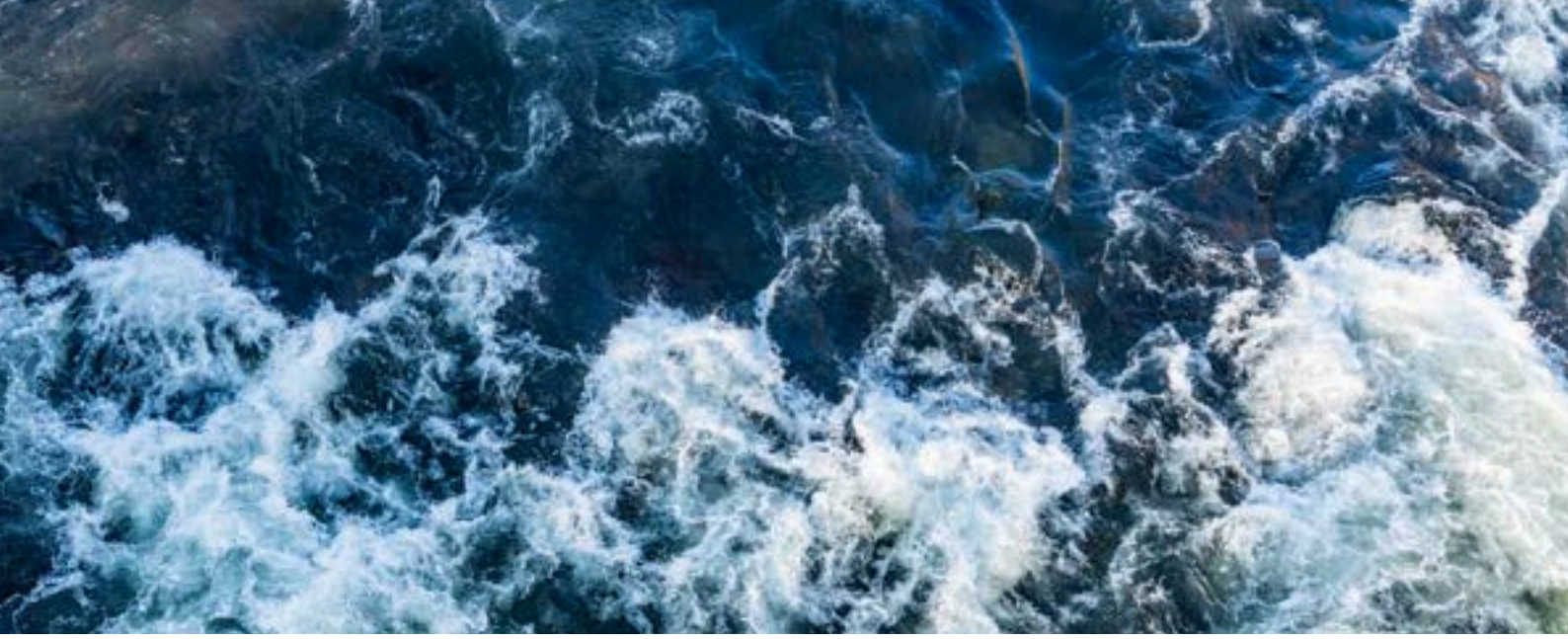
Innovation is also a hot topic. When asked 'does your role enable you to be innovative' almost a third of engineers said 'no', suggesting that they are being stifled in their roles and unable to suggest or implement innovative methods. Engineers within this group reported a 'lack of scope and long-term thinking', and fears over changing approaches when working with antiquated infrastructure.

It would be fair to add that OFWAT, the regulator for our industry, has also faced significant criticism in the news for its role in the current state of the water market. While employers have largely tackled the burden of bringing new skills into the industry independently, OFWAT has so far failed to contribute effectively, and it has been accused by both politicians and industry experts of failing to deliver the financial or management discipline expected. In addition, the body has been subject to public scrutiny for being overly focused on investors, whilst not guaranteeing investment into the aforementioned infrastructure across the country, much of which is now simultaneously reaching breaking point. If the water industry is to see real change, it needs OFWAT to step up and take the reins.

Our survey also questioned engineers on the types of innovation they would like to see in their role; perhaps unsurprisingly, **29% of answers related to the use of modern, emerging technologies – like AI – and a more flexible approach to working structures,** which aligns with findings from earlier in the report, where flexible working was one of the most significant factors drawing engineers to roles.

For employers, these findings highlight the importance of delivering relevant development opportunities to all areas of their workforce – including contractors – particularly in light of other findings from our study which suggest that 43% of engineers do not have access to training that supports innovation. If workers aren't provided access to these opportunities and don't feel they can be innovative in their roles in other ways, then it suggests that employers are not using available personnel to their full potential.

When asked to list their key successes from their careers to date, the most popular answers related to either the completion of major projects or securing qualifications and chartered status. This suggests that employers should consider the role of CPD in their staff recruitment and retention policies.



CONCLUSION

It's clear from our findings that a solution needs to be found to tackle the talent issues facing the water industry. Skills shortages are rife, with experienced engineers in particularly short supply, and a worrying retirement cliff also looms on the horizon. From this data, and our knowledge of the external factors impacting the market, we've outlined five key actions the water industry needs to take to halt its skills crisis:

UPSKILLING FOR MORE SPECIALIST ENGINEERS

Our data – and other sector reports - clearly show that skills shortages are most acute in the more niche and technical areas of engineering. While you can't build a career in this field overnight, the dearth of talent is getting so problematic that employers need to consider taking on professionals with related experience and upskilling them accordingly; this applies to those already in the industry and those working in related industries.

