



Our Business Plan for 2020 – 2025  
Appendix 2: Our Track Record  
September 2018

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# 1 The regulatory environment

Our business is a regional monopoly and is subject to incentive-based economic regulation by Ofwat. We are subject to a strict revenue control regime, designed to drive efficient investment decisions.

Our key Regulators include;



## **Water Services Regulation Authority ('Ofwat')**

Our economic regulator, ensuring good quality service for our customers at a fair price.

[www.ofwat.gov.uk](http://www.ofwat.gov.uk)



## **Environment Agency ('EA')**

The EA controls how much water we can abstract from the environment.

[www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency)



## **Drinking Water Inspectorate ('DWI')**

The DWI ensure we comply with the drinking water quality regulations.

[www.dwi.gov.uk](http://www.dwi.gov.uk)



## **Department for the Environment, Food and Rural Affairs ('Defra')**

Defra are the UK government department responsible for water policy.

[www.gov.uk/government/organisations/department-for-environment-food-rural-affairs](http://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs)



## **Natural England**

Responsible for the protection of designated sites for nature conservation.

<https://www.gov.uk/government/organisations/natural-england>



## **Consumer Council for Water ('CCW')**

The CCW investigate customer complaints relating to service, price and value for money.

<https://www.ccwater.org.uk>

## 2 Addressing one of our key challenges: drought

Our Business Plan sets out some of the key challenges that we face as a business. One of the most complex challenges for us remains how we deal with the potential impact of drought. Further details on some of the actions we're taking are provided below.

### 2.1 The potential impact of drought

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Drought can have an impact on customers' lives and this may become more noticeable as a drought becomes more severe. In the early stages of a drought, TUBs (formerly known as hosepipe bans) may be introduced which temporarily restricts the use of a hosepipe for eleven different activities. As a drought becomes more severe, ordinary drought orders, formerly known as non-essential use bans, may be implemented. This is a temporary measure which would restrict ten activities, including filling swimming pools or ponds, operating vehicle-washers and cleaning windows. These restrictions would have some commercial implications, such as for car washes or window cleaners.

In a severe drought, we may apply to abstract additional water or reduce river support through the use of drought permits or drought orders. The possible effect of additional abstraction at this stage of a severe drought may be an extension in the amount of time it takes for the river to recover, after the drought has ended.

### 2.2 Collaborating with the industry to address drought challenges

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An extreme drought in the south east of England would give us new and changing challenges that will have serious ramifications for people, industry, health, environment, government and the economy. In view of this, and the need to better balance the needs of various stakeholder groups, companies would be better able to manage an extreme drought situation together, and a regional approach needs to be adopted.

During 2017 we were active on the National Drought Group and the Water UK Drought Group to manage the risk of drought. As a result of this Affinity Water sponsored a week-long intensive SPRINT workshop in April 2018 to begin developing an effective plan for managing extreme droughts and in particular the implications of level 4 restriction eg rota cuts and standpipes. The work built on the outcomes from Exercise Arica carried out by the EA and DEFRA with water companies and was topical as a result of the wide media coverage regarding day zero in Cape Town. The workshop was attended by representatives from Water Resources South East (WRSE) companies as well as Anglian Water and a wide range of key stakeholders. Significant outputs were produced during the workshop which will continue to be developed and refined.

The workshops considered the risk of severe restrictions on many sectors and concluded that most industries are unprepared for the economic effects of drought which would be unacceptable to the country. It was recognised that water quality must not be compromised and that water in pipes was necessary at all times to prevent societal breakdown. The workshop concluded that every effort should be taken to mitigate the risk of severe drought.

A regional drought plan is now being prepared to show how water companies will manage an extreme drought through;

- working with other sectors and LRF's to encourage wider drought planning

- greater leakage reductions
- incentivising lower levels of consumption and metering
- additional intra and inter-company transfers
- greater abstractions from the environment under drought permits and orders
- temporary treatment
- use of alternative supplies through a more robust supply chain
- use of non-potable water to reduce where possible
- drought plans and drought orders

The group has recommended that the framework should have a legal/statutory status to ensure effective governance and accountability.

## **2.3 Drought risk of surface and groundwater systems**

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2017 and 2018 have demonstrated that the rate of onset for groundwater and surface water droughts are very different. In 2017, we saw that the emergence of risk of groundwater drought is slow, often multiple-season and may be anticipated a considerable time ahead. Surface water droughts as seen in 2018 can develop much more rapidly.

Through our work in WRSE we have been keen to explore how the conjunctive use of systems can provide greater supply resilience to customers. We have been developing a drought risk model in collaboration with the Met Office and will be seeking research partners to develop a tool for assessing the overall risk in conjunctive systems. We plan to share this work with the wider WRSE group in 2019.

### 3 AMP6 Outcomes and Performance Commitments

In AMP6 we introduced our four Customer Outcomes and thirteen associated Performance Commitments, shown in the table below.

Customers' Expectations	Our Commitments
<b>Making sure our customers have enough water, whilst leaving more water in the environment</b>	<b>Reduce leakage by 14% - 27 million litres a day</b> A stretching target for reducing leakage in the network to reflect the importance our customers place on it
	<b>Reduce average water use by 7%</b> Supporting our customers to enable them to reduce their consumption by offering water efficiency advice and introducing universal metering for 280,000 households in the most water stressed communities
	<b>Improve the water available for use by 4%</b> Increasing flexibility in our network so we can transfer water more effectively around our communities
	<b>Abstraction Incentive Mechanism</b> Ofwat will review our sustainability performance and compare this with other water companies
	<b>Sustainable abstraction reductions of 42 million litres a day by 2020</b> Improving our efficiency in supply and reducing the demand for water will enable us to leave more water in the environment
<b>Supplying high quality water you can trust</b>	<b>Compliance with water quality standards</b> Maintaining the high quality of your water by investing in our treatment works, sampling across our network and preserving the quality of our water sources
	<b>Customer contacts about discolouration</b> Understand and respond to local concerns about water aesthetics
<b>Minimising disruption to you and your community</b>	<b>Unplanned interruptions to supply over 12 hours</b> Targeted investment in strategic mains to limit prolonged disruption to supply
	<b>Number of burst mains</b> Investing in our network to maintain service levels
	<b>Affected customers not notified of planned maintenance</b> Keeping our customers updated when we have to carry out planned maintenance
	<b>Planned work taking longer to complete than notified</b> Effectively planning and carrying out necessary maintenance to our assets to minimise disruption
<b>Providing a value for money service</b>	<b>Service incentive mechanism</b> Delivering a service which meets our customers' expectations
	<b>Value for money survey</b> Ensuring that we are providing the service which our customers and communities value, and that we help those who may struggle to pay

This appendix sets out our performance against each of these Performance Commitments so far in AMP6, along with our view on forecast figures for the final two years. Our PR14 submission also saw us set out our vision to be the leading community-focused water company and we made a number of commitments regarding the way in which we would communicate with the different communities across the areas we serve. Please refer to Section 10 of this appendix for further details on how we're meeting this commitment.

## 4 Making sure our customers have enough water, whilst leaving more water in the environment

### 4.1 Leakage

We have met our commitments for leakage reduction over the last three years and are forecast to continue to meet targets in the final two years of AMP6.

