# Water supply outage scrutiny review





April 2018

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## Introduction

On the weekend of Friday 15 December through to Sunday 17 December 2017, a significant water outage occurred in Tewkesbury Borough.

There had been two previous water outages that had affected the borough in the preceding months that had impacted the Mitton area of Tewkesbury on 24 August 2017 and the Churchdown area of the borough on 30 October 2017.

The outage in December affected over 10,000 properties in the borough, a significant number of businesses – in what was a crucial trading weekend in the run-up to Christmas agricultural farmers, the community hospital and a number of nursing homes. In addition, 17 schools had to be closed.

In light of the above, and the social and economic impact on communities within Tewkesbury Borough, the Overview and Scrutiny Committee agreed, at its meeting on 6 February 2018, to undertake a scrutiny review of the water supply outage that had occurred in December 2017. At that meeting the Committee agreed Terms of Reference for the review which are attached at Appendix 1.

## **Review purpose**

The purpose of the review was to more fully appreciate the water outage incident, its causes, and the lessons that could be learnt to prevent or mitigate future water supply outages.

Specifically, the review sought to:

• understand the impact on the community and local businesses, including agriculture.

In order to achieve this, the intention was to:

- establish the cause of the incident and whether it could have been avoided;
- analyse relevant information from various partners involved in the incident, including Tewkesbury Borough Council;
- consider how well the provision of alternative water supplies, including bottled water, was managed; and
- review the general responsiveness of the multi-agency approach.

In conclusion, the intended outcome of the review was:

 to establish learning points and make recommendations to the Council and its partners that would mitigate the impact of any water outage recurrence.

# **Review methodology**

It was agreed that the whole Overview and Scrutiny Committee, as well as the relevant Lead Members, would be involved in the review, meeting in the first instance as a Working Group to receive detailed briefings and prepare questions.

The Working Group considered how to receive contributions from those affected by the water outage, including the public, small businesses and the farming community, as well as the role of Town and Parish Councils.

Following the conclusion of the Working Group meetings, a special meeting of the Overview and Scrutiny Committee took place on 24 April 2018. The meeting was held in public and included representatives from:

- Gloucestershire Fire and Rescue Service
- Gloucestershire Local Resilience Forum
- Gloucestershire Police
- Severn Trent Water
- Tewkesbury Borough Council Response Team



# Meetings of the working group

The Working Group met on four occasions prior to the special meeting of the Overview and Scrutiny Committee to conduct the review.

## Meeting 1 on 6 February 2018

Terms of Reference for the review were agreed for recommendation to the Overview and Scrutiny Committee which followed the Working Group meeting.

## Meeting 2 on 21 February 2018

At this meeting, consideration was given to a review of the events that took place over the weekend 15-17 December 2017 which, in summary, included the following:

#### Friday, 15 December 2017

#### 1000 hours

- Loss of water supply to 10,000 properties.
- Gloucestershire Local Resilience Forum activation of Operation Link.
- District Emergency Planning Liaison Officer informed via email.
- Tactical Co-Ordinating Group activated involving Severn Trent Water, Gloucestershire County Council, Gloucestershire Fire and Rescue Service, ambulance service, health partners, Environment Agency. Group operating a silver level command and chaired by the police.
- Head of Community Services briefed on the telephone by Tactical Co-Ordinating Group.

- Communications update from Severn Trent and media interviews undertaken.
- 36-inch water main had suffered a failure triggering the Water Treatment Works flow alarms leading to automatic shutdown.
- Water Treatment Works in the process of being brought back on-line.
- 17 schools closed.
- Bottled water distribution site set up at Morrison's supermarket in Tewkesbury.
- Community hospital and nursing homes in the area without water.
- Major incident not declared.

#### 1330 hours

- Burst location identified. Assessment in progress.
- Two bottled water sites in operation at Morrison's and Tewkesbury School. Third site to be activated at Chaceley Village Hall.
- Hospital and nursing homes receiving supplies to meet needs.
- Traffic in Tewkesbury causing problems.
- Major incident not declared.
- Severn Trent Water Senior Manager interviewed by media and updates provided.

#### 1630 hours

- Water Treatment Works on-line, valve opened and system refilling. Drop in pressure being investigated.
- Traffic issues currently alleviated but plan being prepared for Saturday 16 December 2017.
- Tewkesbury Borough Public Services Centre request for water.
- Flood maps assessed for main repair site.
- Major incident not declared.

#### 1900 hours

- Water Treatment Works providing water supply but pressure variables believed to be caused by demand.
- Team working on burst main undertaking risk assessment in respect of flooding on the Severn Ham.
- No change on distribution; three sites operating (Morrison's, Tewkesbury School and Chaceley Village Hall) with resources in place for all three to operate from 0700 hours the following day.
- Gloucestershire County Council re-tweeting all Severn Trent Water tweets and monitoring social media.
- All vulnerable properties in receipt of water.
- Severn Trent Water arranging bottled water for Tewkesbury Borough Public Services Centre and liaising on provision of tanker/bowser.
- Major incident not declared.

#### Saturday, 16 December 2017

#### 0830 hours

- Water Treatment Works shut down briefly overnight, but up and running again.
- Trying a different valving route. Cheltenham at risk and stress on bottled water sites.
- Water distribution sites at Morrison's and Tewkesbury School in operation. Severn Trent Water took decision not to continue to operate Chaceley site but set-up at Gloucester Road car park instead; the latter was shut down due to traffic concerns.
- 8,000 properties still without water.

- Public Services Centre running low on water.
- Major incident not declared.

### 1200 hours

- Water Treatment Works running well.
- Different valving route being tried to restore supply.
- Public Services Centre running very low on water.
- Concerns over communication of health information.
- Vulnerable people, nursing homes, hospital etc. in receipt of water.
- Farmers and animal welfare details being shared by Gloucestershire Fire and Rescue Service with Severn Trent Water.
- Tipping point identified as 1500 hours on Saturday 16 December 2017 when decision to be made to implement contingency plans for dealing with the event as an ongoing issue over the weekend and how to maintain supply to the storage reservoirs to ensure Cheltenham supply not lost.

#### 1500 hours

- New valving plan implemented having positive impact with pressure in Tewkesbury rising as well as storage increasing in the reservoir serving the Cheltenham area.
- Contingency plans being put in place if event ran into Monday.
- Communications via Severn Trent Water website and social media, including health information and handwashing etc. Advice and visits to businesses being undertaken.

- Severn Trent Water updating website and briefing TV and radio.
- No major incident declared.

### 1630 hours

- Valving work complete. Repair of main now being progressed.
- 8,000 customers back on main supply; 2,000 served by reservoirs waiting for reservoirs to refill.
- Storage reservoir levels being monitored with worst case contingency planning being undertaken.
- Public Services Centre very low on water supply.
- No major incident declared.

#### 1900 hours

- Water supply restored at Public Services Centre at 1700 hours.
- Bowser containing 900 litres of water reached Public Services Centre at 1800 hours. Public Services Centre has 6,000 litre tank and bowser did not have sufficient pressure to reach the tank.
- 2,000 properties in rural areas still without water.
- Gloucestershire Fire and Rescue Service dealing with vulnerable people not on Severn Trent Water lists.
- Situation improving but water distribution points still operating.
- Gloucestershire County Council leading on communications.
- Tewkesbury Borough Council team stood down.

