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AMP6

AMP6: A Watershed Moment

AMP6 kicked off in March 2015, with the utility companies moving into the sixth phase of asset management following a long period of tendering and negotiations.

This phase of investment has seen a shift in focus from short term investment, replacing the ageing structures and systems to improve efficiency, to a 'totex' - or total expenditure investment - looking to improve and upgrade the systems for future benefits and in the long-term.

The realignment was set out in an Ofwat report, published in 2013, which showed the methodology Ofwat would use to assess water companies' business plans for AMP6. ↗



The new methodology, which relates to water supply and sewerage in England and Wales, made it clear that the water industry's emphasis was shifting from the 'ticking regulatory boxes' approach of previous AMPs to focusing on value for money for customers.

For the first four AMP periods, water companies' business plans were dominated by the need to meet tough European Union legislation covering issues like wastewater quality and wildlife habitats.

This period will see water companies trying to get the most out of their existing assets and finding ways to minimise cost of operation.

The Ofwat document declared that water companies should be focusing on what it called 'long-term outcomes', which it hopes will encourage innovative ways of working that will deliver services for less money, and with less impact on the environment. As a result, the regulator expects to see substantial efficiency savings being delivered during the five year AMP6 period.

At the same time, Ofwat wants to encourage companies to manage water supplies more sustainably. It believes this will happen because the companies will no longer have a bias toward capital intensive and resource intensive solutions, and because it is introducing incentives to encourage the water companies to trade water and to source it from areas that do not damage the natural environment.

This shift in emphasis is leading to water companies looking for different skill-sets from their supply chains -

expertise that will help make more of existing assets.

The focus on long-term thinking is also being reflected in the way some water companies are looking to procure the firms that will deliver work during AMP6, with many opting for alliances, or for frameworks that run beyond the traditional five year AMP period.

Ofwat gave final approval to a £44Bn spend by water firms over the next period at the end of 2014, saying that the deals struck with the water companies will lead to 5% average fall in bills across England and Wales.

Jonson Cox, Ofwat Chairman, said: "This is an important step in maintaining customers' trust and confidence in the water sector.

"We set out to deliver a challenging but fair outcome. We are requiring companies to meet higher service standards and deliver on their promises to customers.

"We are bringing down bills so customers can expect value for money, while investors can earn a fair return. Companies will need to stretch themselves to deliver much more with the same level of funding as in previous years. We will achieve more resilient infrastructure and better service as a result."

Alongside the asset investment and upgrade, major projects set to take place include Severn Trent Water's Birmingham Resilience Project, Wessex Water's integrated supply grid, and modernisation of United Utilities' Davyhulme wastewater treatment works, with the Thames Tideway Tunnel to be financed and delivered by an independent provider.



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United Utilities outline plans for North West water and wastewater network

HOUSEHOLDS across the North West are set to benefit from an unprecedented investment which will significantly improve water provision in the region over the coming 12 months.

Water supplier United Utilities plan to spend the multi-million pound sum through the 2017/18 financial year. A programme of essential engineering works will safeguard water supplies, reduce leaks and sewer flooding, and better protect rivers and bathing waters.

In Blackpool, work is well underway on priority schemes at Anchorholme Park and Lennox Gate, with more than £100M expected to be spent. Collectively, this investment will reduce sewer spills on

the Fylde Coast and build upon the improvements made to local bathing waters.

By the year's end, a multi-million pound upgrade to wastewater treatment works at Blackburn and Darwen will begin in earnest and improve overall water quality in the River Ribble. What's more, a £70M upgrade at Morecambe wastewater treatment works will enhance the environment for shellfish and bathing waters in Morecambe Bay.

Across Greater Manchester, work continues on a £200M modernisation programme at Davyhulme wastewater treatment works in Trafford, which will bolster the amount of treatment and enable the plant to keep pace with an

ever-increasing population.

In Oldham, an £80M project to boost water quality in the River Irk continues apace with the construction of a new sewer pipeline and the introduction of enhanced processes at Oldham wastewater treatment works. Before the end of the year, work will also commence on a £20M upgrade at Failsworth wastewater treatment works and a £22M infrastructure scheme to provide additional storm water storage at Snipe Clough and the wider Oldham region, with a view to reducing pollutants in the River Medlock.

In Cumbria, a brand new £300M pipeline will transfer water from Thirlmere reservoir to West Cumbria, safeguarding existing



water supplies and protecting such sensitive environments as the River Ehen. Meanwhile, in Kendal, a £12M upgrade to the town's wastewater treatment works will improve water quality in the River Kent. Ulverston will also benefit from a £22M project to reduce pollution of local watercourses during heavy rain, while work continues in Carlisle on a £13M scheme to clean key water mains across the city.