MI/d	2015/16	2016/17	2017/18	2018/19	2019/20
<b>FD14 Committed Performance</b>	183.9	178.5	173.1	167.7	162.2
<b>Actual / Forecast Performance</b>	180.9	173.0	172.7	167.7	162.2

The challenge to reduce leakage by a further 11 MI/d over the next two years is a significant one and will be delivered using a variety of techniques, summarised below:

- District Metered Area (DMA) Optimisation – Forensic investigation into the reasons why long term high leakage DMAs do not respond to normal Active Leakage Control (ALC) activity. This will involve but is not restricted to, step testing, meter verifications, portable acoustic logging and high-volume water use logging
- ALC Controlling Natural Rate of Rise (NRR) – Each year we expect to see the NRR equate to 160 MI/d and this will be managed by using a combination of fixed and portable acoustic logging alongside traditional leakage detection techniques
- ALC Reducing Leakage – Reducing the duration of a leak will be central to ALC contributing to the reduction of background leakage. Our work with external consultants has shown that most of the duration of a leak occurs before we are aware of it. There is a period of time to detect leaks before the repair can be initiated. We will reduce the leak duration by changing our approach to targeting from a predominantly flow based process at a DMA level to a leak noise based approach highlighting points of interest for investigation
- Pressure Management – During year 2018/19 we will complete the delivery of our programme of pressure management schemes across our area. In addition, we will continue to optimise existing schemes to ensure we strike the right balance between network performance and leakage

### 4.2 Average water use

Average water use across our region remained broadly in line with our committed performance for the first two years of the AMP. In year 3, average water use was below our target. For further details on how we measure this, please refer to Table App5 Commentary.

l/p/d	2015/16	2016/17	2017/18	2018/19	2019/20
<b>FD14 Committed Performance</b>	156.3	155.6	153.3	150.3	147.4
<b>Actual / Forecast Performance</b>	154.4	159.7	151.7	147.4	145.4

Based on our latest demand forecast completed for our draft WRMP19, and the performance of the last financial year 2017/18, we expect to meet our ODI targets for the remaining years of AMP6.

In support of our ‘twin track,’ supply / demand approach at PR14, we set out our plans for our Water Savings Programme, including installation of 280,000 meters across our communities in AMP6 (approximately 56,000 meters per year) in order to reduce the amount of water used by our customers. We remain on track to meet this commitment of installing these meters by the end of 2019/20.

### 4.3 Water available for use

We have consistently achieved our targets in the last three years.

MI/d	2015/16	2016/17	2017/18	2018/19	2019/20
<b>FD14 Committed Performance</b>	1,110.4	1,103.5	1,100.8	1,068.1	1,067.0
<b>Actual / Forecast Performance</b>	1,139.1	1,153.0	1,135.6	1,068.1	1,067.0

Please refer to Table App5 Commentary for additional information to support our forecast performance for 2018/19 and 2019/20.

### 4.4 Sustainable abstraction reduction

Our AMP6 sustainability reduction commitment involved changes in deployable output at seven sources (Bow Bridge, Fulling Mill, Whitehall, Hughenden, Amersham, Piccotts End and Marlowes) in six river catchments. These reductions are to be made either by changing or revoking the abstraction licence or entering into a Water Resources Management Agreement with the Environment Agency under Section 20 of the Water Resources Act.

As of 31 March 2018, we have delivered 32.69MI/d of reduction (average deployable output), of which 18.6MI/d was implemented 12 months earlier than the PR14 WRMP target date. We are on target to deliver the remaining 9.4MI/d reduction in average deployable output in the 2018/19 reporting year. This will conclude our AMP6 sustainability reduction programme.

MI/d	2015/16	2016/17	2017/18	2018/19	2019/20
<b>FD14 Committed Performance</b>	-6.7	-12.5	-14.1	-42.1	-42.1
<b>Actual / Forecast Performance</b>	-6.7	-12.5	-32.7	-42.1	-42.1

### 4.5 Abstraction Incentive Mechanism

At present, AIM is a performance commitment without a financial ODI. For this reason, we have not forecast out/under performance costs for the remainder of the AMP period. Operating AIM always has a cost associated with it and we welcome the fact that AIM will become a financially incentivised ODI in AMP7. AIM is only assessed during low flow periods, as defined by bespoke catchment triggers. Although the sensitivity of different catchments to low flows varies, whether AIM is active or not is ultimately driven by the occurrence of drought. This is a naturally occurring event which is difficult to forecast. We expect no variation from our underlying baseline position and therefore our effective forecast is 0.



## 5 Supplying high quality water you can trust

### 5.1 Compliance with water quality standards

We expect our mean zonal compliance (MZC) performance to remain stable for the rest of the AMP. We are delivering an enhancement to our pesticide removal treatment at Iver WTW during 2018/19 and this may lead to a small improvement in performance while the installation of metaldehyde removal treatment at North Mymms WTW will not be delivered until March 2020.

%	2015/16	2016/17	2017/18	2018/19	2019/20
<b>FD14 Committed Performance</b>	99.95	99.95	99.95	99.95	99.95
<b>Actual / Forecast Performance</b>	99.99	99.96	99.96	99.96	99.96

### 5.2 Customer contacts about discolouration

We expect our performance with regards to customers contacting us concerning discolouration of their water supply to remain stable for the rest of the AMP as we have now completed the mains cleaning projects in our four highest risk zones. Early indications from 2018 are that contact rates remain low and we are on track to continue to meet this performance commitment.

Nr	2015/16	2016/17	2017/18	2018/19	2019/20
<b>FD14 Committed Performance</b>	0.66	0.66	0.66	0.66	0.66
<b>Actual / Forecast Performance</b>	0.31	0.28	0.27	0.27	0.27

## 6 Minimising disruption to you and your community

### 6.1 Unplanned interruptions to supply over 12 hours

Performance in this area has fallen well below our committed levels in the first three years of this AMP and we are taking action to improve things for the remainder of the AMP.

Nr	2015/16	2016/17	2017/18	2018/19	2019/20
<b>FD14 Committed Performance</b>	320	320	320	320	320
<b>Actual / Forecast Performance</b>	1,771	1,840	7,890	320	320

We talk more about how we are working to improve performance in Chapter 2 of our Business Plan so that we are confident we will meet our forecast performance in the final two years of AMP6.

As part of this performance improvement programme focusing on 5 key work packages, we have implemented a detailed 43-point plan which is regularly monitored and tracked by our EMT and Board. The following table shows our progress against this plan as at August 2018.