#### Sunday 17 December 2018

#### 1300 hours

- Water supply restored.
- Tactical Co-Ordinating Group formally stood down.

#### 2100 hours

- Majority of properties now back on supply.
- Move to 'business as usual' and recovery.

The Working Group also considered contributions from external partners and agreed that a series of questions be compiled for Tewkesbury Borough Council's Citizens' Panel, the Chamber of Commerce and the Federation of Small Businesses, and the National Farmers' Union to obtain feedback from the community and businesses as to how they were impacted. It was further agreed to produce a short questionnaire for circulation to Town and Parish Councils with responses collated for the next meeting of the Working Group

## Meeting 3 on 22 March 2018

Following the review of the event that took place at the last meeting, a number of questions had been prepared under the following headings:

- Maintenance and infrastructure
- Water distribution
- Communications
- Community and vulnerability

The Working Group considered these carefully, adding to, expanding upon and amending the

draft questions in preparation for the review in public.

The consultation responses from the Town and Parish Councils, businesses and the Citizens' Panel were also considered and resulted in further amendment to the questions, including compensation for businesses, the role of Waterplus, infrastructure investment, network mapping and communication handovers.

It was also agreed that the final meeting of the Working Group before the review in public would include representations from Tewkesbury Town Council and a local farmer. Following this, the questions for the review would be finalised.

## Meeting 4 on 9 April 2018

The Working Group received information on Waterplus entitled 'Buyer's guide to water procurement' outlining business water market changes from April 2017. From this information it appeared that business customers had been transferred to Waterplus but information on this transfer was lacking and warranted questions of Severn Trent Water to explain the situation.

Tewkesbury Town Council attended the meeting and spoke about the water network on the Severn Ham, the number of leaks that had occurred on this site, the access problems caused by flooding and the options identified to address the issues which it was hoped could be completed within the next 18-24 months. Reference was also made to whether the Town Council had a plan for emergency water distribution and the Borough Council's intention to prepare a plan for water distribution.

A local farmer also spoke to the Working Group about the impact of the water supply outage on his livelihood. He had not received any notification that there was a problem with the water supply but there was a legal requirement for his poultry farm to have enough water to cover a 24-hour period. His tanks had not refilled overnight due to the water outage, so it had been necessary for him to find an alternative supply. A water tanker did arrive at 2000 hours on Sunday 17 December 2017 by which time the event was over and the water back on. Communication with Severn Trent Water had been a real issue and, despite being told he would receive a call back, this had not happened. The farmer was a Waterplus customer but had not been advised to contact Waterplus by Severn Trent Water. It was his view that his poultry would not survive without water beyond a 24-hour period.

Using all the information that had been provided at the Working Group meetings, the initial questions to be asked at the scrutiny review hearing were agreed. Follow-up questions would be asked depending on the responses received.

# Scrutiny review of the water outage

A special meeting of the Overview and Scrutiny Committee took place on 24 April 2018 to conduct the review of the water supply outage which occurred over the weekend of 15-17 December 2017.



Scrutiny review meeting

The following were present as witnesses:

#### **Gloucestershire Police**

- Assistant Chief Constable
- Acting Superintendent (and Tactical Co-Ordinating Group Chair)

#### Severn Trent Water

- Head of Asset Management
- Head of Customer Strategy and Experience
- Deputy Chief Engineer

Gloucestershire Fire and Rescue Service

- Assistant Chief Fire Officer

Gloucestershire Local Resilience Forum

 Gloucestershire Local Resilience Forum Secretariat Manager

Tewkesbury Borough Council

- Head of Community Services

The meeting opened with a short presentation from Severn Trent Water giving a brief overview of the water network relating to the incident and the impact of the recent deregulation of the supply of water, including Severn Trent Water's relationship with Waterplus.

This was followed by Members of the Overview and Scrutiny Committee questioning the witnesses. These questions had been divided into the following sections:

- Maintenance and infrastructure
- General
- Water distribution
- Communications
- Impact on businesses
- Conclusion

The meeting lasted in excess of three hours and provided a thorough examination of the event, with recommendations aimed at building on the learning points arising from the incident.



## Maintenance and infrastructure

The root cause of the incident had been a burst in one of the three pipes which fed into Tewkesbury and initial attempts to redirect water had been unsuccessful due to an unknown cross-connection. The network of pipes were located on the Severn Ham.

There had been problems with leaks on the Severn Ham previously - this was a complex location with significant environmental considerations; it was a Site of Special Scientific Interest (SSSI), which was home to rare plant and bird species, as well as being used for grazing.

There were a number of factors to take into account before machinery could be taken onto the Severn Ham to start excavations and there were many times during the year when it was not physically possible to access the site due to flooding.

Investigations had shown that two of the three pipes running across the Severn Ham required replacement/re-lining. Discussions were ongoing as to the preferred approach, but it was hoped the work would be completed within the next two years, or sooner if possible. In the meantime, any leaks reported were being repaired, albeit not always as quickly as would be liked due to the complexities of the site.

### **Recommendation 1**

That Severn Trent Water proceed as quickly as possible with the replacement or re-lining of two of the three pipes running across the Severn Ham.

In response to questions about why it had taken so long to locate the leak and restore the water supply, explanations were provided on the complexity of this section of the network. Locating the leak had taken some time - particularly as the burst had happened overnight, therefore it had been dark - and it was difficult to pin down the exact location within the large area that had lost water pressure.

Once the location had been established, the valving sequence commenced but, whilst this would normally require the turning of one or two valves for a street burst, the valves in this area were huge and needed to be turned 200 times by two people using a valve handle which it was calculated could take three to four hours to complete.

This did not resolve the problem and the water pressure had started to drop away on the afternoon of Friday 15 December 2017 which indicated either a secondary burst or that the first burst had not been isolated effectively. This had led to the discovery of an unknown cross-section and required a new valving sequence to be worked out. In terms of why there was no record of this cross-section, an error had been made when transposing historic drawings to electronic records due to the number of valves within this complex network. Records had been updated following this incident.



#### **Recommendation 2**

That Severn Trent Water check electronic and paper network records to ensure that they are accurate and up-to-date.

### General

A brief overview of how emergency planning worked in Tewkesbury Borough was given with the Gloucestershire Local Resilience Forum Secretariat Manager advising that the government had introduced the Civil Contingencies Act 2004 in response to the outbreaks of foot and mouth and widespread flooding that had been experienced in 2000-2001. This set out a framework for emergency planning, including roles and responsibilities. Tewkesbury Borough Council was a Category 1 responder along with the emergency services, health services and Environment Agency. Each Police force had a Local Resilience Forum which brought agencies together. A cascade system was used to notify partner agencies of an incident and put them on alert that they may need to step-up to a command and control structure. An explanation of the communications in relation to the water outage event was given, from which it transpired that it would have been helpful to have real-time communications which could be logged so that all partners could see the communications at the same time.

#### **Recommendation 3**

That consideration be given by the Gloucestershire Local Resilience Forum to introducing a real-time communication system for emergency incidents.

## Water distribution

A water distribution plan had been developed by the Gloucestershire Local Resilience Forum based on lessons learnt from the floods in 2007. The plan had been aligned to Severn Trent Water's water distribution plan but, as time had gone on, it had become clear that this needed to be revised; for example, the water industry now relied increasingly on bottled water, whereas in 2007 there had been more use of bowsers. Reference was made to the farmer who had attended a meeting of the Working Group and advised that he had been offered bottled water as a solution to meeting the needs of his livestock and that the needs of the farming community should be considered as part of this review, along with other practical issues such as mutually agreed sites, access, vehicle size, traffic impact etc.

