

Wessex Water Services Ltd

Response to request for information – review of freeze/thaw incidents

Section A

A1. Provide details of the impacts of events on your network / customers using the attached tables (please complete both sheets). We are requesting information from the period 14 February 2018 to 14 March 2018. Please specify on which dates your company considered it was managing events rather than business as usual (the end date should be no earlier than all customers being back on supply). If you consider it appropriate, you may extend the date range (eg to the start of February) and explain why additional dates are relevant. You may not reduce the date range.

A2. Beyond the issues highlighted in Tables 1 and 2, please provide details of any further impacts your network or customers (by customer type) experienced that your company had to respond to?

A3. Details of how responding to the incident impacted on your wider business's "business as usual" operations during the incident period. Where possible provide an indication of the scale and nature of these impacts.

We had a red weather warning in force for large parts of our region. Once the weather warning was upgraded from Amber to Red, an incident team was formed headed up by our Chief Operating Officer, with the purpose of protecting our staff and maintaining services to customers.

We proactively communicated with our customers through social media to provide advice on how they could prepare themselves for freezing weather

Planned maintenance works were postponed in advance of the event to ensure resource availability. 33 Customer appointments were rearranged and a payment was made to customers as a gesture of good will to apologise for the inconvenience.

Field staff worked in pairs and were issued 4x4 vehicles to allow us to respond safely to customer calls and network problems.

Additional resources were organised for the weekend to be able to manage an increase workload. This included most of our leakage teams and repair and maintenance gangs to be able to manage a rapid thaw. It was arranged for our Customer Services Unit and 24/7 control room staff to stay in hotels to ensure that service could be maintained.

During the thaw we saw a significant increase in demand on the network, putting pressure on our service reservoirs. These were managed from our control room, using our GRID system and remote-control capability to move water around the region to the areas of greatest need. Leakage detection staff were also coordinated centrally to find and repair leaks that were causing the greatest demand on reservoirs.

A4. What have you judged to be the cause of the issues, particularly water supply interruptions, for your customers (by customer type) during this period? What factors were relevant?

Demand on the network increased significantly over the weekend of the 3rd and 4th March. Our area experienced a red weather warning so the significant temperature change caused an increase leakage levels. The majority of this appeared to be on the customer pipework or within non-household properties (four times the network leaks found). The impact on customers was limited as we ensured that water was made available to the areas of greatest

need using our GRID systems and rezones we completed quickly to allow us to complete repairs.

Section B: Planning and preparation

We want to understand what steps companies took prior to the incident period to prepare in order to minimise the impact on customers.

B1. How did your established processes for gathering intelligence and insight into the potential effects of forecast bad weather on your network help you to prepare for this event? Did they highlight any particular risks and what did you do to mitigate these? (eg network preparation, communications with customers, increased engineering or call centre resources) Did you share insights with other utilities/services?

We received regular weather forecast and weather warning updates from the Met Office. This allowed us to plan for the coming weather a week in advance, ensuring additional resources were available and non-essential planned works were rearranged. In August each year we complete a winter preparedness review, ensuring that we have the appropriate stocks of rock salt, grid and 4x4 vehicles. The rotation of these vehicles was organised to ensure they were issued to standby staff.

On the 1st March the weather warnings that covered large parts of our area were increased to Red – Risk to life. As such an incident team was convened, chaired by our Chief Operating Officer, to review our approach. To ensure that we could protect our staff we instructed that all planned work would stop until further notice and staff should be paired up to ensure no single person working, with travel in a 4x4 vehicle.

Additional resources were organised for the weekend to be able to manage an increase workload.

Hotel rooms were booked for our control room and customer services unit staff to ensure that we could maintain service to customers.

Our newly commissioned GRID system was available to allow us to move water around our network to the areas of greatest need.

B2. What impact, if any, did your preparation have on your ability to handle this event? What role did your Executive take in preparing for these severe events?

Our preparations allowed us to respond to critical alarms and maintain services to our customers.

The Executive was key to our preparation and response. An incident team was formed with the aim of protecting our staff and maintaining service to customers was chaired by our Chief Operating Officer.

B3. What emergency plans were in place and were they adequate to cope with the problems? Were those emergency plans appropriately enacted? If so, when?

We have an 'Adverse Weather Continuity Plan'. This is enacted in part in August each where we review our preparedness for adverse weather, reviewing our stocks of salt and grit and ordering in additional 4x4 vehicles. The full plan was implemented on the 1st March when our weather warning was upgraded from an Amber to Red status.