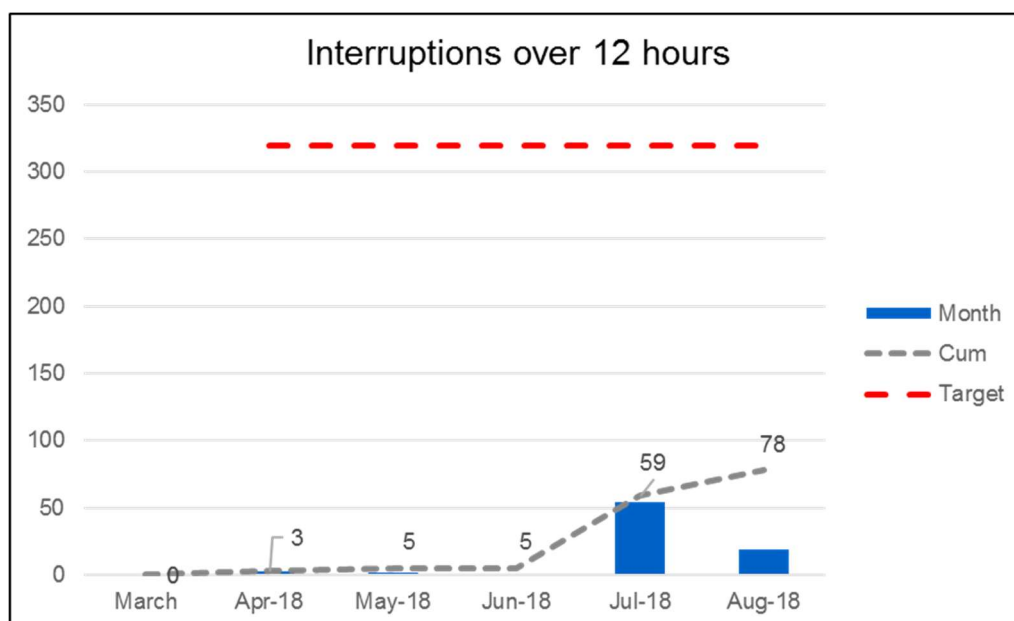
Area	Action	RAG	Comments
Lack of Visibility	Establishing the Network Desk in Control operations: 7am – 11pm, 7 days a week.		n/a
	Design and rollout of Network Desk training, Part 1.		n/a
	Extending Network Desk hours to 24/7.		n/a
	Establish and embed the CIT as the central tool for planned and unplanned incidents.		n/a
	Erect CIT screens act all offices.		Scope changed to mobile device rollout.
	Have the Network Desk verify the customer impact and 'clock start' in real time.		Being delivered alongside Ops teams.
	Refine the rules for how and when the CIT issues the red alert button and to whom.		Email alerts in place. Text messages being explored as next step.
	Live flow meter data at every measured DMA with live flow information fed every 15 mins to WaterNet (NEDs).		90% + completed as per funding programme.
	Establish alarm for procedures for what is considered a possible incident.		Software in place. CP DG2 logger and PRV outlet alarms will be trialed live as a first step before October. Secondary, more complex flow alarms/rules will then be targeted.
	PIN process centralised to Control Operations team to improve consistency of information.		n/a
Rapid Response of Repair	A strategic review of what fittings we have at each of our stores – published in a revamped stores fittings list.		All fittings and been ordered and the Oracle stores inventory is being updated as the fittings arrive.
	A strategic review of what plant we have at each site – published in a revamped stores fittings list.		n/a
	Rollout MOPVC pipework as our default cut-out material.		Now looking to expand size range after very successful rollout of up to 6".
	Procure a bigger range of repair clamps up to 1000mm.		Stocked up to 1900mm.

	Procure a wide range of repair clamps with flanged 80mm outlets for quicker returns to service.		Stocked up to 1900mm.
	NIMA contract to include 1-hour response time for productive working 24/7 to include large mains and deep excavation capabilities.		Contract written and suppliers shortlisted. Awaiting EMT and board approval to proceed.
	Write a series of new contracts with 1-hour response times for core pieces of kit, i.e. tracked machines.		Being delivered through the NIMA agreement and/or when the service agreement expires.
	Extend working window for CSTs: 6am to 10pm to allow increased core coverage and faster response.		Ts & Cs and working window projects are underway and ongoing.
	Change the response times of CST/DLO standby to 1 hour.		Will be an output of the action above.
	Move to parallel dispatch of gangs and CSTs for confirmed 'no water' events.		n/a
Restoration	Changing the DLO gangs to FTs to give a larger resource pool for the restoration works.		n/a
	Procuring pipe trailers with 63mm pipework and storing at key locations.		We have 1 trailer in stock and others waiting for the lead time.
	Write a strategy for the restoration services team to include logistics, storage and water quality.		n/a
	Confirm policy for the injection of water into a depressurised network.		SSO-505 in place.
	Develop an operating procedure around the planning and dispatching of teams.		In place and being updated as we learn.
	Produce a clear guidance note for standby operatives (to sit at the Network Desk) of tanker response times and info required.		n/a
	Develop a maintenance programme for trunk mains and air valves to minimise asset failure.		We are targeting trunk main and air valve maintenance in known issue areas.
	Develop an application that allows field users and the Network Desk to make decisions on cost of restoration vs. cost of failure.		Work has not yet started but is being built into user requirements for the SA tool and CIT update.
	Decision Making	Transition to a functional standby model to ensure core competencies and capabilities are in place.	
Write and publish clear RACI documents for standby roles to include in hours and standby roles.			n/a
New role of Alternative Water Manager to join standby to prevent Network standby team distraction from restoring supplies / completing repairs.			Alternative Water and Restoration roles now on standby. Plans to develop a task manager role also underway.
Produce a new standby structure included in the above to be clear with resources.			n/a
Introduce a DG3 incident review board with all 'greater than 8 hour' events reviewed for learning at the DG3 workshops.			n/a
All 12-hour incidents to be chaired by a select list of Senior Managers with a focus on what we didn't do as opposed to what we did do to drive learning and actions.			n/a

Introduce a new rule that if a model indicates that after all rezone options >50 properties will be affected, a Senior Manager must review, facilitated by the Network Desk, within 3 hours.		Instruction has now been given and we are now monitoring compliance.
Standby Manager roadshow – resetting expectations and rebuilding awareness of existing tools and requirements.		n/a
Standby pack for reference – online/paper guide to key processes / procedures for LESM / RESM.		n/a
Re-write and publish up to date standby brochure as the directory to include Winter Readiness Plan transitioning into a year-round plan.		n/a
Complete a suite of decision making tools for key processes such as alternative water and restoration services.		n/a
April DG3 stand down relaunch.		n/a
Infrastructure – produce a clear library of mitigation plans and contingency plans for use from the AIC.		n/a
Non Infrastructure – produce a clear library of mitigation plans and contingency plans for use from the AIC.		n/a
Hotspots – Produce a clear library of mitigation plans for each know Hotspot (areas unable to rezone) and contingency plans for use from the AIC.		Delivered as a GIS layer and use now needs to be monitored.
Produce clear guidance and a contingency plan per NHH health-related property to ensure restoration is possible given window of time.		n/a

[KEY: Blue = complete, Green = on track, Amber = at risk, Red = significant delay or issue]

Following the implementation of our improvement programme, we are already seeing a definite improvement in performance in this area. The graph below shows the number of properties that have experienced a supply interruption of greater than 12 hours so far this year. This performance gives us the confidence to state that we believe we can achieve our forecasts in 2018/19 and 2019/20.



## 6.2 Number of burst mains

We have reduced burst levels in the distribution network through the increased renewal programme started in AMP4 and extended to AMP5 and AMP6 and we expect to meet our performance commitment target of 3,100 bursts or less, over the next two years. We are currently around 30% below the performance commitment target for this year. We continue to target the pipes that burst more frequently in our mains renewal programme.

Nr	2015/16	2016/17	2017/18	2018/19	2019/20
<b>FD14 Committed Performance</b>	3,100	3,100	3,100	3,100	3,100
<b>Actual / Forecast Performance</b>	2,201	3,077	2,923	3,100	3,100

## 6.3 Affected customers not notified of planned interruptions

Information on our performance to date and proposed improvement plans relating to this Performance Commitment is included in Chapter 2 of our Business Plan.

Nr	2015/16	2016/17	2017/18	2018/19	2019/20
<b>FD14 Committed Performance</b>	110	110	110	110	110
<b>Actual / Forecast Performance</b>	400	111	282	110	110

## 6.4 Planned work taking longer to complete than notified

We have achieved this target in every year in the period. Last year, we experienced over 30 events affecting 484 properties with planned works taking longer than notified. We will continue to promote our early warning reporting procedure. This involves escalation and decision making by the senior manager(s) 3 hours before planned supply restoration time. If the risk of failing to restore a supply on time is high, other measures such as installation of an overlander supply will be implemented. These measures are focusing on restoration rather than completing the works late in the day.