## **Recommendation 4**

That the Gloucestershire Local Resilience Forum review of its water distribution plan include the needs of agriculture, distribution sites, vehicle access, traffic impact etc.

It was also clear that, as this plan was only brought into operation during a major incident, there was a need for a local water distribution plan for smaller scale incidents before a major incident was enacted. There had been problems around the use of Chaceley Village Hall as a third water distribution point, and the opening and closing of the Gloucester Road car park as a distribution point, that warranted the production of a local plan.

## **Recommendation 5**

That Tewkesbury Borough Council produce a local water distribution plan for events not classed as major incidents.

An explanation was given as to why the event had not been classed as a major incident and assurance provided that this had been kept under review at each Tactical Co-Ordinating Group meeting.

Reference was made to the significant traffic congestion around Morrison's supermarket arising from the establishment of the water distribution point and the efforts that had been made to alleviate this. Attempts had been made to contact Gloucestershire Highways with a view to diversions being put in place but no contact could be made and this was a matter that needed to be addressed.

## Recommendation 6

That the Gloucestershire Local Resilience Forum and Gloucestershire County Council work together to ensure that Gloucestershire Highways is included as a Category 1 responder in respect of emergency events.

It was explained why a water distribution point at Gloucester Road was undesirable – although it had a separate entrance and exit, and there were no traffic lights to interrupt traffic flow, it could cause traffic congestion which would not be helpful if there was already congestion at the other end of the town as this could be a problem for emergency services. The fact that it had been set-up regardless of these problems and communicated to the public had been an error. In addition, it had taken some time to shut it down despite a directive from the Tactical Coordinating Group. Some of the delay had been caused by a change of teams and the need to have robust handover procedures in place was reiterated.

## **Recommendation 7**

That the Gloucestershire Local Resilience Forum reiterate to all partners involved the need for directives from the Tactical Co-Ordinating Group to be responded to in a timely manner.

## **Recommendation 8**

That Severn Trent Water ensure that robust handover procedures are in place during incidents.

A discussion on the choice of Chaceley Village Hall as a water distribution point took place. It was explained that, in view of the very clear message that a water distribution point was not wanted at Gloucester Road car park, and the traffic congestion at Morrison's, an alternative out of town site was needed. Consideration had been given to Apperley or Tirley but there were concerns that this may lead to the main road in that area becoming blocked and the parishes being completely sealed off. In selecting Chaceley it had not been known that an articulated lorry would be used to deliver the water, which clearly was an issue due to the very narrow lanes that had to be travelled to access Chaceley. The original intention had been to use the Village Hall but the delivery of nine pallets was too much for the small hall and was ultimately dropped off at the small parking area at the access to the hall leaving little to no room for parking. An additional factor was that the village was on flood alert and, had the river flooded, the nine pallets of water would have had to be removed as a matter of urgency. Subsequently, Chaceley Parish Council had written to Tewkesbury Borough Council and Severn Trent Water to indicate that, should this situation occur again, Chaceley Parish should not be used as a water distribution centre. Another issue which had arisen was the fact that the Chaceley water distribution point required volunteers to man it and, although a team of volunteers had been assembled and sent out to Chaceley by Tewkesbury Borough Council, as the water had not arrived for some time, the team had been stood down by the time it had arrived.

### **Recommendation 9**

That the water distribution plans used by Tewkesbury Borough Council, Severn Trent Water and the Gloucestershire Local Resilience Forum include consideration of the type of vehicles used to deliver water to distribution sites, access routes to those sites and how those sites are to be manned.

Reference was also made to the fact that some people did not have access to cars and small communities in particular tended to band together and support each other. Dropping off pallets of water in rural locations to enable communities to support themselves was also an important consideration when drawing up water distribution plans. Communities were often very resilient with volunteering and selfhelp coming to the fore and it was important that this resource was maximised to its fullest potential in future.

#### **Recommendation 10**

That water distribution plans include consideration of how to help communities self-serve.

The Gloucestershire Fire and Rescue Service role in the incident was explained, particularly in terms of contacting, and distributing water to, vulnerable people. It was suggested that Gloucestershire Fire and Rescue Service could play a role in assisting farms; whilst there was no capacity to supply water suitable for human consumption, these restrictions may not be applicable to farms.

## **Recommendation 11**

That Gloucestershire Fire and Rescue Service explore the potential of supplying water to farms in an emergency.

The Tewkesbury Borough Public Services Centre, where Gloucestershire Police were based, had run low on water and consideration was given to the impact the closure of the building would have had on policing in the borough. Whilst Gloucestershire Police were of the view that service levels could be maintained by linking with other stations such as Bamfurlong, should this be necessary, obviously it was not the preferred option. It had taken more than 24 hours to get water to the Public Services Centre and then a very small bowser with an inadequate pumping mechanism had arrived. A breakdown in communications had meant that it had been prioritised wrongly and it had not been understood that the water needed to be pumped to the top of the building. The Public Services Centre had not been classified as a sensitive building and therefore did not have a site-specific contingency plan, as was in place for buildings such as hospitals and prisons.

## **Recommendation 12**

That Tewkesbury Borough Council, together with Severn Trent Water, consider whether the Public Services Centre should be classed as a sensitive building with Severn Trent Water. If so, a contingency plan should be put in place for the future.

Consideration was given to how vulnerable members of the community were identified and water delivered promptly to those in need. It was explained that there was a protocol in place and information had been gathered in accordance with the vulnerable people plan. It was not possible to hold a master list because of data protection issues and the information would be constantly changing and could be out of date at any one time. In an emergency, postcodes of the affected areas were passed to social care teams to check against their databases and Severn Trent Water also had its own priority services register. Severn Trent Water was undertaking further work to improve the accuracy and adequacy of the list and initiatives such as 'check on your neighbour' were promoted on its website. The role of Town and Parish Councils in providing information on vulnerable people was considered in terms of their local knowledge

about their communities.

## **Recommendation 13**

That Gloucestershire County Council and Tewkesbury Borough Council review how data on vulnerable people is shared between agencies and that consideration be given to the role that Town and Parish Councils could play in identifying vulnerable people.

Reference was made to the impact on the business community, including farmers and the risk to livestock. It was advised that Severn Trent Water's first priority had to be its vulnerable customers, followed by other domestic customers. There was a statutory requirement to provide water to sensitive buildings such as prisons, hospitals and nursing homes. Any additional capacity in terms of tankers/bowsers could then be used to support business customers. Prior to market opening, Severn Trent Water had local arrangements in place with individual businesses but the need to be fair and equitable meant that there was now a hierarchy in terms of the type of business and the order of assistance provided. A meeting with the National Farmers' Union was planned in order to better understand the needs of farmers and how joint working could be improved.

## **Recommendation 14**

That Severn Trent Water meet with the National Farmers' Union to gain a better understanding of the needs of farmers and to consider what, if any, arrangements could be put in place to improve joint working in the future. Some water retailers were looking at offering additional services to the business community, potentially at a cost. In addition, it was important for businesses to have in place contingency plans and an example was given where a farmer had no water tanks and therefore any assistance that could be given was limited.

