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The Worshipful Company of Water Conservators

PAMELA TAYLOR'S SPEECH AT INSTALLATION COURT LUNCH, 4 JULY 2012

Thank you for those kind words and for asking me to speak today.

I'm going to say a few words about the industry I work in – The Water Industry – why it exists and what its fundamental role is. I'll also look at some of the challenges we face and how, in spite of these, the water industry will continue to deliver its essential services.

The water industry was created and has developed, to protect and promote Public Health! Simple really – we provide clean safe water for people to drink and cook with and take away waste for treatment and disposal.

Here in the UK, we are quite good at this! The statistics show that our drinking water is the best in the world – and, by and large, we remove and treat waste water effectively and efficiently.

But the wider role of the Water Industry includes Social, Environmental and even Economic Policy objectives. Modern water suppliers also have to be ready to clean up water affected by all kinds of diffuse pollution; they have to improve the biodiversity along water courses – and as a result, they are also covering the debt of people who can't pay their bills.

Now all that is fine - but we must not forget that our fundamental role, the primary reason why we exist, is protecting and promoting Public Health by providing safe, clean drinking water and sanitation services.

Fundamental service

That service – access to a good clean source of drinking water and the provision of effective, efficient waste water services – is essential to every one of us. Indeed, it was largely the development of drinking water and sanitation in the mid 19th century that enabled the industrial revolution to develop in the way that it did.

That is when the modern water industry really started. Towns were beginning to develop and people were living in closer confines. Sanitation and access to clean water was becoming a big worry for everybody.

Science was developing rapidly and the paradigm shift from believing that disease was carried by miasma – in effect “bad air” – to understanding and proving that vast numbers of diseases are actually carried by water and by insects – was a major turning point in developing water distribution networks and focusing on treatment.

Restructuring the Industry

Moving forward a hundred years or so, the industry was being developed under both private and national control. Then, in 1974, the Water Act brought the whole range of nationalized bodies – that is the river authorities, water undertakings and sewerage authorities – together into the ten regional water authorities. The existing Private Statutory Water Companies were perceived as doing a good job, so they weren't changed.



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It wasn't until Privatisation 15 years later in 1989, that the industry we have now was established, with the ten regional water authorities joining the smaller water-only companies as private entities. The step to privatisation was controversial at the time but irrespective of the rights and wrongs, it has clearly delivered benefits in many ways.

Benefits

With some £98 billion of investment, vast improvements have been made both in drinking water quality and environmental standards. £22 billion is being invested in the five years to 2015. That's more than £935 for every property in England and Wales. Remarkably, this has all been done at no cost to the public purse. Strong leadership from the economic, environmental and drinking water quality regulators has kept prices to customers as low as they can possibly be.

Ofwat says that "bills are about 30% lower than they would have been without regulation". The average household pays around £350 per annum for its water bill. In other words, the industry is providing the highest quality drinking water and removing waste for roughly £1 per household per day.

Changing World

But as we all recognise, the world is changing fast! To plan for an excellent future we now have to take some significant and strategic steps forward, not only in terms of water engineering and management but also in changing the Cultural Mindset of people in Britain.

As a people, we tend to have a complacent "taking water for granted" attitude. If we are to sustain and improve water and waste services – and keep our prices acceptable, we must change that attitude to one of awareness of the true value of water and the need to conserve it and use it wisely.

We are tied to water inextricably, but that does not mean that the way we use water can continue. It is both unsustainable, and in truth immoral, for each of us in the UK to take 150 litres of treated drinking quality water every day and then use only a few litres of that for drinking or preparing food.

Whilst it is probably safe to say that most people are aware of the impact of activity on their carbon footprint, I imagine that very few people think of their water footprint. Yet from cleaning to heating, processing and treating, the vast majority of consumer goods carry their own burden of water use, and that is often in parts of the world where water is an extremely fragile resource.