Over half of all events during 2017/18 affected properties for between 4 and 7 hours. Our aim is to improve escalation and respond more quickly if an incident occurs. Also, to reduce events involving missed services to a single property we have introduced additional checks during planned works. Furthermore, in Q3 2018/19 we are starting “water always on” trials. This is being conducted as part of readiness for AMP7 and the new ODI of under 3 hours for all planned interruptions.

Nr	2015/16	2016/17	2017/18	2018/19	2019/20
<b>FD14 Committed Performance</b>	550	550	550	550	550
<b>Actual / Forecast Performance</b>	266	436	484	550	550

## 7 Providing a value for money service

### 7.1 SIM

Score144	2015/16	2016/17	2017/18	2018/19	2019/20
<b>FD14 Committed Performance</b>	tbc	tbc	tbc	tbc	tbc
<b>Actual / Forecast Performance</b>	76.7	78.51	80.91	81.3	82.4

For the quantitative element, we expect to see continued reduction in both unwanted contacts and complaints, with a greater reduction in 2<sup>nd</sup> stage than 1<sup>st</sup> stage as we continue delivering improvements to customer journeys and targeted training.

For the qualitative element, we expect to continue along the same trajectory we have seen the last 2 years, with improvements to our survey score.

### 7.2 Value for money survey

We committed to testing and running our ‘value for money’ survey throughout AMP6 to better understand whether our service meets our customers’ expectations, is affordable and provides recognised value.

Score	2015/16	2016/17	2017/18	2018/19	2019/20
<b>FD14 Committed Performance</b>	tbc	tbc	tbc	tbc	tbc
<b>Actual / Forecast Performance</b>	69.5	69.6	67.7	67.8	67.8

The index is influenced by various measures. Based on analysis of these measures, we have considered likely performance and how it will feed through to the overall value for money index. Our projection is that the index will be at a similar level over the next two years as we have seen based on historic trends as well as metering roll out plans, future bills, estimated levels of supply interruptions, customer communications activity and the influence of broader economic outlook. The slight improvement is driven by future bills being lower and customer perception improving compared to 2015/16, as well as overall satisfaction levels increasing, following customer journey transformation programmes delivering benefits.

## 8 Major incidents and emergency response

### 8.1 Performance in AMP6

#### 8.1.1 Operational incidents

Chapter 2 includes a summary table of all major operational incidents which have occurred to date in AMP6. The table is included again below for clarity and also provides further details on those incidents, including areas of key learning and performance improvement.

Month	Incident	Commentary
July 2015	Egham WTW	<p><b>Incident Details</b></p> <p>We experienced a burst on a single point of failure within the treatment works.</p> <p>This had previously been assessed as Affinity Water's worst-case scenario in the SEMD audits and the site-specific contingency was enacted immediately in order to minimise customer impact across the Surrey area.</p> <p>Alternative water supplies were provided to customers as required until services returned to normal operation.</p> <p><b>Incident Review / Lessons Learnt</b></p> <ul style="list-style-type: none"> <li>• Surrey Fire &amp; Rescue were asked to assist in a major overhaul of our company emergency plan and related processes. This resulted in some key changes to the way in which we deal with such events, some of which are outlined later in this section.</li> <li>• 'Gold controllers' were put onto standby in order to provide a strategic overview of the situation in the event of an incident.</li> <li>• Competency assessments were created for each management role that would be on standby.</li> <li>• Specific asset improvements were made on site in order to remove the single point of failure entering the treatment works.</li> </ul>
June 2016	Edgware Road	<p><b>Incident Details</b></p> <p>In the early hours of the morning, a trunk main burst on the A41, a major road in North London. Some customers had no water for approximately 13 hours until the main was bought back into supply later that afternoon. Alternative water supplies were provided to customers as required.</p> <p><b>Incident Review / Lessons Learnt</b></p> <ul style="list-style-type: none"> <li>• Following review, improvements made to the alternative water process were identified and implemented.</li> <li>• Asset improvements were made to improve the quality of the pipework in the area.</li> <li>• Clarity was given to the process required for two way communications between silver and bronze controllers to ensure key messages were shared in a timely manner.</li> </ul>
October 2016	Ottershaw Burst	<p><b>Incident Details</b></p> <p>Burst on a trunk main in Surrey in an area which was also undergoing significant mains renewals (planned replacement work). This made re-zoning more complex than it usually would be. Alternative water supplies were provided to customers. The incident ran for approximately 24 hours.</p> <p><b>Incident Review / Lessons Learnt</b></p> <ul style="list-style-type: none"> <li>• Improved customer messaging is now in place for local residents throughout any prolonged planned works.</li> </ul>

		<ul style="list-style-type: none"> <li>The importance of timely and frequent external communications to customers was flagged (including necessity for website updates to be made at times committed to).</li> </ul>																			
<b>February 2017</b>	<b>Arkley Reservoir</b>	<p><b>Incident Details</b></p> <p>Burst on a trunk main which part-emptied a strategic reservoir feeding the north London area. No properties experienced an interruption to supply of longer than 12 hours. Alternative water supplies were provided to customers.</p> <p><b>Incident Review / Lessons Learnt</b></p> <ul style="list-style-type: none"> <li>A full investigation was carried out to understand why the contingency measures didn't work as expected.</li> <li>Asset improvements have been made in the local area and contingency plans have been improved to further minimise customer impact.</li> </ul>																			
<b>August 2017</b>	<b>Baldock Burst</b>	<p><b>Incident Details</b></p> <p>A burst on a main at a storage reservoir affected the water supply in Baldock. The burst main was under three meters of water and was deep underground, so in order for us to drain the water, excavate the area and begin repairs, we had to isolate the main from the network. However, this then affected water supplies to many customers in the area.</p> <p>We managed to drain the water from the area faster than anticipated and dug down to expose the main and assess the repairs that were needed. Our priority was to maintain water supplies to as many of our customers as possible whilst we tried to resolve the issue. We provided bottled water to vulnerable customers on our safeguard register and identified bottled water collection points.</p> <p>Throughout the incident we liaised closely with the Local Resilience Forum (LRF) to ensure all of our local stakeholders were informed and kept up-to-date with the incident and that we understood the wider implications of our water outage.</p> <p><b>Incident Review / Lessons Learnt</b></p> <ul style="list-style-type: none"> <li>Asset improvements have been made in the local area.</li> <li>Desktop assessments of key sites have been completed for similar risks.</li> </ul>																			
<b>March 2018</b>	<b>Freeze / Thaw Event</b>	<p><b>Incident Details</b></p> <p>Significant weather impact across the Affinity Water supply area resulting in very low strategic storage levels and a significant increase in the number of bursts with localised customer impacts. Overall the number of customers experiencing a supply interruption was kept to very low levels. During the period 8,686 households had an interruption to their supply, this is 0.5% of our customer base.</p> <p>Our network and customers were subjected to the effects of the extremely cold weather which, along with the subsequent rapid thaw, caused significant disruption to the water supply over a 4-day period.</p> <p>These resulted in a significant increase in demand for water which caused stress on water storage levels during a time when travelling to sites was made difficult by ice and flash flood conditions. In many cases areas with significant increased demand were restored to normal levels with no mains repairs completed suggesting customer side leakage was the key factor.</p> <p>Whilst customers in locations across each of our 8 communities experienced low pressure and no water, our network held up very well against the increased demand and significant disruption was limited to 4 specific areas.</p> <table border="1"> <thead> <tr> <th>Community</th> <th>Customers affected by no water</th> <th>Restoration time</th> <th>Cause</th> </tr> </thead> <tbody> <tr> <td><b>Pinn : Wakemans Hill, North London</b></td> <td><b>350</b></td> <td><b>7.5 hours</b></td> <td>Power failure at booster</td> </tr> <tr> <td><b>Pinn : Cockfosters/Barnet</b></td> <td><b>2122</b></td> <td><b>3-6 hours</b></td> <td rowspan="2">Air-locking of trunk main</td> </tr> <tr> <td></td> <td><b>920</b></td> <td><b>6-12 hours</b></td> </tr> <tr> <td></td> <td><b>1586</b></td> <td><b>13 hours</b></td> <td></td> </tr> </tbody> </table>	Community	Customers affected by no water	Restoration time	Cause	<b>Pinn : Wakemans Hill, North London</b>	<b>350</b>	<b>7.5 hours</b>	Power failure at booster	<b>Pinn : Cockfosters/Barnet</b>	<b>2122</b>	<b>3-6 hours</b>	Air-locking of trunk main		<b>920</b>	<b>6-12 hours</b>		<b>1586</b>	<b>13 hours</b>	
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				system due to high demand
				Air-locking of trunk main system due to high demand
	<b>Stort: Ware</b>	138 164 14	3-6 hours 6-12 hours 13 hours	
	<b>Pinn: Wembley</b>	479	3-6 hours	Frozen PRV
<b>Incident Review / Lessons Learnt</b>				
<ul style="list-style-type: none"> <li>We expand on the lessons learnt from this event in Section 9 of this appendix.</li> </ul>				