B4. What training have your staff had for responding to severe weather events, particularly freeze/thaw incidents?

Advice documentation has been issued to staff on 'Adverse Weather Preparedness'.

Our 'Adverse Weather Continuity Plan' is regularly updated following any material change or reviewed following an incident when it needs to be implemented. This updated version is then briefed out to staff

B5. What did you learn from previous incident management events, including through working with other water companies, local / regional partners, emergency services or other service providers, and how is this reflected in your current processes?

Every Summer we start our preparation for possible adverse weather as described above.

We also carry out regular incident exercises to test our preparedness. These are fully debriefed and lessons learnt are implemented.

We communicated with our customers early through social media to ensure that they were given advice on how they could prepare for the coming cold weather.

We prepared early to ensure that we had resources available to react to the freeze and the subsequent thaw.

We have a close working relationship with local resilience forums in the area and they were available to assist us if we needed them

Section C: Incident response

We want to understand how companies responded to the incident, including how it prioritised action and how the Board and Executive were involved in the process.

C1. Provide details of your established processes for responding to issues during severe weather events, particularly late winter freeze/thaw incidents (e.g. operational, governance, communications, working arrangements with other authorities through local / regional partnerships). Were these processes effective during this incident? In your response, make clear the role of your Executive in any decision making within these processes.

- Every Summer we start our preparation for possible adverse weather
- Adverse Weather Continuity Plan is in place and reviewed on a regular basis
- Incident team formed and chaired by our Chief Operating Officer
- Proactive advice issued to customers on winter preparedness
- Rescheduled non- critical planned work
- Ensured availability and use of 4x4 vehicles
- The use of our GRID system and remote control to be able to maintain supplies to customers.
- No single person working
- Regular conference calls with LRFs

C2. For this incident, please describe how your company went about deploying the resources required to respond to the incident. In responding, please detail the scale of resource deployed and from which parts of the business and/or external resources (eg supply chain, local / regional partners, business retailers) they were drawn.

Resources were managed centrally through our 24/7 control room. This allowed us to ensure the right resources were sent to the areas of greatest need.

During the initial thaw when we experienced a significant draw on the network, resources were drawn from around the Supply business to increase water production and locate and repair leaks, to protect supplies to customers.

On the 3rd – 4th March when we experienced the majority of the demand increase, the majority of the leakage team was mobilised (c.25 people) along with staff from distribution (c.12) and our utility inspectors (c.4). These were targeted at the reservoirs that were experiencing the greatest demand. They carried out leakage detection and rezone activities. Close coordination was carried out with our in-house repair and maintenance teams to complete repairs as quickly as possible.

In addition, we used our GRID trunk main system to move water around our network to the areas of greatest need.

Our PR and Customer Services teams worked closely with the central control function to ensure that customers experiencing frozen domestic pipes got the advice they needed.

C3. Provide details of how your company assessed the operational implications and prioritised its responses during the incident period.

Resources were deployed centrally through our 24/7 control room and our incident room.

We targeted our resources to the reservoirs that were experiencing the greatest demand, to protect supplies to customers.

Once our reservoir position was stable resources were then targeted at the areas experiencing the highest levels of Leakage

C4. What challenges/barriers did your company face in resolving problems that customers experienced? How did you overcome them?

Our greatest challenge was being able to move freely around our area. Large parts of the Wessex Water region were issued a Red Weather warning and had a heavy snow fall (100-150 mm). We ensured that our staff were travelling in 4x4 vehicles and in pairs. We were prioritising the calls from customers (e.g. frozen pipes) ensuring that the most vulnerable were targeted first.

C5. Provide details of how your company identified customers in vulnerable circumstances before, during and after the incident. What support was offered to these customers and how was this delivered?

Vulnerable customers are identified through our GIS mapping system. This information is also available to our customer services unit when customers contact us.

If a customer is not listed as vulnerable on our system their vulnerability is still assessed on the phone with them to ensure that they received the right care, for example bottled water if they had frozen internal pipework.

Section D: Communication and support

Regular and informative communications are especially important during major incidents. We want to understand how water companies communicated with customers and wider stakeholders during the incident.