Change is around the corner

Unfortunately I don't have a crystal ball. We don't know what the future will be. But we do know that it is likely to be different from where we are now. The Water Industry since its conception, and especially post privatisation, has undoubtedly been a success story – but the world in which we operate is changing rapidly and we must adapt and change with it. The Water Industry is already facing many Challenges. We are increasingly seen as guardians of the environment or deliverers of social policy. As I said, this isn't a bad thing – but whilst it is inevitable, we have to guarantee that it does not affect our overarching role of



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protecting and promoting Public Health.

So far we have always found a solution – no matter how big the challenge. If we had not done so, we would be in a very different place today. But dealing with these tough changes has required that we have a continuous, and liberal helping of innovation.

We are not Dyson or Apple – but with excellent support from stakeholders and our supply chain we have applied fresh thinking, fresh approaches and new ideas in every aspect of what we do.

The Water Companies understand that they can't be complacent and that simply turning the handle will not deliver in the face of the new challenges that they face. Each company – in its own way – has embraced ideas and practices and integrated them into their business models.

So with that in mind, let's have a look at just two of the issues that will demand changes in the way we both think and operate - Climate Change and Water Quantity and Quality.

Climate Change

The water industry is energy intensive. We consume about 3% of the total energy used in the UK and emit some 5 million tonnes of greenhouse gases every year. Most of this energy is used to pump water and waste water and to run treatment plants, to make sure that our water meets environmental and health quality standards.

So our task now is to get the balance right between achieving the quality standards on the one hand, and reducing energy consumption to mitigate the impacts of climate change on the other.

We are fortunate in that we have plenty of potential recovery opportunities. Nutrient recovery, energy production via anaerobic digestion and the reuse of waste water are all possibilities.

The Olympic Village in London, for example, has been developed with both a potable and a separate, clearly marked non-potable water system. The non-potable system is water taken from a major Thames Water sewer main and treated to a lower standard than public tap water.

However the scientific consensus is that even if emissions are controlled, there are processes under way that makes some form of Climate Change inevitable.

What will this mean? Well, in terms of water it is thought that overall there will be no net change to the amount of rainfall in the UK. What will change is the pattern of this rainfall. There will be more intense periods of rain, followed by longer, drier periods.

To me that sounds like more floods and more drought. All of which will challenge our ability to adapt AND to meet our basic remit – protecting and promoting Public Health.



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Pressures on Water Quantity and Quality

Let me look ahead for a moment to our sources of water and the pressures on both its Quality and Quantity.

Water itself is essentially a 'free good'. We often meet people who ask us how we can possibly justify any charging for water, when it falls freely from the sky – and it did a lot of that this spring! Of course the costs come from storage, treatment and transport – rather than provision of the water itself.

But what is becoming more important to water suppliers, is the result of increasing pressure on those areas from which we take our waters. Agriculture and urbanisation in particular pose challenges such as water pollution and sedimentation.

One way of tackling this is Catchment Management – which is not a new concept of course. It requires all those working in a catchment area to interact and co-operate to bring about a whole range of benefits. Primarily the aim will be to reduce pollution of water courses. But by introducing better pesticide practices for example, farmers can save money.

The way land is used can reduce run off, slow down water and reduce flooding. And by introducing buffer strips and wetland areas we can also increase Biodiversity. At the same time concentrations of pollutants will decrease, which helps water providers.

No trade offs

However there is no space for trade-offs. There is no scope for reducing the service that we provide just because times are harder. Rather we need to address how and why we use our drinking water and how we manage our waste waters, to ensure that Public Health provision is maintained in any circumstances.

Final Comment

Ladies and Gentlemen, the Water Industry today is well positioned to be able to build on the work of our forebears and continue to deliver even better water and wastewater services – whatever the challenges.

But we now need a Step Change. A Step Change in attitude and a Step Change in approach! The water industry has a well developed supply chain that can bring its experience and expertise into play. By working in Partnership we can rise to the needs of the future – and that's what I mean by "Changing our Mindset".

Climate Change, Population Growth and Environmental Standards are forcing us constantly to rethink and to innovate. I am pleased to see that the government is engaging with these multiple challenges and, together as an Industry, we will be working hard to ensure that whatever changes come about as a result of the White Paper – they not only help us maintain our standards of excellence, but that they never detract from our fundamental role of protecting and promoting Public Health.

Thank you.