## Recommendation 15

That the Gloucestershire Local Resilience Forum and Tewkesbury Borough Council encourage and assist businesses to put contingency plans in place for emergencies.

It was also noted that very few of the parishes within the borough had an emergency plan in place and the importance of having such plans was stressed.

## **Recommendation 16**

That Tewkesbury Borough Council work with Town and Parish Councils to develop emergency plans.

## Communications

Concerns were expressed about the fact that there had been some mixed messages released during the incident, for example, the water distribution point at Gloucester Road car park. A communications lead had been nominated by each agency with Severn Trent Water taking on the co-ordination role and reporting to the Tactical Co-Ordinating Group. There had been some problems with co-ordinated messages, dissemination of health advice, delays in updates etc. In future, the thinking was that a Category 1 responder should take the lead on the management of communications, particularly to ensure the right balance between the Category 1 responders and any considerations of other organisations involved in the emergency.

## **Recommendation 17**

That the Gloucestershire Local Resilience Forum consider and establish a clear communication procedure addressing the need for a joint communication cell led by a Category 1 responder and seamless handovers between teams.

## Impact on businesses

The impact of this outage on the business community was raised, particularly in light of the fact that the outage had taken place during the holiday period on one of the busiest weekends in the run-up to Christmas. The adequacy of the compensation amount of £50 offered to businesses was discussed, as well as the problems of businesses being passed between Severn Trent Water and retailers (such as Waterplus) and the mixed messages that were given out.

It was explained that there was a standard level of compensation for each type of incident, and this varied according to duration. This was agreed with the regulators and publicised on Severn Trent Water's website. The standard amount of compensation for businesses was a starting amount of £50 and it depended on the length of time specific businesses had been without water as to whether that amount increased. The compensation was for the interruption to the water supply and not loss of business. The question of whether insurance was available for loss of business due to a water outage was raised which it was felt should be discussed further with the business community.

In respect of the communication problems between Severn Trent Water, Waterplus and the business community, it was acknowledged that there was room for improvement and discussions were ongoing to improve upon this. Businesses were the responsibility of retailers, but obviously the water outage rested with Severn Trent Water and it was Severn Trent Water which was responsible for the messages being communicated on the outage. Additional training was being provided to both organisations and consideration was being given to amending Severn Trent Water's website to cover the business community in the event of a water outage.

### **Recommendation 18**

That Severn Trent Water consider how to improve communications with business customers, including clarification of the relationship between the retailer and the wholesaler as well as reviewing information on its website to cover the business community in the event of a water outage.

#### **Recommendation 19**

That Tewkesbury Borough Council work with businesses to ensure they are aware of how to protect against loss of business e.g. insurance.

## Conclusion

Severn Trent Water explained the review mechanisms it had in place following a major incident. A record of events was given by the people involved highlighting what had been done well and areas of improvement. This informed the updating of processes and procedures. It was also intended to look at other water outage events that had taken place to assess the cumulative impact and ensure there was sufficient resilience.

## **Recommendation 20**

That Severn Trent Water undertake a review of all the water outages in the area in 2017 to assess the cumulative impact to ensure that sufficient resilience arrangements are in place.

In terms of the Tactical Co-Ordinating Group/Gloucestershire Local Resilience Forum there had been a multi-agency debrief following the event where learning was documented and would be shared with all agencies. Overall the Tactical Co-Ordinating Group had worked well, and the experience had been positive with the right people around the table working as a team.

A full copy of the approved Minutes of the special Overview and Scrutiny Committee meeting is attached at Appendix 2.

The action plan arising from the review - setting out the recommendations, responsibility for implementation, target dates etc. - is attached at Appendix 3.

# Acknowledgements

The Chair of the Overview and Scrutiny Committee expressed the view that the review of the water supply outage had been useful and productive, resulting in an action plan that would inform any future event. He wished to acknowledge the hard work undertaken by Members and Officers and particularly thanked the representatives of Severn Trent Water, Gloucestershire Police, Gloucestershire Fire and Rescue and the Gloucestershire Local Resilience Forum for their participation, and the open and transparent manner in which they had responded to the questions.

# Appendices

- 1 Terms of reference for the review
- 2 Approved minutes of the special Overview and Scrutiny Committee held on 24 April 2018
- 3 Scrutiny review of water supply outage action plan

## Scrutiny review of water supply outage terms of reference

#### **Purpose of review:**

On the weekend of Friday 15 December through to Sunday 17 December, 10,000 households within Tewkesbury Borough suffered a significant water outage. In light of this, and two previous water outages in Tewkesbury and Churchdown, the Overview and Scrutiny Committee has expressed a wish to carry out a review of this significant event in order to more fully appreciate the incident, its causes and what lessons can be learnt to prevent or mitigate future water supply outages.

#### Method of review:

The whole Committee will be involved, and the relevant Lead Member(s) of the Executive Committee will be invited to participate.

The following partners will be invited to participate:

- Severn Trent Water
- Gloucestershire Fire and Rescue Service
- Gloucestershire Constabulary
- Gloucestershire County Council Emergency Planning
- Town and Parish Councils

The Committee will meet as a Working Group on up to four occasions to consider the Terms of Reference, receive detailed briefings and prepare questions.

The Scrutiny Hearing will take place at a Special Meeting of the Overview and Scrutiny Committee which will be open to the public.

#### Scope of review:

- To understand the impact on the community and local businesses, including agriculture, during one of the busiest weekends of the trading year.
- To collate and review relevant information from various partners, including the Council, relating to the incident.
- To establish the cause of the incident.
- To establish how well the response to the incident was managed, including internal communications between agencies and communications with the community.
- To consider how well the provision of alternative water supplies, including bottled water, was managed.
- To establish whether the incident could have been avoided.
- To establish lessons (if any) that can be learned from the incident and communicate these via the Gloucestershire Local Resilience Forum to the other agencies across Gloucestershire for consideration.

#### **Internal Resources:**

- Chief Executive
- Deputy Chief Executive
- Head of Community Services / Community Services Team
- Head of Corporate Services / Corporate Services Team
- Democratic Services

#### **Evidence Sources:**

- Emergency events logs and associated records.
- Local Resilience Forum Review report and findings.

#### **Desired Outcome:**

To establish learning points for the Council and make recommendations to partners that would mitigate the impact of any reoccurrence.

#### **Scrutiny Period Ending:**

April 2018

## **TEWKESBURY BOROUGH COUNCIL**

#### Minutes of a Meeting of the Special Overview and Scrutiny Committee held at the Council Offices, Gloucester Road, Tewkesbury on Tuesday, 24 April 2018 commencing at 4:30 pm

#### Present:

Chair Vice Chair Councillor P W Awford Councillor R E Allen

#### and Councillors:

G J Bocking, K J Cromwell, J E Day, D T Foyle, P A Godwin, R M Hatton, H C McLain, P E Stokes, M G Sztymiak, H A E Turbyfield and M J Williams

#### also present:

Councillors K J Berry, R A Bird, G F Blackwell and J Greening

#### OS.87 ANNOUNCEMENTS

- 87.1 The evacuation procedure, as noted on the Agenda, was advised to those present.
- 87.2 The Chair welcomed everyone to the meeting and introduced the representatives from Gloucestershire Fire and Rescue Service, Gloucestershire Local Resilience Forum, Gloucestershire Police and Severn Trent Water.