D1. How effective were your communication processes before, during and after this incident for each of the below:

a. Customers? (residential and business);

Pre-emptive communications to customers through social media on how to protect their property from the cold weather. No reactive comms required on significant loss of Supply, outside of normal processes.

b. Customers in vulnerable circumstances and business customers for whom a water supply is critical (eg hospitals, schools)?;

Pre-emptive communications to customers through social media on how to protect their property from the cold weather. No reactive comms required on significant loss of Supply, outside of normal processes.

c. Water retail businesses?; and

Communication directly to specific retailers regarding large leaks found on several non-household properties. We also made retailer wide communication post thaw encouraging retailers to work with their customers to resolve any emerging leakage.

d. Wider stakeholders? (eg local authorities, other agencies, Government, Ofwat)

Regular situation updates with LRF's and regulators

D2. What channels did you use for communication with customers and key stakeholders before, during and after the event? (eg local, regional or national news media, social media, e-mail, SMS, hard copy letter) What were your key messages at each stage? Please provide examples of your communications material with your submission.

Once we heard of the cold weather warnings from the Met Office, we knew it was important to start pro-actively sharing our cold weather advice with customers which we started to do on social media before the 'Beast from the East' arrived.

We continued to push this messaging once the weather hit making sure it was prominently shown on the front page of our website and pinned to the top of all our social media channels.

As we didn't experience any major supply outages, our key messages to customers was to lag their pipes, what to do if they had frozen pipes and how to find and turn off their internal stop tap.

To help make sure these messages reached a large proportion of our customers we used paid social media advertising to promote our leak advice video which reached almost 48,000 customers.

A press release was also issued to local media in our supply area to advise customers to check for leaks in their home and what to do if they spotted anything.

We also made sure we shared the cold weather advice from partner agencies such as WaterSafe, Avon & Somerset Police and the Met Office on our social media feeds.

The adverse weather also impacted on our staff activities with our teams unable to travel to work safely, so we made sure we kept customers updated with regular information on our social media channels and on our website using emergency banners, advising them to visit the advice pages on our website.

Following the event, we continued to publish leakage advice on our social media feeds and on our website, including up to the return of the mini Beast from the East a few weeks later. We also used Facebook advertising again to proactively promote a video to customers which showed how we helped customers during the adverse weather.

Examples of proactive weather advice posts on social media

Wessex Water @wessexwater · Feb 23

It's feeling chilly again ❄️ so here's our advice to help wrap up your home & protect it from any frozen pipes.

- ✅ Fix any dripping taps
- ✅ Check your internal stop tap is working
- ✅ Ensure pipes in cold areas are insulated
- ✅ Consider leaving your heating on low if you go away



The graphic features a blue background with white snowflakes. On the left, there are three green Christmas trees and a house with a purple ribbon around it. On the right, a cartoon character in a brown coat and hat holds a pipe. The text 'Get your home winter ready' is in white, and 'Fix dripping taps and insulate pipes' is in blue. The URL 'wessexwater.co.uk/winter' is at the bottom.

Wessex Water @wessexwater · Feb 27

The #BeastFromTheEast is on its way and it's getting chilly! ❄️

Make sure both you & your home are wrapped up warm and take extra care - water pipes can freeze or burst in cold temperatures.

Follow the advice on our website to help get #WinterReady
wessexwater.co.uk/winter



Wessex Water @wessexwater · Mar 1

The cold weather and snow is set to continue over the next few days which can cause pipes to freeze or burst. ❄️💧

Please take extra care and keep you & your home wrapped up warm 🏠🔥

Visit our website for advice of what to do when it's icy and chilly
wessexwater.co.uk/winter





Wessex Water shared their post.
Published by Lauren East [?] · 2 March at 11:39 · 🌐

Due to the current weather situation our billing contact centre will be closed till Monday 5 March - we're sorry for any inconvenience.

If you need any help in the meantime, you can find plenty of advice and information on our website.

www.wessexwater.co.uk/Customers/Bills-and-accounts/



www.wessexwater.co.uk/wir



Wessex Water @wessexwater · Mar 5
Have you checked your property for leaks?

While there's no supply issues in our area, customers are finding problems with their own pipework following the adverse weather.

Here's our advice on what to do
[wessexwater.co.uk/About-us/News/...](http://wessexwater.co.uk/About-us/News/)



BBC Dorset, BBC Somerset, Wessex FM and 4 others



You Retweeted



Avon & Somerset Police @ASPolice · Mar 1

We're urging people affected by significant snowfall to please stay at home & not travel.