## 8.2 Updating our emergency response procedures

### 8.2.1 Learning from Experience

Learning is critical for performance improvement and process enhancement and all incidents that required intervention by the Emergency Response Team (ERT) are subject to a review referred to as the 'Wash-up' to identify issues and opportunities. Any improvement activities are coordinated at both tactical and strategic level to ensure they are effectively integrated in to the procedures.

Occasionally, incident reviews can trigger improvement ideas as technology advances and innovation is possible. An example of this is the enhancement of the ERT room that is now fitted with cutting edge IT and digital communication facilities. This has enabled real-time information to be displayed for the response team to monitor and the ability to get a digital image of any site or situation.

At its core, the process around responding to an emergency is geared to capturing learning and improvement opportunities.

### 8.2.2 Improvement

Following the learning from events in recent years and a formal commission following the Egham incident in 2015 where Surrey Resilience Forum carried out a review of our procedures, changes have been made to how we manage our emergency response. Some of these include:

- The ERT has been formally arranged in 'cabinet' structure with a named Emergency Controller and 'Silver' command. This structure is communicated to the business and provides clear responsibilities to ensure an informed and coordinated response.
- The standby arrangements now include resources to provide support to the ERT and focuses on critical demand periods throughout the year. These resources remain on call for unexpected and unplanned events throughout the year.
- The ERT now performs with a consistent approach to all emergency incidents.
- The responsibilities of key members of the ERT are documented, known and understood. Roles and responsibilities relating to bronze, silver and gold command are documented and used as training material to ensure they are understood by the respective post holders.

- The ERT functions are subject to a competency assessment and regular updated training in the emergency plan and best practice. This ensures a consistent approach to situation management and opportunities to upskill in areas of weakness.
- Scenario response events have been held with key stakeholders to identify areas of collaboration or overlap and to understand each other needs and expectations.
- The immediate risks of an event are identified and continually updated in the emergency room and are communicated to all that participate in update meetings. As a minimum, the risks are focused around People, Environment, Assets and Reputational (PEAR).
- There is a clear mission statement produced for each event that enables those in the emergency control room to focus on the agreed action and understand the parameters of the response.
- Communications and briefings are structured for content, format and audience and the issue is controlled to provide a consistent message to customers and stakeholders. The communications can be in the form of formal press releases, stakeholder briefings and Twitter or Facebook discussions.
- Standard formats for critical records or actions have been issued for use to provide accurate time records of discussions, meetings, activities and events. These records are now consistent and stored on SharePoint for ease of access. This enables any member appointed to the emergency response to store or share critical information across the various teams.
- The improved accuracy of the records means we can review performance in more detail and identify more appropriate and effective opportunities for improvement within the processes.
- The records enable clear statements on situation performance to stakeholders' post event to demonstrate diligence and governance.
- Any hard copy records created by the ERT, relating to the emergency event, are retained in perpetuity after scanning for future scrutiny.
- All standby managers participate in a handover review held by the Emergency Controller every Monday morning to share knowledge on minor events or issues and potential risks and the likelihood of an emergency incident.
- Enhanced engagement has been made with members of the Local Resilience Forums (LRFs) to understand the need for sharing accurate and appropriate information for a collaborative response.
- The key learning from each event are shared with the business for improved situational awareness and better risk management.

### 8.2.3 Performance improvement examples

The improvement in the emergency plan and the processes around the ERT have already enabled us to;

- respond to the Freeze/Thaw event of 2018 in a more timely manner due to the advanced planning in place (see Section 9 for more details).
- identify the appropriate risks and mitigating actions during an event and coordinate our activities to reduce the 'emergency' duration.
- use more accurate records of our activities to detail our efforts and actions to our Regulator and other key stakeholders.

#### **8.2.4 Our future plans for emergency response**

We will continue to evolve our plan, our team and the company resources to meet the risks and opportunities presented by every 'emergency' as well as the smaller incidents to ensure best practise is identified, shared and processes or procedures amended to improve our response.

We are currently considering the benefits of an Emergency Response policy that formalises the company and leadership commitment. This policy will also identify the roles, responsibilities and accountabilities during an 'emergency' incident. We are also awaiting the formal issue of ISO22320 on "Emergency Management – Guidelines for incident response". This international document is currently in a draft consultation stage as its progress to formalisation is being managed by the International Standards Organisation (ISO).

We will continue to learn from incidents – both our own, and from others within the water industry as well as reviewing significant events in other industries where lessons can be learned. Our intention is to understand the root cause of an emergency so we can either avoid them altogether or to respond to the incident in a timely and adequate manner providing the least impact on our customers.

## 9 The freeze / thaw event – key learning

### 9.1 Introduction

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Section 8.1 highlights some of our key operational incidents in AMP6. One of our more high profile incidents was the freeze / thaw event in early 2018. During the event, a small number of our customers experienced a supply interruption.

- We recognise that the event caused inconvenience to some of them and have provided those customers with compensation of up to £75 each. This is equivalent to the value of more than 5 months of our average household bill.
- We delivered bottled water to any customers who were on our Priority Services Register who were impacted by a supply interruption.
- Regular updates were provided to customers and key stakeholders throughout the event using a wide range of communication channels.

Our post-event review is still ongoing and workshops are continuing with Water UK and the wider industry to share best practice. Additional information also continues to be shared with Ofwat. We are already making changes to some of those areas identified for improvement.

The following section sets out a summary of our approach, lessons learnt and action plan following the event.

### 9.2 Incident overview and customer impact

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The UK experienced a spell of severe winter weather with very low temperatures and significant snowfalls from late February to early March 2018. Daytime temperatures remained widely below freezing on 28 February to 01 March with a strong east wind and significant accumulations of snow across much of the country. This was the most significant spell of snow and low temperatures for the UK overall since December 2010.