Finally, in Cheshire, a programme of wastewater infrastructure investment will include £13M at Winsford, £20M at Crewe and £45M at Ellesmere Port. This will substantially improve the quality of water returned to local rivers, bringing benefits to wildlife and the wider community.

Each of these projects forms part of a £3.5Bn investment programme for the North West water and wastewater network, running between 2015 and 2020. This investment will be part funded through customers' water bills which, on average, are set to rise from April 1 to around £419 per household - up £8 on last year. The increase of 2% is due to inflation and is broadly in line with other regions of the UK.

Louise Beardmore, United Utilities' Customer Services Director, commented: "Back in 2015 we committed to keeping customers' bills as low as we possibly could over the next five years while still delivering all the service improvements that our customers expect.

"The small increase in bills this year is less than the rise in inflation. It means householders in the North West will have all their water and sewerage services for around £1.14 a day, half the price of a cup of coffee on the high street.

"We know for many of our customers that any rise may put more pressure on them as they juggle household bills. We have lots of ways we can support people who might need help to make their water bill more manageable.

"We are here to help whether that's a payment scheme which might help or other advice on how to lower your bill and save money."



Welsh Water emphasise importance of innovation

WELSH Water has brought together academics and industry experts from across the country to recognise the challenges facing the water sector, identify innovative new solutions and celebrate some of the pioneering initiatives that have helped improve performance, protect the environment and bring lasting benefit to the customer.

Over 350 delegates attended the 2017 Innovation Conference - hosted by the not-for-profit organisation - to exchange knowledge, ideas and learning, and discuss future research needs at Swansea University's flagship Bay Campus.

Throughout the day, delegates heard how identifying and embracing innovative answers

to everyday challenges has become part of everyday life at Welsh Water - from practical 'on the ground' solutions to multi-million pound investments in renewable energy and research.

The organisation also outlined many of the challenges they are facing or expect to face in the near future, such as climate change, to encourage potential partners to share their own innovative and sustainable solutions.

Over the past 12 months, Welsh Water has invested £7.2M in innovative projects that have improved services for customers and enabled them to continue to safeguard the environment.

Tony Harrington, Director

of Environment for Welsh Water, explains: "2016 was a fantastic year for our innovation programme. We completed 55 cutting edge projects, worked with 72 partner organisations, and won industry awards for our new ways of thinking. We've also trialled / continued to develop the newest technologies that only a year or two ago looked almost beyond our reach.

"It's important that we continue this focus on new ways of working if we are to be recognised as an innovator in everything that we do and achieve our aim of being a truly world class, resilient and sustainable water service for our customers. Our annual innovation conference is a fantastic way of sharing the challenges and opportunities



we think we'll be facing with the very people who can help us build resilience and future proof our business for our customers."

Speaking at the event, Sophie Howe - Future Generations Commissioner for Wales - said: "The Well-being of Future Generations (Wales) Act 2015 is an innovative and forward-thinking piece of legislation that has the potential to truly transform the way we do things here in Wales, shifting the focus and ambition from short-term gain to long-term well-being.

"The business sector has much to gain from thinking and embedding the sustainable principle into new ways of working, and Dwr Cymru - Welsh Water has a crucial

role in ensuring the well-being of future generations in light of the challenges we face with climate, economic and population change.

"Innovation and new technologies play an important part in the future but for us to make real, transformative change we need to work together in a joined-up way, planning for the long-term, involving people in the decisions that affect them, making sure that our actions today leave a Wales that is fit for future generations."

Arup Water Group Leader Catherine Wenger added: "Welsh Water has a clear drive to deliver innovation across its business. We see this drive daily in our work with them, as a partner in Welsh Water's Capital

Delivery Alliance. Arup is proud to contribute to many of Welsh Water's innovation projects, including the ongoing coastal investigations programme, designed to strengthen understanding of how coastal communities around Wales can best prepare for climate change.

"Arup's team was also involved in the design of the Swansea Bay wind turbine, a project that strengthens Welsh Water's resilience by reducing its energy costs and its reliance on electricity purchases from the National Grid. This innovation day has been a great opportunity to discuss ideas and share best practice, and we were delighted that Arup's Global Water Leader, Mark Fletcher, joined us as keynote speaker."





Thames Water's £250M Deepphams transformation a team effort

WORK is well underway at Deepphams Sewage Treatment Works, where a £250M upgrade has begun to take shape. According to Thames Water, there's barely a scrap of space at the 170 acre site that isn't a hive of activity. And yet, despite its many interconnected elements, the upgrade has yet to interfere with Deepphams' daily running.