RED wind & snow @MetOffice warning for parts of Somerset, including #M5 between Taunton & Exeter. AMBER wind & snow warning for other parts of our area: socs1.in/hpt64

#StormEmma

Amber warning details
Wind & snow

Between 14:00 Thu 1st and 08:00 Fri 2nd

A spell of heavy snow is expected. The snow will be accompanied by very strong easterly winds leading to blizzards and considerable drifting. From Thursday evening some places could also see ice built up due to freezing rain. Long delays and cancellations of public transport seem very likely. Some roads may become blocked by deep snow, stranding vehicles and passengers. Long interruptions to power supplies and other utilities are likely to occur, along with possible damage to trees and other structures due to heavy snow or ice. This is an update to shrink the amber area slightly, removing parts of

Yellow warning details
Wind & snow

Warnings NOT affecting Bristol

Red warning details Wind & snow
16 miles from Bristol

Amber warning details Snow
150 miles from Bristol

Amber warning details Snow
223 miles from Bristol

Yellow warning details Snow
72 miles from Bristol

Met Office

6 105 39

Published by Lauren East [?] · 15 March at 09:33 · 🌐

It looks like the chilly weather may return this weekend 🌨️
Be prepared by checking the pipes in your home are wrapped up warm with lagging and check your internal stop tap is working. Water pipes can freeze or burst in cold temperatures.

There's also some more advice on our website
www.wessexwater.co.uk/winter



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water · Mar 1
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22,175 Views

you may wish to call a plumber - we recommend
JK approved list of plumbers.

There's also advice at wessexwater.co.uk/winter

If you do suspect you have a frozen pipe or tap in your home, try the following steps to help thaw them:

- Turn off your internal stop tap and partly turn on any affected taps until the pipes have thawed.
- If you're able to locate the frozen pipe or tap you may be able to help thaw it using a hot water bottle or wrapping it in warm towels but never use extreme heat.
- Look to see if your property supply pipe travels above ground, perhaps in a garage or outbuilding.
- Once your pipes have thawed, protect them with lagging to prevent them from freezing again.
- If you require further advice, you may wish to call a plumber - we recommend looking at the WaterSafe approved list of plumbers at www.watersafe.org.uk or on 0333 207 9030.

Customer advice videos proactively promoted on Facebook to customers in our supply area

Wessex Water
Published by Lauren East [?] · 5 March at 16:12 · 🌐

Have you checked your property for leaks?
While there's been no major problems with our water supply network, customers are finding problems on their private supply pipe – the section of pipe between the water main and the property.
Watch our video to see how you can identify a leak in your home. ...
See more



47,661 people reached

Boost Post

29K Views

Press release issued to customers in our supply area urging them to check for leaks – issued 5 March

www.wessexwater.co.uk/About-us/News/Latest-news/Homeowners-urged-to-check-for-leaks/

D3. How did you proactively engage with customers (by customer type) before, during and after the event?

We predominately used our social media channels and website to push pro-active communications to customers before, during and after the event. This included frozen pipes and cold weather advice before and during, with support on spotting the signs of leakage afterwards.

D4. What processes do you have in place for managing properties that are vacant, void or difficult to access (eg businesses that are closed at weekends) in the event of a major incident?

The management of void and vacant properties is a daily activity for our billing team. We currently have a very low number of void household properties in our region – 2.1%. For the non-household market, around 3.5% of premises are vacant. We work with retailers through regular contract management to reduce these further.

During the event we worked with retailers and their customers directly to identify leakage on non-household customers' pipework. We ensured we followed the market codes and our associated processes when doing this. We continue to work with MOSL and its working group on accessible emergency contact details for events such as these.

D5. What ongoing support after the incidents have you put in place, in particular for customers in vulnerable circumstances?

As we experienced no abnormal interruption to supplies, we were able to support customers after the snow through our BAU processes. This included a warm voice answer in our call centres, maintaining our standard responses times and pro-active cold weather advice on social media before the mini Beast from the East arrived a week later.

We are working with a Water UK working group on aligning our priority services offering with energy providers and exploring opportunities to share data with regional distribution network providers.

Section E: Impact on customers and compensation arrangements

We want to understand how water companies expect to provide customers with appropriate compensation for the disruption that they experienced.

E1. Provide details of how you will identify which customers (by customer type) are entitled to compensation.

N/A

E2. Provide details of the automatic GSS payments, including any payment penalties, you expect to pay (or already have paid) to customers (by customer type) as a result of the incident period and the total value associated to these payments.

