

N. Ireland Water Resource Strategy 2002–2030

ensuring high quality water for this & future generations

by

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Almost half the water in Northern Ireland comes from large impounding reservoirs in upland areas, with the remainder coming from loughs and rivers. Currently 740 megalitres of high quality water are produced every day. However, calculations show that demand is rising and by 2030 a further 150MI/d will be required. The Northern Ireland Water Resources Strategy 2002-2030 addresses the problem and has outlined measures designed to meet the increasing demand for a high quality service for the next 30 years.



Proposals in Northern Ireland Water Resources Strategy 2002-2-30, prepared for the Department of Regional Development Water Service by *Ferguson McIlveen LLP*, with specialist assistance from *Black & Veatch*, *PriceWaterhouseCoopers* and *Eveson Environmental Associates*, are very significant and will have a major impact on the delivery of an essential service to the community in Northern Ireland over the next thirty years.

The Regional Development Strategy, approved by the Northern Ireland Assembly, has established the context within which ALL future development will take place over the next 25 years. This provides the strategic framework within which the water demand calculations have been performed. These calculations have confirmed that the demand for water is rising, resulting in an increase of 150MI/day by 2030. This growth is primarily attributed to a combination of increasing population and decreasing occupancy.

Water Service currently produces in the order of 740 megalitres of high quality water every day (MI/day). at present the water supply is sourced from 50 locations throughout Northern Ireland, ranging from reservoirs and rivers to small local sources, including boreholes.

It makes economical sense, therefore, to concentrate investment and maintenance resources on those sources that can produce high volumes of water at reasonable cost.

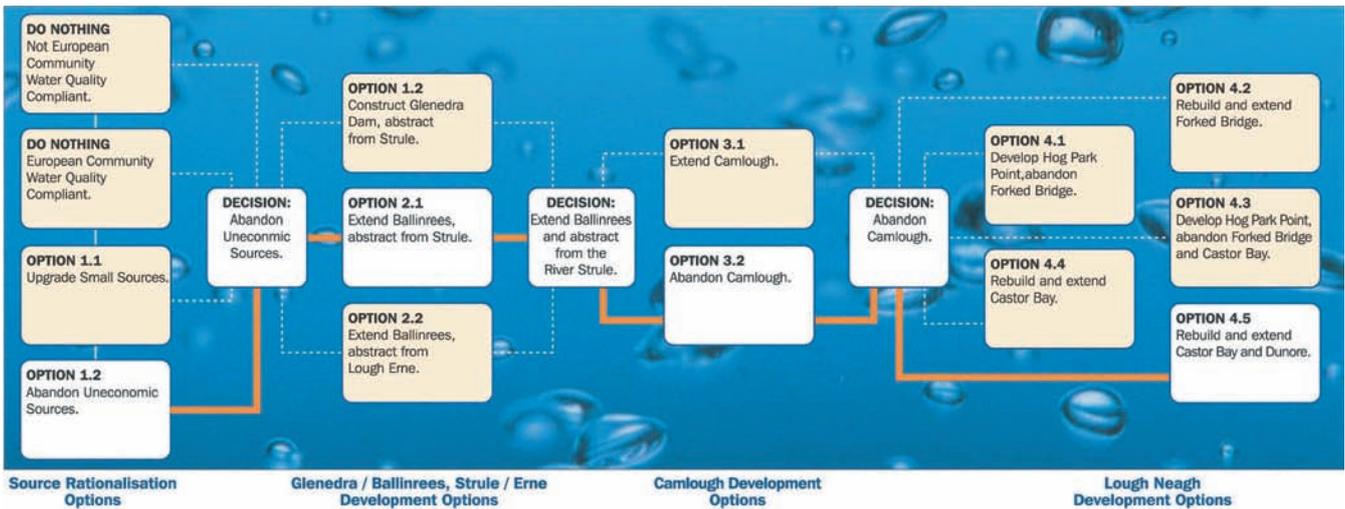
Efficient use

Water Service, through its Water Efficiency Plan, are continuing to promote the efficient use of water through public awareness, information leaflets and at public exhibitions. Water lost through leakage also places an extra burden on demand and **ongoing leakage management** will play a key role in reducing demand. The Strategy recommends that the existing leakage activities are escalated to ensure that water lost through leakage will be reduced further.

Water Service has set a target to reduce leakage to an economical level of 180MI/day by 2006.

Option appraisal

The preferred programme of works was identified after extensive examination of a wide variety of options, including that of continuing with the existing supply regime. The strategy was devised to deliver value for money, provide flexibility in moving water between supply



areas and to be achievable and acceptable to the public. Appraisal of the options therefore, included:

- * assessment of costs;
- * rationalisation;
- * climate change;
- * water abstraction;
- * value for money
- * environmental issues;
- * land requirements;
- * planning issues
- * flexibility of supply

Strategy proposals

The Strategy therefore confirms the need to reduce the number of sources, and in so doing, gives priority to the most cost effective sources of water. This allows output from the best sources of water to be maximised and usage from uneconomic sources to be curtailed.

This confirms the important roles that Lough Neagh and upland impounding reservoirs play in meeting the Northern Ireland water demands, Provisions have also been incorporated to plan for uncertainties in supply due to future rainfall patterns as a result of climate change.

High quality

A further key element of the Strategy is to implement treatment processes to improve the already high quality of the water supply in order to meet increasingly stringent legislative requirements.

All treatment works will, where required, receive appropriate upgrading to full chemical treatment.

The Water Resource Strategy is designed to provide a safe, high quality and reliable water supply. **It reinforces a twin track approach to the future management of Northern Ireland's water by reducing leakage and rationalising sources.** The net result of these actions will be to ensure reliable supplies of clean high quality water for Northern Ireland for the future. A consultation document was published and circulated to a wide range of interested groups and individuals, including MPs, MLAs, District Councils and government departments, totalling over 600 formal consultees. Numerous responses were received which generally supported the contents of the document.

The Water Resource Strategy 2002–30 is about providing water treatment works and water mains to ensure enough high quality water for this and future generations. The Strategy will be monitored during its implementation and modified if and when necessary. ■

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