

CHOLDERTON AND DISTRICT WATER COMPANY LTD

STRATEGIC DIRECTION STATEMENT

January 2008

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INTRODUCTION

Background

1. When Henry Charles Stephens acquired estates in Wiltshire in the latter half of the nineteenth century, water supplies for the local inhabitants were haphazard. The villagers of Shipton Bellinger had a rudimentary but intermittent mains supply but their counterparts in Cholderton and outlying areas relied on local wells from which water was drawn by traditional methods.

2. Stephens had a vision that those who lived in rural areas should have access to a year-round supply of clean drinkable water delivered to their homes and, to this purpose, he steered his Private Members' Bill through parliament in 1904, bringing The Cholderton and District Water Company into being. The Act of Parliament gave the company a monopoly for the supply and sale of water but was most specific about the obligations of the company. It set out in some detail the infrastructure that was necessary to provide and maintain water supplies to the area where the company had exclusivity of supply.

3. At the time that the service reservoirs were constructed it was envisaged that the company would provide water to a larger area than it serviced initially. This did not happen and the excess storage capacity at the outset has enabled the company to maintain supplies of water without interruption as the population in the two villages and surrounding area has expanded over the last 100 years.

Current Operations

4. The company is a water only supplier. Mains sewage facilities exist in Shipton Bellinger and are the responsibility of Southern Water. For Cholderton and the outlying properties domestic effluent disposal is by septic tank.

5. The company serves an area of 22 square kilometres, abstracting its water from two boreholes. From these the water is pumped to service reservoirs and fed by gravity through a distribution network of 48 kilometres either directly to consumers or, in the case of some parts of Cholderton, via a separate service reservoir. There are a total of 727 connections. In the year ended 31 March 2007 the company abstracted 235×10^6 litres of water.

Looking Forward

6. The paternalist approach of Henry Stephens to the provision of a water supply was a reflection of the social structure in the years preceding the First World War. Today the company, still in private ownership, exists to provide a service to its customers, who take it for granted that a regular and reliable supply of drinking water is always available on demand and without interruption.

7. The company is confident that sufficient water resources are available and its basic infrastructure is robust enough to maintain a constant, reliable and safe supply of water to its customers for the next 25 years.

Business Objective

8. The aim of the business in the 21st century is to remain true to the vision of the founder and, through a process of continuous improvement, enable the business to meet the expectations of its customers whilst protecting the environment and meeting the uncertainties and challenges ahead, not the least of which is that posed by climate change.

MAINTAINING SUPPLIES

Forward Strategy

9. In addition to providing a constant supply of water for all domestic purposes to those properties connected to its distribution network, the company is required by law to demonstrate that it has made plans to ensure that the supply can be maintained in the future. The company's approach to this issue is to make sure that as much water as possible from its existing sources is available for consumption and that the implementation of measures for improved water efficiency lead to reduced consumer demand. The company and its customers have important roles and responsibilities in the continuing quest to conserve water.

10. These measures form part of the wider Water Resources Management Plan 2009 which the company will be publishing as a draft in the spring of 2008 as a follow-on to that which the company produced in 2004. The new plan, which is a statutory document, looks forward for 25 years. There has been prior consultation with the regulatory authorities and other interested parties about what they expect to see covered in the plan. Those involved in the initial consultation and stakeholders, including individual consumers, will have a chance to comment on the draft before the final Plan is placed before the Secretary of State for approval.

Planning for Growth

11. The company's operations fall into an area covered by two district councils, viz. Salisbury District Council and Test Valley Borough Council. The former has included Cholderton in the category of 'other settlements' which have been identified provisionally as not providing sustainable locations for growth. As matters stand, Test Valley BC has not identified Shipton Bellinger for development.

12. Although neither council will publish its LDF until late spring 2008 it is reasonable to assume that there will no major developments in either village. For the basis of forward planning the water company has assumed that any new builds will follow the pattern of the last 7 years during the course of which a total of 20 properties were connected to the network. Beyond the period covered by the LDFs it can be assumed that any major developments will follow recent trends by creating sustainable communities close to major centres of population within the district councils' areas.

Demand

13. The company has estimated the growth in demand over the period covered by this plan by making the assumption that, between 2008 and 2035, the number of connections will rise in a straight line from the current level of 724 serving 2,100 consumers to 800+ serving around 2,500 customers. Assuming the average per capita consumption remains unchanged and there is some additional but limited commercial growth, it is unlikely that the overall annual demand for water at the end of the period, after allowing for leakage, will grow by more than 33×10^6 litres.