N/A

E3. Provide details of any further compensation you will be providing to customers beyond automatic GSS payments and how the level of compensation was calculated relative to the disruption customers experienced. In doing so please provide details of the numbers of customers (by customer type) you expect to receive this and the total value associated to these payments.

33 customer appointments were rearranged due to the heavy snow, so we have issued £25 to each of these customers as a gesture of good will, to apologise for any inconvenience caused. Customers have received a cheque. Total value £825.

E4. Provide details of how long you anticipate the process of compensating all affected customers will take and the methods by which the compensation will be paid (eg automatic, cheque). Will there be an application process for any elements of compensation? If so, please describe the process.

N/A

Section F: Reflection and lessons learnt

We want to understand what lessons water companies will take on board from the events in terms of delivering greater resilience in the round for customers.

F1. Provide details of what you considered to work well and what you considered to need future improvement for your company and why in relation to:

- a) Identifying and repairing supply interruptions and actions taken to prepare the supply and network system;
- b) Communicating activities to customers/stakeholders (by customer/stakeholder type);
- c) Identifying and supporting the needs of customers in vulnerable circumstances; and
- d) Having the appropriate governance processes in place.

The use of the GRID and reconfiguration of the network worked well, allowing us to move water to the areas of greatest need.

Early planning, allowed us to ensure that we had the appropriate resources and equipment available to react to the weather.

F2. What were the biggest constraints to your company doing more, faster to respond to issues customers faced?

We were able to maintain normal service to our customers. The only constraint for us was the ability to move easily around the area due to the amount of snow and the condition of the roads.

Annex 1: Commentary for table entries

Table 1 lines 6 & 7

Core data extracted from the company Supply Interruption Log (SIL) for the period, for Unplanned incidents only which would have been almost exclusively due to bursts.

For each day the SIL has provided the number of interruptions and an actual duration for each. The average response time is given as the average interruption duration.

Only two interruption events in the period had an actual duration in excess of 3 hours.

Table 1 line 18

We have entered this value as the difference from the monitored value at 15th February. Our intention is to give a clearer indication of the impact on total leakage.

Table 1 line 20

Numbers provided are taken from the total daily SIL. Line 45 has been added to illustrate the total count of customer contacts received for 'No Water' or 'Frozen Pipes'.

The customer contact number includes a significant proportion of contacts caused by customer asset issues and not failure of the company network or assets. In addition, it will also include a number of contacts related to the network shuts. Over the period our automated alert system which flags 'Over 10 customer contacts' from discrete DMA's did not generate any alert emails reinforcing the fact that the issues were spread across the network and linked to specific and isolated properties rather than the company network itself.

Table 1 Line 21

There were no significant incidents that required deployment of bottled water or bowsers. During the period 28 February 28th to 6th March some discretionary bottled water was provided to who were without supply due to frozen pipes on the customer side.

Table 1 Line 22

No bottled water distribution or collection points were initiated during the period

Table 1 line 25 &26

The number of 'Low Pressure' customer contacts are given in line 25. It is not evident that the network became so stressed through leakage as to generate loss of pressure to widespread areas or customers. The network was NOT re-configured or pressures further reduced to conserve reservoir storage and prevent service failures. The low-pressure incidents have been addressed using our normal response process. Those attributed to isolated bursts or network shuts will have been resolved within the timescales given in lines 6&7

Table 2 Line 4

Number taken from SIL analysis of the number of unplanned shuts in Table 1as opposed to the customer numbers affected.

Table 2 Line 5

Based on current connected population of 612,123

Table 2 Line 6 & 7

Totals taken from analysis of SIL data in table 1. Breakdown of HH, NHH & vulnerable customers is estimated, requiring detailed analysis of the areas affected to ascertain accurate numbers beyond the scope of the time available

*A number for vulnerable customers has not been entered as presently no definitive number is available. That said, all vulnerable customers who became identified to us during the period were dealt with appropriately and recorded in our customer contact system. This included some vulnerable customers who were assisted with bottled water due to their own service pipes being frozen.

Selected 'Red dates' to highlight event management rather than BAU

The period from 28 February to 5th March has been selected to highlight the period where customer contact was highest and mobility due to prevailing weather was most difficult. It has not included the peak burst period of 6,7 & 8th March where although activity was intense, mobility was largely back to BAU.

Table 1 Columns D&E

These columns have been added to account for the 14th & 15th February, omitted from the original spreadsheet.