#### OS.88 APOLOGIES FOR ABSENCE AND SUBSTITUTIONS

- 88.1 Apologies for absence were received from Councillors T A Spencer and P D Surman. There were no substitutions for the meeting.
- 88.2 The Chair advised that Councillor K J Berry was not a Member of the Overview and Scrutiny Committee but she was a Member of the Scrutiny Review of Water Supply Outage Working Group in her capacity as Lead Member for Community, which included emergency planning, and would participate in the hearing on that basis. It was noted that Councillors G F Blackwell and J Greening had indicated that they would be observing the meeting.

#### OS.89 DECLARATIONS OF INTEREST

- 89.1 The Committee's attention was drawn to the Tewkesbury Borough Council Code of Conduct which was adopted by the Council on 26 June 2012 and took effect from 1 July 2012.
- 89.2 The following declarations were made:

Councillor	Application No./Item	Nature of Interest (where disclosed)	Declared Action in respect of Disclosure
M G Sztymiak	Item 4 – Scrutiny Review of Water Supply Outage.	Is a Member of Tewkesbury Town Council which own and manage Tewkesbury Ham.	Would speak and vote.

89.3 No further declarations were made on this occasion.

#### OS.90 SCRUTINY REVIEW OF WATER SUPPLY OUTAGE

- 90.1 Attention was drawn to the report of the Scrutiny Review of Water Supply Outage Working Group, circulated at Pages No. 1-5, which provided background information in relation to the review. Members were asked to note the information provided and to conduct the Scrutiny Hearing.
- 90.2 Tewkesbury Borough Council's Chief Executive explained that the purpose of the Hearing was to investigate the issues surrounding a significant water outage which had affected over 10.000 homes in Tewkesbury Borough in December 2017. Given the seriousness of the event, and considering there had been previous outages, the Overview and Scrutiny Committee had felt that it was appropriate to undertake a review on behalf of the Council in order to understand more about the incident and the lessons which could be learnt to prevent or mitigate future impact. The Overview and Scrutiny Committee had met as a Working Group on four occasions and had contacted Parish and Town Councils and the local community via the Citizens' Panel – in order to develop the hearing process. The aim of the hearing was to have a discussion based on a series of questions grouped into sections which would bring forward information and actions in order to produce a report which would be useful to all agencies in the future. He stressed that whilst there may be challenging questions, it was very much about working in partnership to learn lessons and improve the service received by residents in future.
- 90.3 It was subsequently

**RESOLVED** That the background information to the Scrutiny Review of Water Supply Outage be **NOTED** and the Scrutiny Hearing be conducted.

90.4 In outlining how the hearing would run, the Chair explained that there would be a short presentation from Severn Trent Water giving a brief overview of the water network relating to the incident and the impacts of the recent deregulation of the supply of water including Severn Trent's relationship with Waterplus. A series of questions had been prepared in advance and these would be put to the various witnesses in order. After each question had been asked, there would be an opportunity for Members to ask follow-up questions. He indicated that learning points would be flagged up throughout the hearing.

- 90.5 The Severn Trent Water Head of Asset Management apologised to those who had been impacted by the outage and acknowledged how difficult it was to be without water. He stressed that this sort of incident was rare and he extended his thanks to all of the partner organisations that had helped with the response. As a company, Severn Trent Water welcomed sessions such as this to look at lessons which could be learnt in order to make improvements for the future. He drew attention to a simplified diagram of the network surrounding Tewkesbury and explained that a number of works had been carried out over the years including a fluvial wall to protect the treatment works if river levels started to rise. If there was a problem with the treatment works, there were arrangements in place to ensure that water could be brought to the area from other sites. The network itself contained treated water storage which allowed time to respond to events and the pipes which came through the storage and supplied water to Tewkesbury used a twin system which built resilience into the network. Notwithstanding this, there were a lot of connections and valves between the pipes and this was a very complicated part of the network with difficult locations to access - there were three pipes running across the Ham and he would explain why this was a key aspect of the water outage as the meeting progressed.
- 90.6 The Severn Trent Water Head of Customer Strategy and Experience explained that the business market had opened for competition one year ago which had given all businesses the ability to choose a water retailer who would be responsible for billing, reading metres etc. Whilst Severn Trent remained the wholesaler i.e. it was Severn Trent's network, pipes etc. the customer's contractable relationship was with a retailer. In the lead up to market opening. Severn Trent had taken the decision that it did not wish to be in the retail market and had founded Waterplus a joint venture with United Utilities. On 1 April 2017, all Severn Trent business customers had been transferred to Waterplus; however, all businesses had the freedom to choose a different retailer if they so wished and 25 different retailers had signed a contract with Severn Trent. She explained that there were separate teams to manage relationships and, whilst customers would go through their retailer for most things, this did not prevent them contacting Severn Trent if there was a network issue. If customers did contact Severn Trent they would also let the retailer know they had been in contact and what the issue was. There was a set process for when the retailer wanted to contact Severn Trent and she confirmed that Waterplus followed the same process as the other retailers.
- 90.7 The Chair thanked the representatives from Severn Trent for their presentation and indicated that questions would now be taken around maintenance and infrastructure. A Member sought clarification as to the root cause of the incident. In response, the Severn Trent Water Head of Asset Management explained that there was a burst in one of the three pipes which fed into Tewkesbury and initial attempts to re-direct water had been unsuccessful due to an unknown crossconnection. The Member questioned whether Severn Trent ran any contingency training sessions in order to help anticipate incidents such as this and was informed that Severn Trent ran models of its assets to help predict any failures this was done across all infrastructure. Some were used routinely, and therefore examined frequently, whereas others were checked periodically. A Member indicated that the issue of leaks in the area around the Ham had been reported previously and he questioned why action had not been taken before. The Severn Trent Water Head of Asset Management reiterated that this was a complex location - the Ham had significant environment considerations, it was a Site of Special Scientific Interest (SSSI) and was home to rare plant and bird species as well as being used for grazing. As such, there were a number of factors to take into account before machinery could be taken onto the land to start excavations and there were many times during the year when it was not physically possible to access the site. In addition, the pipe itself was large; it supplied a lot of properties

and was a very important asset which had its own risks. Technically the pipe could be stable for some time so Severn Trent had to weigh up the need to do work against the difficulties of intervention. The team was aware of leaks on the Ham and a different pipe had been repaired prior to the incident at the end of December 2017; this had taken a year to fix due to issues around access and environmental concerns. Severn Trent had become aware of another issue during discussions with the Tewkesbury Town Council Ham Committee in September/October 2017 and had started the investigation process; however, the complexity of the site had meant this was still being investigated at the time of the burst in December.