The severe weather event was followed by a rapid increase in temperature over the weekend of the 03 and 04 March which resulted in a thaw across our operating area. We observed temperature variation at some weather stations of 15°C in fewer than 10 hours and significant changes to the temperature of water leaving our water treatment sites. The resultant thaw caused an increase in burst mains on our network and leaks appeared on consumer supplies and internal plumbing systems as ice melted.

During the period of 02 to 07 March 2018, we repaired 182 burst mains, 230 repair jobs regarding supply pipe leaks were created and 64 waste notices were issued. The increased demand caused by supply side leakage and bursts resulted in distribution input similar to summer peaks.

We were fully prepared to respond to these challenges. Our preparations for events of this nature are supported by a number of detailed operational plans which ensure we are ready to respond, with the right resources, in the right place at the right time. In the autumn of every year, we raise customer awareness of the risk of burst pipes and our operational teams and out of hours standby arrangements are made ready should we experience cold weather episodes. As part of our ongoing planning, during January we increased our leakage detection

(both direct labour and contract) and repair teams to assist in our drought management and leakage programmes.

We operate with a well-established gold, silver and bronze structure. This approach is engrained into our policies and procedures and sets out how we manage our resources and responsibilities to ensure we are well prepared and agile to respond to any adverse situation that may arise. We operate under this framework all year-round inclusive of our Chief Executive Officer and Executive Management Team. It was through these well exercised procedures that our Executive Management Team established our Internal Gold Command to co-ordinate our activities from Monday 26 February. Our Emergency Response Team (ERT) was mobilised on Saturday 03 March and stood down on Wednesday 07 March following the satisfactory recovery of our strategic supply position. Accordingly, we were operating other than business as usual between Saturday 03 March and Wednesday 07 March inclusive.

The primary causes of disruption over the 4-day period were;

- Power failures across parts of North London impacting our Water Treatment and Pumping sites.
- Burst water mains and communication pipes.
- Subsequent air-locking of water mains.
- Burst water pipes on the customer side including supply pipe and internal pipework.

As a result of these incidents, there was a significant increase in the demand for water which caused stress on water storage levels during a time when travelling to sites was made difficult by ice and flash flood conditions. In many cases areas with significant increased demand were restored to normal levels with no mains repairs completed suggesting customer side leakage was the key factor.

Whilst customers in locations across each of our 8 communities experienced low pressure and no water, our network held up very well against the increased demand and significant disruption was limited to the four specific geographical areas outlined in Section 8.1 of this appendix.

## 9.3 Our approach

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### 9.3.1 Early monitoring and maintaining business as usual activity

In previous years, we have been somewhat reactive when responding to leakage outbreak events, often relying on our supply chain to scale-up skilled resources quickly which has not always been possible. During 2017 and 2018, we have followed a model of insourcing which has meant that we had the core leakage resources needed in-house and were able to take a proactive stance.

We monitor weather conditions and take steps to mitigate the impacts of severe weather as part of our business as usual activities. As such, when the Met Office issued its severe weather warning on 19 February, we implemented our plans to ensure standby and duty treatment capability, storage capacity and team availability were optimised and in place. We also put in place heightened weather monitoring and briefed teams on the critical importance of the safety and health of our people and customers during such times.

We closely monitored levels of customer contact against forecast numbers and regularly reviewed any opportunities to postpone planned activities in order to release resources if required (although often, this was not needed). We made the decision to postpone the following key activities so that we could focus on maintaining customer service levels during such a busy time;

- 7 Contact Centre Advisors were moved from handling proactive outbound calls to incoming calls to bolster our call answering capacity.
- 417 planned customer appointments were rearranged, with customers being given either 24 or 48 hours notice.
- All non-urgent maintenance and repair activity on our infrastructure assets was cancelled, with planned activities restarting four days later. This allowed us to focus on reactively repairing bursts as quickly as possible.

### 9.3.2 Seeing the benefits of thorough preparation

Going into the event, several key operational plans were being actioned to ensure readiness and resilience for our assets, customers and their water supply. We considered the risks and put plans in place across several areas;



This preparation allowed us to have a controlled response to the challenges we faced - resource plans were in place, our suppliers were engaged and our customer contact was enhanced. When the cold weather hit, plans were being actioned, instead of drafted. The result was a robust defence of our strategic storage, a very rapid recovery in the outbreak of leakage, minimal supply interruptions to customers and a quick return to 'business as usual' status, just three days after it was declared.

### 9.3.3 Industry collaboration

The criticality of our water imports from neighbouring companies increased during the incident. Initial arrangements were made through business as usual channels. However, as the severity of the incident increased for all companies, strategic negotiations were held between respective Incident Teams, allowing mutually agreeable import volumes to be set.

### 9.3.4 Deploying resources

Through the intelligence gathered through our Control Operations and Asset Strategy teams, we made a number of changes to our resourcing patterns;

- Moved to 24/7 operating.
- Additional resources recruited or retained. For example, our leakage contractors alone increased by 94%.

- Bolstered standby numbers and a new standby roster created solely for increased call volumes.
- Extension of hours at our Contact Centre.
- Operational Managers col-located with our service desks to ensure operational knowledge was available to our advisors and subsequently, customers.
- Volunteers from across the business supported our Community Liaison Officers in the delivery of bottled water.

## 9.4 Key learning and next steps

### 9.4.1 What went well and where are further improvements needed

Our full Ofwat report (available on request) sets out those areas of our response to the event which we considered worked well and those where we considered future improvements were required. These have been summarised below across the four areas requested by Ofwat as part of their review of the incident.

Area	Key Learning
<b>Supply Interruptions</b>	<ul style="list-style-type: none"> <li>- In the previous 12 months, we have worked hard to improve our performance on Supply Interruptions (details included earlier in this appendix). Two geographical areas have been particularly badly affected and we had done much to improve our visibility and control of our assets that supply those areas to enable us to respond more quickly to supply interruptions. This worked well and agreed contingencies were deployed quickly.</li> <li>- Following the incident, several workshops were held to look at further opportunities to strengthen our control and resilience in the worst affected areas. These will be developed further and progress monitored by our Executive Management Team.</li> <li>- Our new Rapid Response and Restoration team is now in place to help restore supplies as quickly as possible.</li> <li>- We have identified further opportunities for improvement in how we coordinate the delivery of alternative water supplies during large incidents and are already progressing these with our suppliers.</li> </ul>
<b>Communications</b>	<ul style="list-style-type: none"> <li>- The incident was initially communicated to over 2,000 stakeholders, but during it we employed a new stakeholder mapping tool which allowed far more accurate identification of the affected stakeholders. This new tool will now be used as a matter of course during any future incidents.</li> <li>- Having all operational contact teams co-located in one area, and the way in which we also sat key operational managers within these teams proved to be very successful during the incident. We will replicate this in future.</li> </ul>
<b>Vulnerable Customers</b>	<ul style="list-style-type: none"> <li>- Where customers in vulnerable circumstances were affected, we deployed teams of Community Liaison Officers to ensure that they had water delivered to their door by one of our own people.</li> <li>- By engaging early and regularly with our Local Resilience Forums, we could ensure the services we offered were well understood and our customer coverage was complete.</li> <li>- During the event, some customers informed us of their status as a vulnerable customer. If these customers were not already on our Priority Service Register, we have sent them an information pack to register with us so that we can proactively manage their needs during any future incidents.</li> </ul>
<b>Governance Processes</b>	<ul style="list-style-type: none"> <li>- The use of our Emergency Plan in running the Company Emergency was considered appropriate and gave a strong governance framework which included clear agendas for decision making at tactical and strategic levels.</li> </ul>

	- We have identified areas where we could be more consistent in how we gather, store and use our data both during and post incidents.
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## 9.4.2 What else are we doing today?

