

Scottish Water has £1.8 billion 'Solutions' to provide water & wastewater services into the next century

The Highlands and Islands of Scotland are welcoming hosts to million of tourists who enjoy the shimmering lochs, stunning mountains, beautiful glens and fascinating off shore islands of this northern part of the British Isles during the long days of summer. Others, albeit in lesser numbers, come in winter to enjoy the thrills, and spills of skiing and winter sport in mountain areas such as the Cairngorms. It is, though, a different environment for the hardy breed of Scots who were born, bred and live their lives in some of the more isolated parts of the Highlands and have to endure long dark winter days in this far north area of Britain, with heavy snow in the mountains, blocked roads and storm lashed waves battering the coast and offshore islands. Obviously, nothing can be done to tame the winter weather, however, a little improvement in home comfort helps a lot for many of these sturdy residents of an area of Britain which has been their family home for generations. To many Highlanders it is a welcome and comforting improvement brought about by a unique organisation which has modernised, transformed and improved water and sewerage treatment and disposal systems and services throughout the Highlands and overcome daunting isolated rugged terrain to bring even tiny populated areas, with perhaps only 100-200 residents, into the modern age of water and wastewater treatment and sewage disposal of the highest standards possible.

The unique organisation which has been charged with delivering a £1.8 billion programme to bring Scotland's water quality and wastewater treatment delivery and disposal processes into the next century has the very appropriate title - **Scottish Water Solutions**.

The enormous task allocated to it was to manage and deliver some 2,500 projects in Scottish Water's £1.8 billion improvement programme between September 2003 and March 2006 – less than 3 years. This was some 70% of the water company's Quality and Standards 11 Capital Investment programme, which aims to improve Scotland's water quality and wastewater processes and bring them up to the highest modern standard.

All of these infrastructures and non-infrastructure projects were spread throughout Scotland from remote communities in the Highlands to congested city centres - and in particular the administrative capital city of Edinburgh. Many required ingenious solutions using the latest technology in order to achieve significant efficiencies with the least disruption to communities.

In the Highlands the inhospitable terrain in places and difficult weather conditions during the winter months also presented significant challenges to the delivery teams, as well as to supply chains.

By March 2006 more than 1500 projects had been delivered and 100% of the targeted regulatory outputs. 95% of the FULL programme will have been delivered by the deadline, September 2006. The remaining 5% being those projects which have had significant delays to start dates due to land acquisition and planning consents.

Scottish Water Solutions structure is an innovative joint venture partnership comprising eight companies, making it one of the biggest partnering agreements of its kind in the world.

Scottish Water is the majority owner of 51% of the shares in Water Solutions. The balance is shared equally by two consortia - **UUGM Limited**, led by **United Utilities** with their construction partners **Galliford Try and Morgan Est**; **Stirling Water Limited** led by **Thames Water** with their construction partners **Gleeson, KBR and Alfred McAlpine**.

This unique business model is a limited company within a publicly owned organisation, brings global best practice from each partner to the Scottish Water industry, particularly in the fields of asset management, engineering, programme management and construction industries, enabling them to begin to transform the ageing Victorian Infrastructure, which had suffered from decades of neglect and underfunding.

As such, partnering is not just a philosophy at Scottish Water Solutions, it is the driving force behind the efficient delivery of the Capital programme, through increasing the skills and knowledge transfer amongst partners in order to support delivery of the programme.

Half of the programme is being delivered through equity construction partners in the joint venture and half through third party contractors who have been allocated work in each of the four delivery regions in Scotland. A major strategy for driving efficiencies out of the Capital Investment programme was to select the best asset delivery working practices that the Solutions' partners had employed in their own organisations across 13 years of privatisation in England and Wales and standardise them within Solutions. These included Signature Solutions, common contract conditions, swimlanes, common kit frameworks, reduced optioneering and a clear delivery framework called the 'Racetrack'

In this special feature we have concentrated on the delivery of a more modern, healthy and hygienic water service for one of the most difficult terrains in the British Isles - the Highlands - with the addition of the Capital city which had its own problems to be faced.

The articles in this section describing some of the work done in the Highlands of Scotland does not adequately portray in full the problems, the ingenuity, skills and determination necessary, in many cases, to bring a more modern water and sewage disposal system to fruition in remote, incredibly difficult conditions of terrain and weather. They seem to spell out the message: 'Job's done - bring on the next challenge?' The key influence on the whole Capital Investment programme is to deliver better value for money and superior service for Scottish Water's five million customers, as well as environmental improvements to Scotland's rivers and coastline. To meet this challenge Scottish Water Solutions aims to live up to its own demanding standards of:

'Delivering more for less'