NWG Annual Report

2011

Sustainability case studies

NORTHUMBRIAN WATER GROUP

Customer
Working in partnership

We always aim to exceed the expectations of our customers by taking personal responsibility for delivering and communicating a good service and keeping promises. We have many examples of 'right first time every time', two of these are outlined below.

Many of our domestic customers have meters and pay bills based upon how much water they use. Having a meter can help save money, however, for those who have larger families, big gardens or use lots of water, this can be more difficult.

This was exactly the case for the Young family from Stockton-on-Tees. Father of two Stephen Young contacted us to discuss his metered bill and seek advice about ways to reduce his charges. Stephen already used water butts to store rainwater, however, following our advice, Stephen and his family made some simple changes including turning off the tap while brushing their teeth, taking shorter showers and using NWL's water efficiency pack containing a variety of water saving devices.

Commenting on the help and advice he received, Stephen said: "Getting in touch with NWL is easy. I know my call will be answered straight away, which is amazing these days that I will be able to speak to someone who cares and relates to my concerns." Vikki Anstey, our customer advisor who talked to Stephen, said: "It's all about listening to each customer's concerns and then making sure you meet their needs and go the extra mile to help them."

We aim to work in partnership with our major business customers as we know that a key factor for them in their business is reliability and security of our services.

Tees Valley crisp manufacturer KP Foods (KP) is a major customer of NWL's Billingham sewage treatment works. To improve KP's economic performance and enhance the sustainability of its operations, KP proposed to construct a membrane bioreactor to enable water to be treated and re-circulated at its plant. NWL's account manager worked with KP to ensure that the proposed development did not detrimentally impact on NWL's sewage treatment works compliance while providing advice and support. Both parties have benefited from the close, honest working relationship which has resulted in a great deal of trust and respect:

- water consumption has been reduced meaning less abstraction, treatment and pumping for NWL and lower water bills for KP; and
- the trade effluent discharge is cleaner and requires less treatment, reducing the cost of power and de-sludging for NWL, resulting in lower trade effluent discharge costs for KP.

NWL and KP have each increased their competitiveness by improving their efficiency.

Competiveness
World first at Hanningfield

An initial stage of water treatment involves removing silts and algae from raw reservoir water, a process which creates around two million litres of a ferric (iron) based liquid sludge every day. Around 99.8% of this is water which, once separated, can be recycled back to the reservoir for re-use. In this case, innovation is clearly linked to our competitiveness.

Traditionally, sludge was discharged into lagoons storing the solids whilst allowing clear water to overflow back into the reservoir. At Hanningfield, our largest water treatment works, the last lagoon was near the end of its life and although it would have been quicker and easier to have specified traditional mechanical treatment, a considerable amount of work over three years was undertaken to prove that reed beds could provide a sustainable and effective alternative for water sludge treatment – a world first for a project of this scale.

Natural England strongly supports the reed bed project at Hanningfield reservoir because it will provide a sustainable, energy and carbon-efficient solution to the long-term disposal of water treatment sludge. It will also create a significant reed bed within a few hundred metres of Hanningfield reservoir which will be designated as a site of special scientific interest that will be of use in its own right for a variety of wildlife, including reed bed invertebrates, birds and foraging bats. It will also provide a regular water supply for a disused sludge lagoon within the site of special scientific interest which the company has recently restored very successfully as a wildlife-rich mosaic of reed bed, open water, wet scrub and woodland.

People
Growing in water – investing in our people

As a company we are committed to investing in training and development to ensure that our people are competent and safe in their current roles, to support them to develop skills and knowledge to help take the business forward and, where people are career orientated, to help them develop for future roles. We have many examples of our people in the business who have developed their career within NWL.

Tony Erskine, our customer manager, joined us aged 17 on the young person's development programme, a youth training scheme, and began studying for a higher national certificate qualification. He is now in his final year of NWL's bespoke BA (Hons) in Leadership and Management and will graduate in July.