We are now working on our follow-up response to Ofwat. The response is based on a series of internal and cross industry reviews, including;

- Collaborative sessions with other water companies to discuss how we can deliver, collectively, a better service for our customers.
- Engagement in Water UK workshops and sub-groups managed by a steering group that includes our Managing Director of Wholesale Operations.
- Internal wash-up meetings within and across different teams at bronze, silver and gold levels.
- Internal workshops focusing on key areas for improvement.
- The newly formed Water Deliver Group, co-founded by Affinity Water and now chaired by Water UK, which provides a new and refreshed platform for the water industry to seek innovative solutions to shared challenges for the good of our customers.
- Discussions within functional industry working groups.
- Review sessions with our supply chain.

Working groups have been established and we have focused our initial internal sessions around a number of targeted areas. Each area is sponsored by a member of our Executive Management Team, led by a relevant Senior Manager and facilitated by our Head of Business Transformation.

Area of Learning	Sponsor	Owner
<b>Alternative Water Supplies</b>	MD Wholesale Operations	Head of Community Operations
<b>Retailers and Non-Household Customers</b>	Customer Relations Director	Head of Customer Operations
<b>Customer and Stakeholder Communications</b>	Customer Relations Director	Head of Customer Operations
<b>Incident Response</b>	MD Wholesale Operations	SSHEQ Director
<b>Vulnerable Customers</b>	Customer Relations Director	Advanced Care Team Leader
<b>Accurate Reporting</b>	MD Wholesale Operations	Head of Water Quality

Progress against the actions and ideas generated in these forums are being reported to the EMT-level led steering group.

Please note, our full report to Ofwat on our response to the Freeze / Thaw event can be made available on request.



# 10 Reporting by community

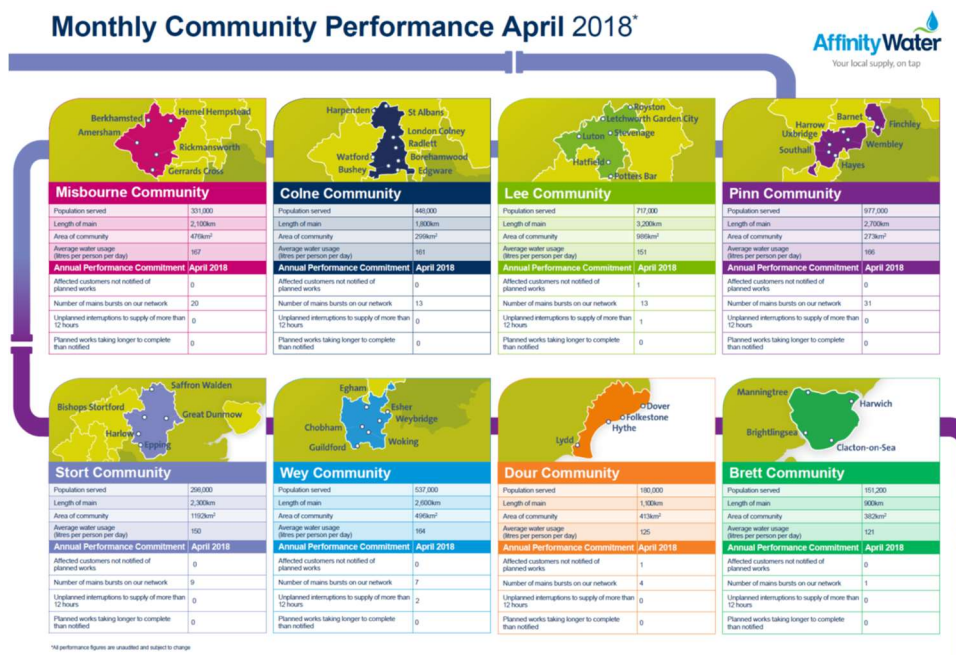
At PR14 we set out our vision to be the leading community-focused water company and ‘split’ our operating area into eight geographical communities named after local rivers. Alongside this, we committed to reporting our operational performance to customers at a community level with a view that this would increase customer understanding of the service they receive and provide them with an opportunity to compare performance with our other communities.



Performance information is now shared with our communities in a variety of ways, including;

- Our annual customer report: ‘Our Year in Review’
- Online via the Affinity Water website;
  - Key performance statistics provided for each community on a monthly basis (3-month reporting lag to allow for internal audit and review of figures)
  - Where we don’t have specific community Performance Commitments (they have been set at company-level), we split these where we can for reporting purposes in order to allow customers to better compare performance within their local area
- Through face to face meetings across our communities throughout the year

## Monthly Community Performance April 2018\*



The tables on the following pages show our performance by community (where applicable) across the first three years of the AMP.

## 10.1 2015/16 community level performance

Outcome	Performance Commitment	Unit	Misbourne	Colne	Lee	Pinn	Stort	Wey	Dour	Brett	Company Target	
Making sure our customers have enough water, whilst leaving more water in the environment	Leakage	MI/d (1dp)	25.6	31.2	29.6	45.1	14.5	23.7	5.8	4.0	183.9	
	Average water use	l/p/d (1dp)	161.0	161.6	138.6	155.8	155.0	164.5	122.6	128.8	156.3	
	Water available for use	MI/d (1dp)	114.0	148.4	230.1	284.7	108.5	165.8	49.9	37.7	1,110.4	
	Sustainable abstraction reductions	MI/d (1dp)	-	-	-6.7	-	-	-	-	-	-	-6.7
	Abstraction incentive mechanism (AIM)	TBC	tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc
Supplying high quality water you can trust	Compliance with water quality standards (MZC)	% (2dp)	100.00	99.95	99.98	99.98	100.00	100.00	100.00	100.00	99.95	
	Customer contacts for discolouration (Nr per 1,000 population)	Nr (2dp)	0.34	0.22	0.26	0.19	0.91	0.28	0.48	0.27	0.66	
Minimising disruption to you and your community	Unplanned interruptions to supply over 12 hours (properties)	Nr	57	56	137	14	627	879	0	1	320	
	Number of burst mains	Nr	275	434	349	423	271	317	84	48	3,100	
	Affected customers not notified of planned interruptions (GSS events)	Nr	23	22	104	124	25	101	1	0	110	
	Planned work taking longer to complete than notified (GSS events)	Nr	109	9	35	47	8	15	43	0	550	
Providing a valve for money service	SIM service score	score (1dp)	76.7								tbc	
	Value for money survey	score (1dp)	69.5								tbc	

## 10.2 2016/17 community level performance

Outcome	Performance Commitment	Unit	Misbourne	Colne	Lee	Pinn	Stort	Wey	Dour	Brett	Company Target	
Making sure our customers have enough water, whilst leaving more water in the environment	Leakage	MI/d	28.44	28.83	24.49	45.75	15.10	19.95	4.99	4.13	178.5	
	Average water use	l/p/d	156.20	158.56	154.88	164.83	148.67	149.70	126.93	133.90	155.6	
	Water available for use	MI/d	111.89	143.50	230.31	301.86	109.85	167.99	49.93	37.70	1,103.5	
	Sustainable abstraction reductions	MI/d (1dp)	-12.5									-12.5
	Abstraction incentive mechanism (AIM)	TBC	-2.55									tbc
Supplying high quality water you can trust	Compliance with water quality standards (MZC)	% (2dp)	100	99.87	99.93	99.95	100	99.97	100	99.99	99.95	
	Customer contacts for discolouration (Nr per 1,000 population)	Nr (2dp)	0.32	0.28	0.26	0.25	0.53	0.22	0.25	0.18	0.66	
Minimising disruption to you and your community	Unplanned interruptions to supply over 12 hours (properties)	Nr	95	785	152	35	188	582	3	0	320	
	Number of burst mains	Nr	464	405	559	580	473	387	123	86	3,100	
	Affected customers not notified of planned interruptions (GSS events)	Nr	13	7	43	23	15	7	3	0	110	
	Planned work taking longer to complete than notified (GSS events)	Nr	31	34	65	141	165	0	0	0	550	
Providing a valve for money service	SIM service score	score (1dp)	78.5									tbc
	Value for money survey	score (1dp)	69.6									tbc