A wholesale transformation is taking place. Deepphams is being brought headlong into the 21st century in terms of output, energy generation and odour control, though the waste of some 800,000 residents remains the priority.

This is no small feat. To date, it has required considerable effort from both Thames Water's customer liaison operation and the men and women of AMK – the joint venture of AECOM, Murphy and Kier

responsible for the works.

Using pure and simple circus terminology, it has been something of a tightrope walk. Process streams have had to be taken offline and refurbished without any loss in capacity. Complicating matters is a near constant stream of inbound sewage, which cannot be stopped. What's more, there can be no compromise in quality – discharged water must be maintained throughout.

For Rachel Groves however – Community Engagement Manager at Deepphams – the scheme has brought out the very best in each of the disparate organisations at work. "Working hand-in-hand, the operational and project teams have gone to extraordinary lengths to understand and appreciate each other's strengths and weaknesses. They've shared

tasks on-site, gathered and shared information openly and honestly and this has led to a common understanding and shared goals."

In part, Thames Water attribute this success to a truly sustainable approach as Ron Gulliver, Environmental Manager at AMK, explains: "By reusing the original site and many of the original structures, the design reduces the need for waste to go to landfill. The earth removed while structures such as tanks were under construction has been kept on-site to reduce lorry movements and, where possible, some elements of the new process have been constructed at factories off-site to reduce the need for concrete structures to be built here.

"Every effort has been made to consider the scheme's environmental impact – even



down to building new nest-boxes for the birds on-site."

As Community Engagement Manager, Ms Groves also has a role to play. Engagement with the wider community and those most affected by the upgrade is absolutely critical. Here, Thames Water has taken the rather unconventional step of inviting residents on-site to view progress first-hand. Collectively, their feedback has also helped inform the transformation process from a neighbourhood perspective.

Rachel continued: "In addition, we've raised more than £20,000 for local and national charities and fully embraced Thames Water's Give Someone a Start scheme, helping people with challenges who may have been out of work for a while to get back in work by offering experience here.

"Working with the local JobCentre Plus, our candidates were put through a construction industry programme and helped to obtain an NVQ level 2 in health and safety. And from the original course, five from the eight are now in full-time employment, two of them right here."

Unfortunately, it's too soon for Thames Water to rest on its laurels. With much left to be done, the transformation is likely to last until August of next year. What Deepphams does show, however, is that large-scale infrastructure improvements can be made without compromising essential services.

Jim Jenkins, North Central Operations Manager at Thames Water, said: "Since we started, we have had a number of unique challenges and to date each of them has been tackled by the five teams which feed

into Team Deepphams, pooling their resources together and approaching the issues with a desire to overcome, improve and get the best solution for the site."

Thames Water Project Lead Martin Hoff concluded: "We have a fantastically enthusiastic team of people at Deepphams who are working tirelessly to achieve great results in a demanding project and operational environment.

"It is a testament to the spirit of true collaboration and forward thinking that we have been able to overcome the many challenges faced and deliver real success for Deepphams. With the next phase just getting under way there are more exciting times ahead for Team Deepphams. Keep up the good work!"



Severn Trent engage with next generation of engineers

IN recognition of National Apprentice Week, Severn Trent Water has spoken with more than 100 young women from across the Midlands at an event promoting careers in science, technology and engineering. The water supplier, recently named one of the nation's top 100 apprenticeship employers, wants to encourage more young women to take up these opportunities during the current asset management plan.

Amy Barber, who is responsible for the apprentice programme at Severn Trent, said: "We all know that science and engineering careers are not "just for boys", so this event was all about showing girls and women exactly what careers are on offer. It was a fantastic day with many schools from across the region joining us for the day. We had some great conversations with girls and young women who were interested in science subjects but didn't really know what to do after school. Hopefully, some of them will now consider an apprenticeship

and go on to glittering careers in engineering and science - and maybe here at Severn Trent.

"We see apprentices as an absolutely integral part of our business, which is one of the reasons why we took on almost three times as many last year. Our apprentices have visibility across the business right from the start as they work across our region with experts, other apprentices, and graduates, and have the opportunity to make a vital contribution right at the start of their career with us. We're making sure that we're training them in such a way as to ensure they can develop the right skills for today - where they can help make a real difference to our customers straightaway - and for tomorrow."

Hannah Black is currently midway through an apprenticeship at Severn Trent and spoke to many young women at the event: "I chose to do an apprenticeship in engineering because I'd always been a more vocational

learner and found that I could understand complex subjects better when I applied them to a real life situation. I'd already had some work experience in the engineering field before applying for an apprenticeship and this confirmed for me that I was well suited to this type of role. When I found out more about the varied nature of the role and the vast opportunities at Severn Trent that I knew this was the right fit for me."