14. This projected increase in demand of 12% can be handled by the company's existing distribution network and will not require any increase in the service reservoir capacity. However, even with improvements in leakage control and a reduction in individual consumption through water efficiency measures, the company will find it necessary to make an application for an increase to its abstraction licence at some point during the period under review.

Drought Planning

15. The company has been obliged to produce a draft Drought Plan which describes the measures that may have to be taken to enable the company to maintain water supplies to domestic consumers. The plan can be viewed on the company website and will be amended very shortly to include the 'final directions' required by the Secretary of State.

16. In the event of a severe drought, it is possible that the company may have to implement measures to protect its ability to maintain essential supplies. These include:

- Mailshot and/or door-to-door visits appealing for restraint.
- Cutting back supplies to commercial users.
- Hosepipe ban including the filling swimming pools.

17. It should be noted that the company operates a permanent ban on domestic sprinklers. This is rigidly enforced.

18. More serious measures such as rota cuts, stand-pipes and, in the most extreme conditions, the trucking in of bulk supplies are most unlikely to be implemented. Nevertheless the company has made contingency plans to ensure that vulnerable groups will not be deprived of water.

Metering

19. Metering is seen as a fair method of charging and also a means of managing demand. The company has a policy of installing new meters in all new builds and encourages existing householders to convert to metering on the basis that it gives them a measure of control over consumption and hence the opportunity to reduce their water bills.

20. A total of 112 connections are Metered giving a penetration of 15.4% overall. 12 meters were installed in the year ending March 2007. This is low but with few new builds and limited changes in house ownership there is little opportunity to achieve an increase in the number of metered properties. Every effort will be made to install an average of 15 meters per annum over the next 10 years. Assuming that all new properties are metered, this will bring the level of meter penetration to 35% by 2035.

Leakage Management

21. The decreased abstraction figures over the last 3 years, against a background of a small rise in the number of connections including one large commercial user, demonstrate that there has been a significant improvement in leakage control. It has proved very difficult to calculate accurately the true level of leakage which is estimated at 10%.

22. The company uses a data logging system which monitors the meters on the main distribution pipes from the reservoirs. The results are recorded at 15 minute intervals and are accessed through a password-protected website. The minimum night-time water usage on all mains meters is checked for changes in usage patterns. This has proved to be an efficient first line identification of potential leakage incidents. Over the next few years this web-based system will be improved to give greater point control allowing the probable sites of new leaks to be identified.

23. The existing models that are used to calculate background leakage are concerned with major systems and are not really suitable for use with small networks as the margin for error is too great to make calculations meaningful. The company is about to embark on a major initiative involving the Environment Agency and the University of Exeter to produce a model that will enable estimates of background leakage to be arrived at with greater certainty. This programme is expected to run over the next 2 - 3 years before being tested in the field. It may be 5 years before a system that delivers a suitable confidence level is ready for application.

Water Quality

Results & Testing

24. The testing of the company's water is carried out under contract by Wessex Water who provide a full range of analytical services. Cholderton has reported no routine failures in water quality in the last 3 years. Every effort will be made to maintain this 'clean sheet' into the future in the face of the challenge posed by the severe weather events that are linked to climate change.

25. Wessex also carry out periodic reviews of pesticide usage. This acts as an effective early warning system of any potential dangers. Although the company has had no pesticide failures, new generations of pesticides may pose a risk and the testing system is alive to this possibility.

Contamination Issues

26. Routine testing over the last 20+ years has shown a gradual but continuous rise in the level of nitrates in the water from both boreholes. Extrapolation of the rate of increase suggests that, should no action be taken, the level of nitrate contamination may exceed the statutory level of 50mg/litre in 10 years time. The company's directors consider this to be the most pressing problem affecting the consumers and the business going forward.

27. The two most likely sources of the nitrate contamination are from the use of manufactured nitrogen fertilisers and farm manure on farms within the catchment area and from the legitimate discharge from 3 sewage treatment works either into the bed of the river Bourne or very close to it. A further worry is posed by the possible housing increase in Tidworth which may increase the discharge of treated waste.

28. The government recognises the extent of this problem and launched a consultation document in 2007 under the heading "The protection of waters against pollution from agriculture" which contained proposals related to the implementation of the Nitrates Directive.

Solutions

29. The company has been alerting the Environment Agency and its predecessors for some years about the nitrates issue. In 2007 a more intensive approach was adopted and the company itself looked at possible solutions on the assumption that the tougher measures proposed by Defra for the implementation of the Nitrates Directive were unlikely to have an effect before the nitrate level in Cholderton's water supply exceeded the statutory limit.