## 10.3 2017/18 community level performance

Outcome	Performance Commitment	Unit	Misbourne	Colne	Lee	Pinn	Stort	Wey	Dour	Brett	Company Target
Making sure our customers have enough water, whilst leaving more water in the environment	Leakage	MI/d (1dp)	22.50	26.23	31.02	48.29	15.21	21.13	4.23	4.07	173.1
	Average water use	l/p/d (1dp)	173.10	162.17	146.47	161.32	156.63	156.38	119.64	132.11	153.3
	Water available for use	MI/d (1dp)	1,135.6								1,100.8
	Sustainable abstraction reductions	MI/d (1dp)	-32.7								-14.1
	Abstraction incentive mechanism (AIM)	TBC	-5.11								tbc
Supplying high quality water you can trust	Compliance with water quality standards (MZC)	% (2dp)	99.92	99.99	99.97	99.96	99.95	99.98	99.87	99.96	99.95
	Customer contacts for discolouration (Nr per 1,000 population)	Nr (2dp)	0.25	0.21	0.22	0.22	0.73	0.19	0.37	0.18	0.66
Minimising disruption to you and your community	Unplanned interruptions to supply over 12 hours (properties)	Nr	32	6	3718	1587	36	1085	1426	0	320
	Number of burst mains	Nr	456	410	454	571	383	440	126	83	3,100
	Affected customers not notified of planned interruptions (GSS events)	Nr	20	87	114	1	57	3	0	0	110
	Planned work taking longer to complete than notified (GSS events)	Nr	6	69	315	0	23	15	56	0	550
Providing a valve for money service	SIM service score	score (1dp)	80.91								tbc
	Value for money survey	score (1dp)	67.7								tbc

# 11 Financial information

## 11.1 Finance and gearing

We have maintained our internal gearing target of 80% for the first 3 years of AMP6 and expect to do so for the remainder of the AMP. The gearing performance is;

- 75% in 2016
- 77% in 2017
- 79% in 2018

The gearing level for the notional company is set by Ofwat at 62.5%, which is lower than our gearing target and performance. This is due to the Financing structure implemented in 2012, which is a whole business securitisation which allows for higher gearing levels and benefits from the ability to raise low cost funds in the capital markets. The structure also ensures we adhere to a number of covenants both quantitative and qualitative, which strengthens governance and controls within the securitised ring fence.

The AMP6 debt requirement was forecasted to be £114m. We have raised funds in the capital markets in AMP6 to a total of £150m which consists of £10m of Class B, £20m through a bond exchange, £60m Class A fixed and £60m Class A CPI linked. This has been raised to ensure capital expenditure requirements are met and also forward funded capital expenditure into AMP7 to take advantage of a favourable interest rate environment.

## 11.2 Totex analysis

£000	2015/16	2016/17	2017/18	Cumulative
<b>Adjusted actual totex – base year prices</b>	216,311	239,814	223,730	679,855
<b>Allowed totex based on final menu choice – base year prices</b>	244,700*	244,300	212,300	698,400*

*\*For 2016/17 reporting the line definition was updated from “The baseline totex allowance from the 2014 price determination in base year prices” (which was £244,700k for 2015/16) to “The final menu choice from the 2014 price determination (base year prices) as set out in ‘Allowed expenditure from menu’ of the ‘Wholesale water / wastewater allowed expenditure’ tables in chapters A2 (water) and A3 (wastewater) of ‘Final price control determination notice: company-specific appendix’” (which was £241,800k for 2015/16). Therefore, the cumulative number reflects this change in line definition and includes £241,800k for 2015/16 rather than £244,700k.*

The difference between actual and allowed cumulative totex on a cumulative basis is primarily due to a slower than anticipated start to the company’s metering programme, lead pipe replacement programme and delays in technology selection for water quality projects. However, these programmes of work were running at full capacity in 2017/18, resulting in an in year overspend in 2017/18 that has made up for some of the deficit built up in years 1 and 2 of AMP6. The work planned for the remainder of the AMP has been re-profiled to ensure our totex obligations are still achieved.

## 11.3 Taxation

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The main variances between the current tax charge allowed in our price limits, and the actual appointed current tax charge so far in AMP6, are explained below.

### 11.3.1 Variance in profit before tax

The basis for the corporation tax computation is profit before tax per the statutory accounts, adjusted for non-appointed income and expenses. Variances in tax-deductible operating expenses and interest have resulted in a variance in the appointed tax charge.

### 11.3.2 Capital allowances

Tax relief on tangible fixed assets is claimed in the form of Capital Allowances. The rate of allowances depends on the type of assets acquired, and their useful economic life. Variances in the amount and type of assets acquired in AMP6 have resulted in a variance in the appointed tax charge.

## 11.4 Accounting for grants and contributions under FRS 101

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At the time of the PR14 Final Determination the tax treatment of grants and contributions under FRS 101, and the adjustments to be made on transition from UK GAAP, were not certain. Variances between the assumptions made at PR14, and the treatment of grants and contributions as agreed with HM Revenue & Customs, have resulted in a variance in the appointed tax charge.

The impact of each of the above variations between the PR14 Final Determination and the actual appointed current tax charge is shown in the Current Tax Reconciliation in the Regulatory Annual Performance Report which can be viewed on our website;

<https://stakeholder.affinitywater.co.uk/investor-library.aspx>

## 11.5 Dividends

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Our dividend policy is primarily based on maintaining a target level of gearing (net debt to RCV) of 80%. The amount of the dividend is dependent on our ability to generate cash flows and to achieve our regulatory outputs in the reported period. The policy distributes earnings equal to the amount necessary to maintain net debt to RCV at or below the targeted gearing ratio. This is consistent with the requirements of Condition F of the licence that dividends paid will not impair the ability of the appointee to finance the appointed business and under a system of incentive regulation, dividends would be expected to reward efficiency and the management of economic risk.

All profits arising from non-appointed business activities are paid out as dividends.

## 11.6 Pension funding

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The company's pension plan providing benefits based on final pensionable salary is closed to new members (the two precursor plans closing in April 1996 and September 2004). The assets of the Affinity Water Pension Plan ('AWPP') are held separately from those of the company.

The plan's corporate trustee (the 'Trustee') is a subsidiary of Affinity Water Capital Funds Limited, an intermediate parent of the company.

We have invested in our defined benefit pension plan so that it is in a surplus on a technical provisions basis and the long-term objective is for the plan to be in a position such that it is largely self-sufficient on an on-going basis by 2026. 80% of the interest rate and inflation risk associated with the plan's liabilities are hedged by the plan's assets through Liability Driven Investment.

At the beginning of the AMP, funding of the plan on a technical provisions was at 99% moving to 110% by 31 March 2018, a surplus of £48m. On a self-sufficiency basis, funding as at 31 March 2018 had reached 95%.