Tony said: "The BA course is the best thing that I have ever done. It has been a real eye opener and enabled me to learn new skills, get different perspectives and learn from others. It's been a massive benefit to me as a manager and I believe makes me a more effective leader. It's been a lot of hard work but I have gained a lot from it and so will the company".

Chris Loftus, leakage assistant, was unemployed and not sure of what he wanted to do with his life when he saw the poster advertising The Prince's Trust Get into Water programme in the window of his local Jobcentre. He found his age and lack of experience a real hindrance until he joined us on a three week course designed to provide unemployed 16-25 year olds with the opportunity to learn about the water industry and get some valuable hands-on work experience, before hopefully moving into employment. He has now been with NWL for three years and has become a young ambassador for the Princes Trust while receiving the Essex Young Achiever of the Year Award.

Kathryn Waugh, distribution operations controller, joined the accelerated graduate development programme in 2001 following her degree in physical geography. She undertook a series of strategic projects and business support placements to develop her knowledge of business processes and gain a broad overview of the company and its operations. After further development roles in water and waste water works management, she has now taken a senior role in operations. Kathryn said: "I find working with people to make positive improvements to the operations and maintenance side of the business very rewarding. I really enjoy my job and working for NWL".

Environment
Good progress for the Abberton Scheme

Essex is the driest county in the UK. In a dry year demand already outstrips supply and due to population rise this situation is expected to get worse.

After 17 years in the planning the £150 million Abberton construction scheme to help secure water supply to 1.5 million customers in Essex made good progress in its first year.

The reservoir, near Colchester, will be enlarged by 58% with its footprint extended by 40%, and the increased capacity will be in service in 2014. Over the last year, significant progress has been made and two important milestones have now been reached. Water is now flowing into the reservoir via the newly completed reservoir inlet structure at Broadmeadows and work has begun on the construction of two major raw water pipeline routes. These 1.2 metre diameter, 16 kilometre long, steel pipelines will transfer water from the River Stour at Wormingford to Abberton.

Abberton is a site of international environmental significance, designated under the Ramsar convention on wetlands. In designing our proposals, working closely with Natural England, the RSPB and Essex Wildlife Trust, we have gone beyond what is required to not only maintain the environmental significance of the site but to enhance it. The new reservoir will have existing concrete edging removed, will include more marginal shallow waters, as well as a new re-sited visitor centre and an extensive wetland area at the western end of the reservoir. The new proposals will improve biodiversity as well as enhance the amenities for visitors.

Communities
A* performance at Castle View

Castle View Enterprise Academy, in Sunderland, completed its first year of operations during the year.

NWL is the lead sponsor and wanted to create a centre of excellence with a clear focus on raising standards of academic performance to enable every student to achieve their personal best in all areas of academy life within a safe, secure and stable environment. NWL formed a new trust board to govern the school, recruited an inspirational head teacher and helped her to form a new leadership team, design an engaging curriculum and implement a set of new policies which would fundamentally change and improve school life for the students.

During the first year, Castle View Enterprise Academy students achieved 43% A*–Cs in GCSEs English and Maths (up from 26% in the old Castle View School) and 86% five or more GCSEs A*–Cs (up from 63%). Persistent absences decreased from 10%, in the old Castle View school, to 6.3% in the new academy's first year of operation. In March 2011, the new academy undertook Ofsted assessment and from being a failing school previously is now a school making good progress.

Indeed, sixteen students at Castle View Enterprise Academy have gained amongst the highest grades possible in the January 2011 GCSE Mathematics examinations – six months ahead of schedule. Eight of the sixteen gained grade A* and the other eight gained grade A.

In addition to the excellent teaching in the academy and after school tutorials, these more able students were also coached by one of our graduate trainees, David Bullin, who has a maths degree. David has given his time under our employee volunteering scheme, Just an hour, on Wednesdays after school and more recently on Saturday mornings.