90.8 A Member gueried what the maintenance plan was for this part of the network and was advised that there were different regimes for different assets. In terms of this particular site, there was a planned maintenance programme within the treatment works and ongoing routine inspections - in 2017 this had included replacing all of the filters at a cost of more than £15M. In response to a question around whether plants had to be shut down, the Severn Trent Water Head of Asset Management advised that a lot of maintenance was done with sites running and this would be the first choice. It was possible to take some out without impacting production and other mains could be used to bring water into the area if necessary. A Member noted that improvements had been made to the pipe system in this area as a result of the 2007 floods and he questioned whether any had failed during this event. The Severn Trent Water Head of Asset Management clarified that none of those improvements had failed and they had been useful during the event. In response to a question about how much investment had been put into this specific part of the infrastructure in recent years, and whether that was enough, Members were advised that the replacement of the filters was just one example and a lot of other work was being progressed - an investment of over £3M had just been signed off for works to mains across the Ham which, on face value, was guite a resilient area given the dual pipes and would not normally be a priority; however, Severn Trent had learnt from the latest incident that it was not just about the risk to the pipe but also the ability to access the site. It had been established that one of the three pipes was fine but the other two were worthy of investment, given the challenge of getting to the location, and there was a choice of relining or replacing the twin mains which needed to be discussed with the owners of the land. Relining required one of the mains to be taken out of use which meant there was more operational risk whilst the work was being done but could cause less environmental impact. He went on to indicate that more technology was becoming available which Severn Trent was able to take advantage of such as noise correlation - this could be used over long distances to check for leaks and acoustic monitors could then pin point any identified. A number of leaks had been reported since the incident in December 2017 and were currently under repair, although there had been delays due to flooding on the Ham. He provided assurance that any known leaks would be fixed now and relining/replacing the pipes would be done as quickly as possible. The Member questioned whether there was a timescale for these works to be completed. The Severn Trent Water Head of Asset Management explained that he wanted to satisfy himself that there was nothing else in the water network that Severn Trent needed to be aware of but, aside from that, the timing would be dependent on the technique being used; getting agreement with the other land users; and physically being able to access the site e.g. avoiding bird nesting season. He hoped that the works would be completed within two years - sooner if possible. A Member noted that Severn Trent recognised the Ham as a vulnerable site in terms of the environmental considerations and the fact that it frequently experienced leaks and she questioned whether there was a different plan for the site for emergencies. In her view, it seemed to warrant special maintenance and should be a priority. The Severn Trent Water Head of Asset Management confirmed that his team had been meeting with Tewkesbury Town Council's Severn Ham Committee and an environmental expert had been working closely with them and the person who ran

the control room to ensure everyone was clear about what needed to be done if access to the site was needed. This had been drawn up and shared as part of the discussions and was currently being tested. In response to a question as to whether there were provisions to re-route water if the Ham flooded, the Severn Trent Water Head of Asset Management explained that, since the event, the records had all been checked to ensure they were accurate based on what had been learnt about the cross-connections. The key thing was to isolate the valve and keep customers on supply until the repair could be carried out - in terms of the incident in December, the valve had been isolated on the Saturday and repaired over the following two to three days. The Member sought assurance that water could be re-routed if necessary and the Severn Trent Water Head of Asset Management confirmed that, with greater knowledge about cross-connections and the fact that the valves could be accessed, it should be possible to re-route the water. Another Member gueried whether there was any conflict between investment in resilience/maintenance and investment in growth and demand for the future. The Severn Trent Water Head of Asset Management provided assurance that there was no conflict and investment was not being constrained.

90.9 A Member questioned how the incident had finally been resolved and why it had taken so long to locate the leak and restore the water supply. The Severn Trent Water Head of Asset Management advised that the burst had occurred in the largest pipe and the broken section in the middle had been cut out and replaced. Severn Trent had believed that the water supply had been restored on the Friday as they had seen the water pressure rise but, when it had dropped again, Severn Trent had changed its approach and the supply had been restored on Saturday afternoon. He explained that when water pressure had dropped at approximately 00:30 hours on the Friday, Severn Trent had mobilised a full response team within the hour and ensured that staff were available 24/7 in the control room. The Severn Trent Water Head of Asset Management and the Deputy Chief Engineer were both on hand, as they would be for any incidents of this nature. Whilst models of the network were being run in the incident room, the team was on site looking for the burst. Triggering the bottled water supplies was one of the first things that had happened as well as activating vulnerable customer lists and putting other contingency arrangements in place. Locating the leak had taken some time - particularly as it had happened overnight therefore it had been dark and it was difficult to pin down the exact location within the large area that had lost water pressure. The in-house drone team had proven to be successful in that respect and Members were shown some images of the burst that had been taken by the drone when it had been dispatched at first light on the Friday. Once the location had been identified, the teams had already established the valving sequence and knew what to do. Unfortunately, it was in a highly complex section of the network: whereas one or two valves normally required turning to isolate an average burst on the street, the valves in this area were huge and needed to be turned 200 times by two people using a valve handle – it had been calculated that it would take three to four hours to complete the sequence. The proposal was to bring back water to the network gradually and, having confirmed this with customers, that was what had happened in the Tewkesbury area. On the Friday afternoon, the pressure had started to drop away which either indicated another burst - it was not uncommon to have a secondary burst - or that the first burst had not been isolated effectively. The team had worked through Friday night and Saturday morning and had discovered additional records showing a crossconnection that they had not previously been aware of. From this, they had been able to work out a new valving sequence and had started that process on the Saturday morning; it had taken until early on Saturday afternoon for supply to start to return to the network in the area. In response to a query, the Severn Trent Water Head of Asset Management reiterated that there was a cross-connection that Severn Trent had not known about. Following the incident, Severn Trent had looked carefully at that part of the network and had updated its records and

contingency plans with this information. If faced with a similar incident, Severn Trent would now have the benefit of this knowledge. In terms of why Severn Trent had no record of the cross-connection, Members were advised that an error had been made when transposing from historic drawings to electronic records due to the sheer number of valves within the complex network. A Member questioned what had happened to the cathodic mapping information that he understood had been available at one time. The Severn Trent Water Deputy Chief Engineer explained that there was always a small risk that something would be transposed incorrectly when upgrading to the Geographic Information System (GIS) platform that Severn Trent now used but this was outweighed by the benefits of using GIS. A significant learning point was the need for Severn Trent to check both its electronic and paper network plans to ensure records were accurate and up-todate. In response to a query as to whether Severn Trent now had a complete map of the network, and whether any other valves may have been lost, the Severn Trent Water Head of Asset Management clarified that it was the cross-connection which was the issue rather than the valve itself and a programme of trunk main walking would ensure that the records were an accurate reflection of what was on the ground - it was noted that trunk main walking included cracking the valves and ensuring they were operable.

- 90.10 A Member noted that the Tactical Co-Ordinating Group (TCG) had been stood down at the end of the incident; however, a small number of properties had remained without a supply of water and she questioned why the emergency response had been stood down before all properties were confirmed to be back on-line. The Severn Trent Water Head of Asset Management confirmed that Severn Trent's incident team had not been stood down until the last property was back on supply and normal business was resumed; this had run into the following week. The Gloucestershire Police Acting Superintendent advised that there were two TCG meetings on the Sunday with the first at 0900 hours. At that point several houses in Snowshill were still off-line due to an air block and their supplies were in the process of being reinstated. All of the relevant agencies had been around the table for the next TCG at 1300 hours and, when the TCG had been stood down, there had only been two homes without water– this was considered to be "business as usual" and had been transferred to the Severn Trent incident team.
- 90.11 A Member questioned whether the pipeline to Strensham had been used during the incident and the Severn Trent Water Head of Asset Management confirmed that it had helped to support the wider area during the event. He clarified that there were two mains which supported the area, both with different characteristics and value for Severn Trent the other one had not been used and the outcome would not have changed had it been used.
- 90.12 The Chair indicated that general questions would now be put to the various bodies. A Member requested a brief overview of how emergency planning worked in Tewkesbury. The Gloucestershire Local Resilience Forum (LRF) Secretariat Manager advised that the Government had introduced the Civil Contingencies Act 2004 in response to the outbreaks of foot and mouth and widespread flooding that had been experienced in 2000/01. This set out a framework for emergency planning and response from a local to national level and outlined certain roles and responsibilities. As a local authority, Tewkesbury Borough Council was a category one responder along with the emergency services, health services and the Environment Agency which came together to carry out detailed tasks e.g. joint risk assessments. Each Police Force had an LRF – this was a statutory requirement not a statutory body i.e. the LRF was not a separate organisation but it brought all agencies together. Tewkesbury Borough Council participated in the district level meetings which were held several times a year and chaired by the Chief Constable. The Tewkesbury Borough Council Head of Community Services indicated that this was reflected at Tewkesbury Borough Council which had an emergency planning structure involving the management team and other members