WIDEN THE PIPELINE OF TALENT

This is probably the most important single issue the sector needs to fix, and fast. Water isn't the only industry facing skills shortages, in fact, most are suffering, but the critical nature of our field means that employers need to win the war for talent, and get ahead of other competing areas. This means doing more to make the sector more attractive, highlighting the importance and breadth of the water industry., Skills shortages are an area where UK PLC will have to work together to some degree, particularly in STEM, but water needs to find a way to encourage more talent to consider a career in the field.

STOP THE EXODUS INTO OTHER INDUSTRIES

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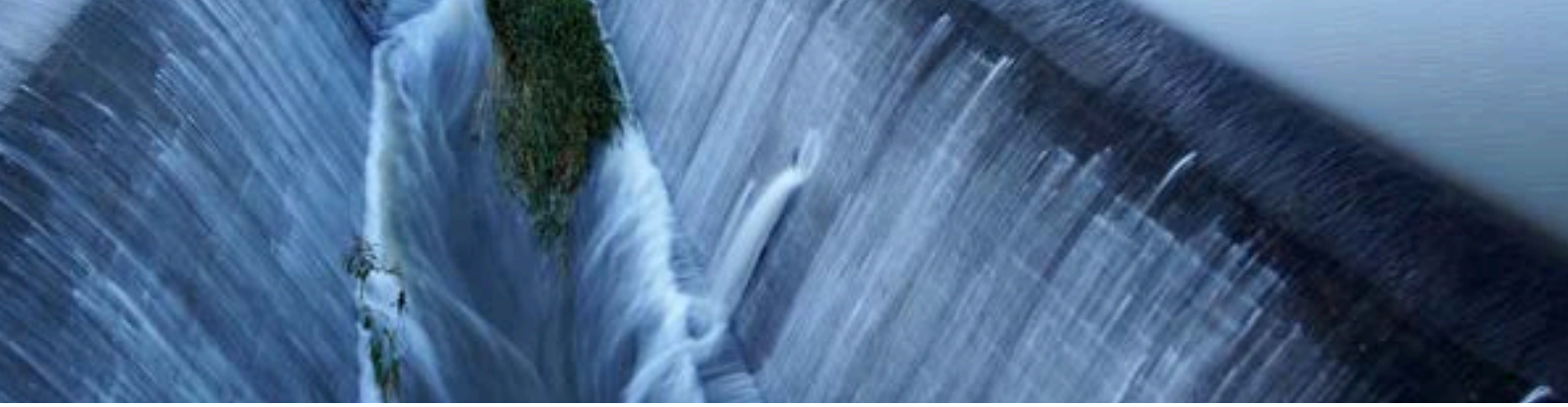
LISTEN TO ENGINEERS

Our research shows that engineers are motivated not just by pay, but by other key factors including job satisfaction (largely management), flexibility over hours, the opportunity to innovate, word of mouth, and more. The candidate motivators are diverse which highlights that a one-size-fits-all approach just won't cut it anymore, and that a tailored approach is key. Most importantly this shows that there is more than one approach to motivate staff. Job satisfaction was ranked as the second most important factor, just after pay, and this is heavily dictated by management, being given the opportunity to learn (or mentor others) and being offered the chance to develop skills. If this teaches organisations anything, it's that – if you want to retain and recruit engineers – they need to listen to what they want. Otherwise, they'll work for another employer that does. Supporting an engineer to secure chartered status, for example, won't make a huge difference to an organisation's finances, but it will mean a huge amount for the individual.

PROMOTE THE SECTOR MORE EFFECTIVELY

This is a broader issue but the sector really needs to consider its wider image and how it markets itself not just to talent, but to the wider world. The water industry only hits the headlines for the wrong reasons, and major, innovative and noteworthy schemes often go unheralded because of our lack of strategic focus. If water wants to pull skills from other industries, then it must think about how external engineers see it, and do more to boost its image. We need to have pride in our industry and promote our projects in the same way other markets do.



ABOUT WATER BY MURRAY

Since AMP 4 we have proudly serviced the national water industry and its supply chain. We are the recruitment partner of choice for Water Frameworks, Tier Providers and SMEs. We uniquely support each cog of the water industry ecosystem, with our methods of recruiting the best water engineers on the market.

As we approach AMP8, which kicks off in April 2025, utilities and other employers operating within frameworks will need to focus even more on ensuring they are properly staffed for what is likely to be an intensive period. AMP8 will support firms to prioritise commitments to climate change, the environment, service and society, and organisations are expected to achieve considerably more in this period than in the previous spending cycle. This is already being proven, with utilities' submitted business plans already showing almost twice the spend of AMP7.

We understand this complex environment and have been supporting water frameworks with their water engineering recruitment needs since AMP 4, from programme infrastructure and delivery to completion and handover. There are no other water recruitment consultancies in the sector that have successfully navigated a full project life cycle, like our team. Our understanding and track record have led to the development of successful and long-term partnerships with multiple Water Frameworks across the country.

From project inception to completion, and everything in between, we understand your water engineering recruitment needs, resourcing requirements and how these sit within the AMP cycle schedule and regulatory requirements. We know how you operate, are aware of the demands and requirements placed upon you by the water frameworks and are adept at positioning ourselves to offer the best water engineers at the right time.

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