30. The Environment Agency will be giving the company access to its knowledge and technical expertise. This valuable resource will enable the company to develop a preferred option which it will implement to ensure that the drinking water delivered to customers over the next 25 years remains safe and wholesome.

31. Contact has also been made with neighbouring water companies to see what part they might play in assisting Cholderton to find the most suitable and economic solution.

Environment and Sustainability

Climate Change

32. Enough has been written on the subject of climate change to demonstrate that it is a reality. The full impact is still fraught with uncertainties but a briefing from the Hadley Centre of the Meteorological Office contained a forecast that average temperatures in the

South West will rise, with drier summers and wetter winters. Overall rainfall is likely to decrease but there is a likelihood of more intense precipitation events leading to an increase in the frequency and severity of floods and droughts.

33. The inertia in climate systems produces a lag in response. This means that during the next 25 years the planned cuts in CO² emissions will have little effect in reversing the current trend of rising temperatures and the associated effects on climate change.

34. There will be increased pressure on water resources because of higher demand for water from households, agriculture and industry. There will also be a potential impact on water quality.

35. The company will have to do what it can to adapt to the changing conditions. These include:

- Actively promoting water efficiency measures to reduce the profligate use of water, including a programme to increase the total number of metered properties.
- Having in place a robust Drought Plan to protect consumers in even the most severe periods of drought.
- Reducing water losses through leakage by implementing improved detection techniques and the instigation of quick response to leaks when they occur.
- Ensuring that the company's facilities are protected against the projected threat of increased flooding.

Biodiversity & Conservation

36. The Water Company has no 'Special Sites of Scientific Interest' (SSSI's) within its operating areas. However the Company believes that the preservation and restoration of the natural environment is an extremely important issue.

37. The Company's reservoirs are situated in an area of natural chalk grassland with a large variety of fauna and flora. The site is continuously monitored and action is taken to ensure that populations of species with sensitive requirements are catered for. Examples of the work done by the company in this sphere include:

- Butterflies: The Adonis Blue butterfly requires a plentiful supply of its larval food plant, the horseshoe vetch and a short well-cropped turf. Careful management is undertaken to ensure that a population of this butterfly is increasing together with that of the Chalkhill Blue which has similar requirements.
- Birds: Scrub clearance is carried out on an annual basis to ensure that the grassland is not shaded out, but also to leave and manage areas for birds such as the Willow Warbler; Corn Bunting; Turtle Dove and Yellow Hammer.
- Plants and shrubs: Included in the many shrubs are the viburnum lantana, which provides a habitat for a Clearwing moth. These are protected during scrub clearing operations. The site also has a population of Field Fleawort, a very rare plant in Hampshire. Individual flowering plants are protected from rabbit damage by guards.

38. Biodiversity audits have been completed, with appropriate management plans identifying the actions that are needed to enhance, restore and maintain the natural environment.

39. The Cholderton Estate which occupies over 20% of the area served by the water company is a participant in the Countryside Stewardship Scheme and has regenerated hundreds of acres of chalk downland by releasing it from arable use. The entire farming activity on the estate is carried out organically. No pesticides or manufactured fertilisers are applied to the land and all target levels for livestock manure loadings are met.

Sustainability

40. The company is committed to ensure that its operations are sustainable. It is important that, in meeting current requirements for water and in planning for the increase in demand over the next 25 years, the company does not compromise the lives of the consumers of the future.

41. Past assessments have shown that Cholderton's groundwater abstraction of 0.70×10^6 litres per day is not having an adverse effect on the environment. There is no reason to believe that the relatively small increase in abstraction over the period covered by this plan will place an undue strain on the environment.

42. The company plans to reduce leakage by detection followed by prompt repair. Measures to encourage consumers to use less water will help offset the anticipated growth in demand. Nevertheless there will be an increase in the use of electrical power to pump and treat water. This is expensive and damages the environment through increased emissions.

43. In the longer term the company in partnership with the Cholderton Estate will have to consider the use of a renewable source for the generation of electrical power. This will be an expensive project and require considerable research. It is unlikely that electricity for the company will come from a renewable source until the latter part of the period covered by the plan.

Customer Service

Consultation

44. Nearly all the 2,100 consumers served by Cholderton live within 2.5km of the company and over 70% live in the villages of Shipton Bellinger and Cholderton. Such close proximity has meant that consumer contact has tended to be both personal and informal. All the company's staff live locally and are well known to most of the villagers.