of staff who were put into action as and when events happened. The team responded very well as had been proven during the 2007 floods. He pointed out that it was slightly different for Tewkesbury Borough Council when the event happened on a weekday, as in the case of the water outage, as it was necessary to manage the response alongside the Council's day-to-day business to keep services operating for members of the public. A Member questioned how it was communicated and was advised that a cascade system was used to notify partner agencies of an incident and put them on alert that they may need to step up to a command and control structure. There would be several questions around communications later in the discussion but he explained that Tewkesbury Borough Council had received notification of this incident at around 0800 hours on the Friday - as soon as Officers had arrived at work they were aware of what needed to be done and were ready to participate in the first TCG. As an incident grew communications were key and he confirmed there had been regular communication with Tewkesbury Borough Council's Chief Executive and the Deputy Chief Executive. In his view the response had been appropriate and at the right level. The Tewkesbury Borough Council Chief Executive explained that he had been quite heavily involved in the Council's response and felt that communication had been effective between all agencies in terms of the LRF framework, particularly around the TCGs; notwithstanding this, there had been a number of telephone calls and emails between those meetings and he felt it would have been helpful to have real-time communications which could be logged so that all partners could see the communications at the same time. The Assistant Chief Fire Officer advised that making communications more effective had been added to the Agenda for the next strategic LRF meeting.

90.13 A Member sought clarification as to what constituted a 'major' incident and gueried whether there was a plan for bottle water distribution in those circumstances. The Gloucestershire LRF Secretariat Manager explained that, until fairly recently, there was no national definition of a major incident and each of the different agencies had their own versions. In 2016, the Cabinet Office had defined a major incident as: "An event or situation, with a range of serious consequences, which requires special arrangements to be implemented by one or more emergency responder agencies". This was supported by five notes, three of which were pertinent in this case: a major incident is beyond the scope of business-as-usual operations, and is likely to involve serious harm, damage, disruption or risk to human life or welfare. essential services, the environment or national security; the severity of consequences associated with a major incident are likely to constrain or complicate the ability of responders to resource and manage the incident, although a major incident is unlikely to affect all responders equally; and, the decision to declare a major incident will always be a judgment made in a specific local and operational context, and there are no precise and universal thresholds or triggers. With regard to a water distribution plan, after the floods in 2007, the Gloucestershire LRF had developed a plan based on lessons learnt; this was the first of its kind and had been replicated around the country. The plan had been aligned to Severn Trent's water distribution plan but, as time had gone on, it had become clear that this needed to be revised, for example, the water industry now relied increasingly on bottled water whereas in 2007 there had been more use of bowsers. This was something which needed to be addressed and a full review was on the LRF work programme. A Member pointed out that the Working Group had heard from a farmer who had been offered bottled water which was clearly not viable and the Gloucestershire LRF Secretariat Manager provided assurance that all scenarios would be considered as part of the review. Another Member indicated that she understood the water distribution plan had not been implemented in relation to the water outage as it had not been classified as a major incident; in her view the list would have been helpful and should have been used irrespective of the official classification. The Tewkesbury Borough Council Head of Community Services explained that there was a plan for bottled water distribution

as part of a major incident. One of the learning points arising from the water outage was the need for the plan to come into play at an earlier stage so that everyone was clear on the type of vehicles that needed to be used and the suitable locations for distribution etc. It was his intention to design something locally - in consultation with Severn Trent - which would be shared with the LRF as best practice. The Severn Trent Water Deputy Chief Engineer indicated that Severn Trent had been working through its water distribution plan and there was no logical reason why the same list could not be enacted for smaller scale events. In response to a query regarding the timescale for the water distribution plans to be revised and updated, the Tewkesbury Borough Council Head of Community Services indicated that there was no reason why this could not be completed within the next three months.

90.14 A Member noted that Gloucestershire Police had chaired the TCGs and run the emergency planning process and she questioned whether consideration had been given to declaring the outage a major incident at any point. The Gloucestershire Police Assistant Chief Constable explained that he had not been involved in the response and the Acting Superintendent was the tactical lead as the most experienced officer available at the time. There were no hard and fast rules about who chaired the TCGs or the Strategic Co-Ordinating Groups (SCGs) but the default was normally someone from Gloucestershire Police. The Gloucestershire Police Acting Superintendent confirmed that she had chaired the TCGs and specific consideration had been given to the definition of a major incident at the first meeting, as well as setting out the working strategy for the TCG going forward. The decision not to declare the water outage as a major incident had been made by the TCG as a whole following discussion. This had been revisited at every subsequent TCG – four on the Friday and one on the Saturday morning where it had been decided to hold an SCG at which the same decision was made. The Gloucestershire Police Assistant Chief Constable advised that, in his view, there was no right or wrong answer in terms of whether the event should have been categorised as major. He did not think there would have been significant value in declaring a major incident; however, he considered there should have been a better water distribution plan and the plans that were available should have been used without triggering a major incident. A Member recognised that Severn Trent had initially thought that the water supply had been restored on the Friday but had then seen another drop in pressure and he questioned whether a major incident would have been declared had the information about the problem been accurate from the outset. The Gloucestershire Police Acting Superintendent advised that the conclusion on the Saturday in terms of whether a major incident would be declared was that, if there was additional disruption to water supplies in Cheltenham and Gloucester – which was a risk – there would have been serious consequences and it should be escalated at that point. She confirmed that she had been happy that the right level of resource was around the table and that nobody else had needed to be involved. The Severn Trent Water Deputy Chief Engineer indicated that Severn Trent had also been operating at the right level and no other personnel would have been involved had it been declared a major incident. In terms of the information about the cause of the outage and when it would be resolved, the Gloucestershire Police Acting Superintendent advised that the TCG had acted on the information available at the time and she was happy that was accurate. In response to a query as to whether there were any disadvantages associated with declaring a major incident, the Gloucestershire Police Acting Superintendent confirmed that there were no additional consequences either way. She reiterated that the relevant authorities had been available to make decisions, the situation had been reassessed at every stage and further discussion had taken place with the SCG which had all resulted in the decision not to declare a major incident at any point.

