South Staffs Water

incorporating

CAMBRIDGE WATER COMPANY

Water Resources Management Plan 2014
Cambridge Region
Non Technical Summary

Executive Summary

Cambridge Water's number one priority is to ensure a safe and consistent supply of high quality water for its customers, now and in the future.

We aim to achieve this in a way that is affordable and takes into consideration any environmental pressures on our resources.

This final Water Resources Management Plan sets how we plan to achieve this over the next 25 years.

The plan has been prepared in compliance with our statutory duty as a water undertaker, as set out by the Water Act, and the Water Resources Management Plan Direction 2012.

We have also followed guidance provided by the Environment Agency, and taken account of the Government's guiding principles on resources planning.

Specifically, this plan sets out how Cambridge Water intends to balance the amount of water it has available in its supply with the forecast demand. This is known as the 'supply demand balance'.

A number of factors are likely to influence the supply demand balance, and these are described in detail within this plan.

Our overall aim is to ensure there is a surplus in supply, known as available headroom.

If a deficit in supply over demand is predicted, it is our responsibility to include and evaluate the costs and benefits of options to remove any deficit.

During the preparation of this plan, we have consulted with members of the Local Water Forum. The Local Water Forum is an independent body made up of representatives of Cambridge Water's regulators and its household and non-household customers.

A sub group of the Local Water Forum was set up to look specifically at Cambridge Water's draft Water Resources Management Plan to understand and challenge the assumptions made in its preparation.

As a result of consultations with the sub group, members of the forum were satisfied with the approach Cambridge Water has taken to determine its baseline supply demand position is appropriate, and the assumptions made are reasonable.

A draft plan was published in August 2013 for a 12 week period of statutory consultation. We considered all representations made during this consultation, and revised our draft plan accordingly.

Following review of our draft plan, the Secretary of State has directed us to publish this final plan.

Baseline water resources situation

Cambridge Water is able to demonstrate a surplus in deployable output, and therefore available headroom, in the baseline supply demand balance for the next 25 years.

In arriving at this conclusion, we have taken account of all of the influencing factors and allowed for uncertainty in producing the plan. Most notably these are reductions in available supply, population growth and new demand, environmental concerns and leakage.

All the factors that influence the supply demand balance are summarised below. Full details of each of these issues are contained in the plan.

One area of uncertainty relates to Water Framework Directive legislation, which requires us to ensure our abstractions do not impact on the water environment and the ecology it supports.

The actual impacts of this legislation are still being assessed; however any that are identified will eventually be notified as Sustainability Reductions and ultimately may become reductions to abstraction licences. We recognise the potential risk to our licences, particularly towards the end of the planning period, and are working closely with the Environment Agency to assess the possible future impact, and manage these risks as appropriate.

As likely reductions are not yet fully ascertained, and in accordance with the latest Environment Agency guidance, no reduction in deployable output has been allowed for at this stage. We will further review this issue as more information becomes available.

Overall we remain confident that we are able to maintain a surplus in headroom, and can do so without the requirement to develop options in this plan.

The main influences on the supply demand balance that are included in our forecast, and which are explained fully within the plan, are summarised below.

On the Demand Side:

We expect significant growth in the region over the next 25 years, and Cambridge Water is planning for 47,000 new properties to be built by 2040, with the number of connections increasing each year through much of the period. This growth is in line with the latest local authority forecasts, although we have taken a realistic view on the phasing of the expected growth.

The continuation of our strategy to encourage unmetered customers to opt for a metered supply will result in 87% meter penetration by 2040, and universal metering by 2050, without the need to impose compulsory metering on customers. The benefits of metering in reducing peak demand have already been seen over recent years, and our customers are opposed to the idea of compulsory metering, therefore we do not propose an accelerated household metering programme during the planning period

The demand for water in new properties will reduce as a result of new Building Regulation standards now in force. This combination with the effects of our water efficiency measures, will ensure that per capita consumption (PCC) will decline, from 141 litres/head/day to below 125litres/head/day by 2040.

Demand for water in household and non-households is expected to increase by up to 3% over the planning period as a result of climate change.

Although no regulatory target is proposed, we will continue to promote water efficiency to meet a minimum annual reduction of 1litre/property/day. Our customers have expressed their expectations of the company to continue in helping them to become more efficient.

We plan to maintain leakage at 14.0 mega litres per day (Ml/d), in accordance with Government requirements in the planning guidelines. This is despite our Sustainable Economic Level of Leakage (SELL) being assessed at 15.5Ml/d. To maintain this level, per property leakage will reduce by 35% to 2040.

We shall also continue to lobby for newly built properties to meet the higher levels of the Code for Sustainable Homes (CSH). Where this can be shown, we will incorporate the lower consumption figures into our demand forecasts. We will consider the role of infrastructure charges for new developments, and how this can be developed to support lower consumption properties.

On the Supply Side:

Since our last plan total available deployable output (DO) under annual average conditions has increased slightly, due to the re-commissioning of a previously un-used source.

Cambridge Water's supply area is no longer designated by the Environment Agency as an area of serious water stress, therefore no demand management through enhanced metering policies is deemed appropriate.

As a result of the Environment Agency's National Environment Programme, we have recognised sustainability changes, resulting in a reduction in deployable output of 5.4Ml/d. We will continue to work with the Environment Agency to achieve the most appropriate solution at the sites implicated.

A further reduction in deployable output of 3.0Ml/d has been included to account for the removal of 2 sources from supply due to treatment considerations for the medium term, beyond AMP6.

A small reduction in deployable output is predicted across all of our sites to account for the impact of climate change. We will work with the Environment Agency, and use its regional ground water models to further understand and quantify this impact on a small number of our most vulnerable sources.

The overall outage allowance included in the plan has been revised, applying current best practice, and has reduced to 8.5Ml/d.

Where there are potential environmental issues arising from the Water Framework Directive (WFD), we will continue to work with the Environment Agency to ensure the risk from these is managed appropriately. As likely reductions are not yet fully ascertained, and in accordance with the latest Environment Agency guidance, no reduction in deployable output has been explicitly allowed for in this plan. We expect WFD implications to feature considerably in subsequent updates of this plan.

From 2020 onwards, we will also look to introduce measures that increase the security of our supply at single boreholes sites. This will further reduce the allowance for outage, and increase available headroom.

Final planning solution

For this draft plan the Company does not propose to include a final planning solution that differs from that in our Baseline assessment of the supply demand balance. As we are able to demonstrate a surplus in supply and available headroom by applying the appropriate methodologies and guidelines, there is no requirement for us to do so.

Cambridge Water operates in an area of water stress. We are also mindful of future pressures on resources, and of Government aspirations in water resources planning. These factors allow for companies to adopt a 'do the right thing' approach in order to propose measures that allow them to become more efficient and maintain a positive supply demand balance into the future.

In drafting this plan we have explored various additional measures we could include in order to improve our baseline supply demand position. Our review has demonstrated that any such additional measures will not alter the supply demand balance significantly, and would be at additional cost to our customers.

We therefore do not propose to adopt any solutions that differ from our baseline assessment at this stage, and have not included additional measures in our final plan.

This approach has the support of our customers in achieving our outcomes in the most cost effective manner.

We will continue to review the Water resources position annually and to produce an updated plan at least every five years.