Some of Severn Trent's 2016 intake of apprentices have joined the company at degree level for the first time, as well as at advanced and higher levels. The provider has also expanded its apprenticeship roles for 2017 to include digital, IS and finance, in addition to more traditional engineering roles.

For more information about Severn Trent's apprenticeship programme, please visit: www.severntrent.com/careers/apprentices/why-choose-us/



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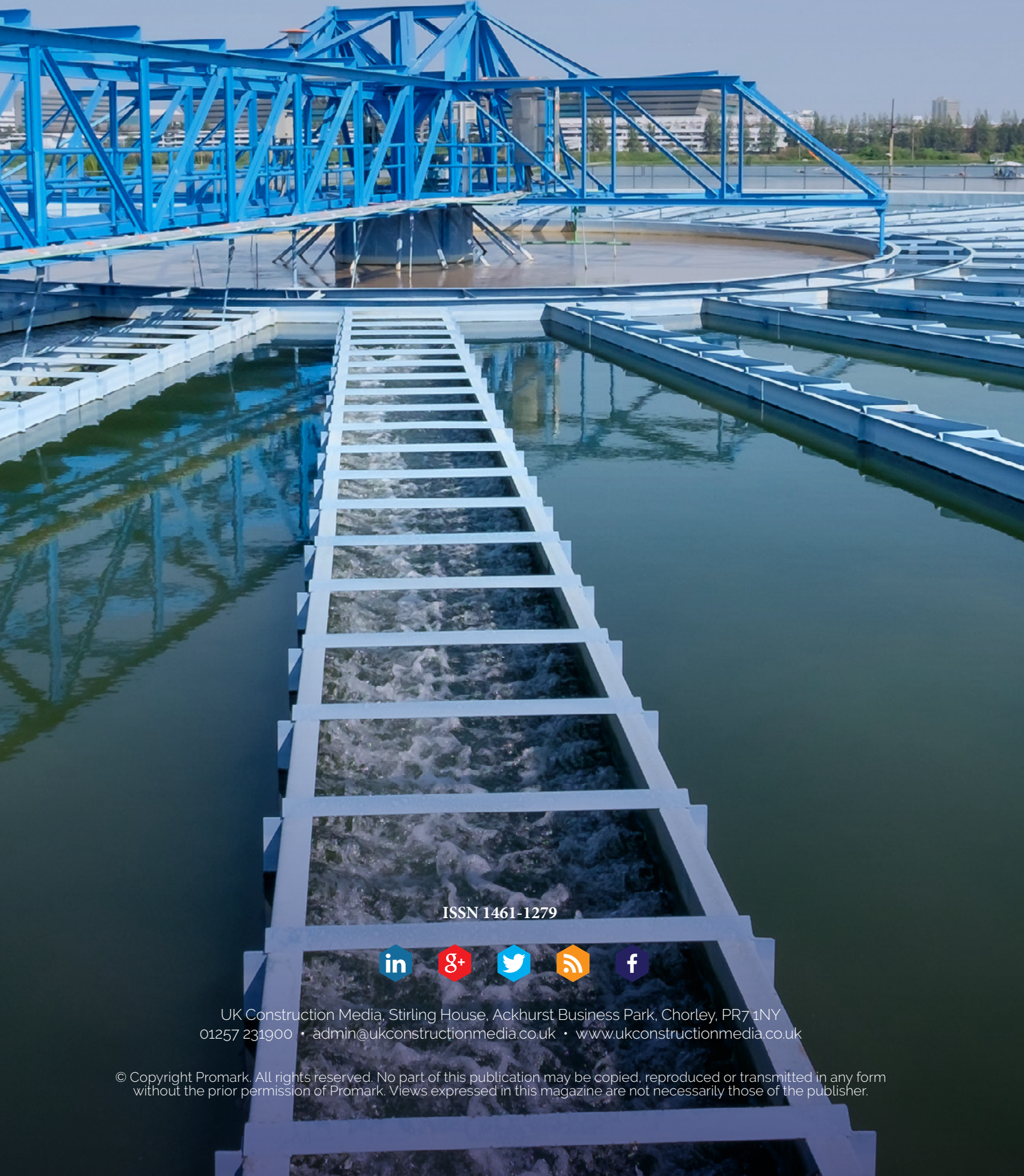
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UK Construction Media, Stirling House, Ackhurst Business Park, Chorley, PR7 1NY
01257 231900 • admin@ukconstructionmedia.co.uk • www.ukconstructionmedia.co.uk

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