45. Up until now the formal approach to consumer consultation adopted by the very much larger water companies has not been replicated by the Cholderton and District Water Company and hence the reported views of customers tend to be anecdotal rather than statistically based. The fact that there have been very few complaints overall and none on water quality has put no local pressure on the company to adopt a different approach.

46. It is hoped that all consumers will read the company's plan and feel free to comment upon it. The directors intend to approach the chairmen of the local parish councils to see whether a formal consultation process can be established which reaches down to individuals.

Charges

47. The average household bill for 2008/8 is £172 per annum which is at the higher end of the scale. It is hoped that more consumers will opt for a metered supply as this should reduce the charge per household and lead to water conservation through a reduction in demand. The company will use the new lines of communication to promote this idea.

48. It is difficult for a company with such a small customer base to undertake significant expenditure without there being an undue rise in water charges to consumers. There is a balance to be struck which enables the business to invest in order to maintain the service that consumers take for granted without increasing water charges beyond what is reasonable. This is a major challenge and will continue to be so during the period covered by the plan.

Website

49. Since November 2007 the company has had its own website rather than being in a section of that of the Cholderton Estate. News of events and copies of consultation documents are posted on it and it is hoped that consumers will use it for contact purposes. It is intended to expand the scope of the website.

Maintenance and Investment

Summary of facilities

50. The company has two boreholes drawing from different catchment areas. Water from these boreholes is pumped into two service reservoirs from which water is supplied, through a 48km network, to consumers in an area of 22 square kilometres. The majority of consumers live in the villages of Shipton Bellinger and Cholderton where there is also a small intermediate service reservoir.

Maintenance

51. The service reservoirs are sound and, apart from regular maintenance, have a life expectancy well beyond that covered by this plan. Additional service reservoir capacity exists which may play a part in the investment plans associated with the reduction of the level of nitrates in the water.

52. The pipes in the distribution network are old but, having been laid in chalk, show remarkably little corrosion. Nevertheless it is necessary to carry out maintenance on a regular basis and the company has allowed for the replacement of 500m of mains per annum.

Future Investment

53. The most easily identifiable plans for capital expenditure relate to the reduction in the level of nitrates in the water supplied to consumers. As has been explained earlier, this project is at an early stage of investigation and assistance is being given by the Environment Agency to help the company identify the most suitable and cost-effective solution.

54. The following table gives a summary of identifiable items of capital expenditure that the company is anticipating in order to maintain services to the level that consumers expect and to meet the challenges that have been identified in the plan.

Reason for Investment	Detail	Timescale
Flood Prevention	Measures to protect the lower borehole & facilities	Within 5 years
Excess Nitrate	To be identified	Completion by mid 2013
Mains replacement	Target 500m per annum	Ongoing
Sustainability	Renewable energy generation	2025
Leakage Control	Programme development	Before 2012
Operational efficiency	Pump renewal programme and automated systems	Completion 2015
General maintenance of major assets + metering	Replacement and renewal of major assets incl. new meters	Ongoing annual spend

Finance & Funding

Capital Structure

55. Cholderton has been a privately-owned limited liability company since 1934. There are no plans to change its status. For its size the company has a strong balance sheet with no indebtedness and adequate working capital.

Funding

56. The majority of the capital expenditure that has been planned over the next 5 years will have to be funded through loans from the traditional sources that are available to small businesses. The business will have to service and repay these loans from cash flow.

57. The process that determines the future cash flow of the company rests with Ofwat who set price limits by forecasting the minimum revenue that a company is likely to need to run its business efficiently. This is compared with the revenue the company is expected to receive and Ofwat then calculates the percentage change needed after allowing for inflation.

Summary

Meeting the Challenges

58. The Cholderton and District Water Company faces some significant challenges over the next 25 years. The most immediate is the inexorable rise in the level of nitrates in the water supply. Having sought the assistance of the knowledge and technical expertise available within the Environmental Agency the company is confident that an effective and economic solution will be found that will enable the company's customers to receive a quality supply of water into the foreseeable future.

59. One of the effects of climate change will be the tendency for a greater number of intense precipitation events per annum leading to an increase in the frequency and severity of floods and droughts. The company will take the appropriate action to ensure that, throughout these periods of turbulence which will increase pressure on water resources, customers can expect to receive an uninterrupted and safe supply of drinking water.

60. The company has to manage the anticipated growth in the demand for water over the next 25 years as the number of households increases and household consumption rises in response to the higher temperatures associated with climate change. Paragraph 35 outlines some of the measures that the company will have to adopt in order to maintain supplies. However, the customers also have a significant part to play by taking active measures to reduce individual consumption of water - that most vital resource for human well-being.

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