- 90.15 A Member pointed out that the water distribution associated with the 2007 floods had required significant manpower and he questioned whether the military had been contacted in respect of the water outage. The Gloucestershire Police Acting Superintendent clarified that there was a formal procedure which needed to be followed if military aid was required and there was additional criteria which needed to be met over and above that of a major incident. The Gloucestershire Police Assistant Chief Constable advised that the LRF had a good relationship with the military and it had access to a contact who could give advice and support about what could be done informally; however, if resources were required, this had to be requested through the appropriate channels. The Gloucestershire LRF Secretariat Manager advised that the regional liaison officer had been aware of the incident and had dialled in.
- 90.16 Tewkesbury Borough Council's Chief Executive felt that an important point had been made about the changing nature of the incident and the timescales associated with it; there was a potential for an incident to grow, either in terms of geography or intensity. Tewkesbury Borough Council had been capable of operating from the Public Service Centre building, which also housed a police station and a number of other agencies, until the Saturday afternoon but beyond that the water supply would have run out completely and Tewkesbury Borough Council would have been severely restricted in terms of its duty to respond to the incident - he would have regarded the water outage as a major incident in that event. The Gloucestershire Police Acting Superintendent echoed these sentiments. The Gloucestershire Police Assistant Chief Constable advised that the technical term was a 'rising tide' incident but it was only possible to act on the information that was available at the time. In response to a query as to whether Tewkesbury Borough Council would have been required to take control had a major incident been declared, Members were advised that the chair of the TCG had already been established and this would remain the same for continuity purposes. For many major incidents it was typical for the Police to chair the response phase and the local authority to chair the recovery phase. Tewkesbury Borough Council's Chief Executive clarified that, from the local authority's perspective, at no point during the incident did the Police act in any way other than to fully support and respond to the incident. There was a good relationship between the LRF partners and this had been reflected throughout the incident.

The meeting adjourned at 5:55pm and reconvened at 6:15pm.

90.17 The Chair indicated that he would now be taking questions in relation to water distribution. A Member pointed out that there had been reports of significant traffic congestion around Morrison's in Tewkesbury and queried what had been done to manage this. The Gloucestershire Police Acting Superintendent explained that the outage had occurred in the week before Christmas and therefore the situation was very different given the traffic on the roads. Congestion had been managed as best it could, for example, using ambulance service motorcycles to navigate the traffic and report back. Attempts had been made to contact Gloucestershire Highways with a view to putting diversions in place but they could not be engaged on the Friday afternoon and this was something which had been picked up in the debrief. It was not an easy situation and everyone had done the best they could; whilst it was slow moving, traffic had been able to move freely. In response to a query as to whether Morrison's would be used as a water distribution site in future. the Gloucestershire Police Acting Superintendent indicated that Morrison's had been used several times in 2007, 2016 and 2017 and she felt it was a good site as was Tewkesbury School - given its central location and easy accessibility so she would be happy to use it again. A Member questioned why the TCG did not want a water distribution point at Gloucester Road car park as he felt it was a good location in that it had a separate entrance and exit and there were no traffic lights to interrupt traffic flow. The Tewkesbury Borough Council Head of Community Services explained that, from his point of view, it would not have been helpful to

have traffic congestion at both ends of the town as this could have been a problem for the emergency services. Gloucester Road car park was not considered to be the most appropriate place for a water distribution point but it had been set up regardless and this had been communicated to the public which was a problem. In addition, it had taken some time for the water distribution point to close when this had been directed on the Saturday morning which should not have been the case and was a significant learning point. The Member asked why the water distribution point had been set-up in the first place if this had not been identified as an appropriate location and why those commands had been over-ruled. The Severn Trent Water Deputy Chief Engineer indicated that this was an error on Severn Trent's part and had been picked up in its own debrief as a learning point.

90.18 In response to a question about the logic behind choosing Chaceley Village Hall as a water distribution point, the Tewkesbury Borough Council Head of Community Services reiterated that there had been traffic congestion at Morrison's, and a very clear message that a water distribution point was not wanted at Gloucester Road car park, so an alternative out of town site was needed. Consideration had been given to Apperley or Tirley but there were concerns that this may lead to the main road in that area becoming blocked and the town being completely sealed off. He had a list of possible sites and had opted for Chaceley which, in hindsight, had not been the best place, particularly as an artic lorry had been used to deliver the water. Had he known the type of vehicle that would be used, he would not have chosen Chaceley, however, the route around the village was circular and it may have been appropriate had a palette of water been dropped off for people to help themselves. He provided assurance that the importance of understanding the water distribution locations and the type of vehicles that would be used to deliver water had been recognised. In response to a query, he advised that Tewkesbury Borough Council did not have a plan in place setting out which routes and vehicles should be used for particular water distribution locations but this would be considered and included in the water distribution plan which he had committed to delivering within the next three months. It would also be necessary to incorporate how the water distribution points would be manned; Tewkesbury Borough Council had assembled a team of volunteers during the water outage and they had been deployed to Chaceley, however, the water had not arrived for some time and the volunteers had been stood down by the time Severn Trent had arrived with the vehicle. A Member indicated that Chaceley Village Hall was used by local residents at times of flood, which had been a concern during this particular incident, and he expressed the view that Tirley Village Hall – which had been used during the 2007 floods – would be a better option for the future. The Gloucestershire Police Acting Superintendent felt that there was also a key learning point around rural locations and being able to drop off palettes of water to enable communities to support and help themselves. In her experience. communities were very resilient and there was a lot of volunteering which could be drawn upon in future. A Member felt it was important to note that some people did not have access to a car and their needs must also be considered in the water distribution plans. The Gloucestershire Police Acting Superintendent provided assurance that this was taken into account - a number of water distribution tactics were used during the incident and tankers had been provided for hospitals, care homes etc.

90.19 A Member questioned what role Gloucestershire Fire and Rescue Service had played in managing the incident. The Assistant Chief Fire Officer advised that he was the strategic officer in relation to the incident and the Gloucestershire Fire and Rescue Service had provided logistical support at the TCGs. The TCGs were a high challenge environment and the chair's job was to manage the discussion and ensure that every agency had an opportunity to feed into that. Gloucestershire Fire and Rescue Service sat within Gloucestershire County Council and acted as a conduit for information which was disseminated across the county. The County

Council also hosted the Civil Protection Team and Gloucestershire Fire and Rescue Service supported that team to deliver what was needed. On an operational level, direct support was offered to over 500 vulnerable people in the community; this meant that staff were on the ground making contact with the most vulnerable and ensuring their health and safety was maintained. A Member queried whether Gloucestershire Fire and Rescue Service could take water to hospitals and farms. The Assistant Chief Fire Officer advised that there was no capacity to supply potable water suitable for human consumption therefore it was not possible to assist hospitals; however, supplying water to farms was something which could be explored. A Member went on to question how an incident of this nature affected Gloucestershire Fire and Rescue's capacity for dealing with a major incident. The Assistant Chief Fire Officer explained that the Fire and Rescue Services Act 2004 set out a responsibility to provide water for firefighting purposes. During "business as usual" the majority of water was taken from fire hydrants connected to mains water, although there were contingency plans for dealing with a failure in the mains supply. For incidents of a certain scale, i.e. requiring multiple fire appliances, there was a mutual agreement with surrounding Fire Services that extra support would be provided to enable firefighting to take place. Whilst mains supply was the primary source of water, the Fire Service had means of drawing water from other sources e.g. rivers and swimming pools and it had the ability to pump water across long distances in a relatively short period of time. Whilst there may be an impact in terms of speed of response, there would be no significant overall impact in terms of being able to respond to a fire during a water outage.

- 90.20 A Member noted that reference had already been made to the fact that the Public Service Centre had run very low on water and she questioned what impact the closure of the building would have had in terms of policing in the borough. The Gloucestershire Police Acting Superintendent indicated that she was happy that links could have been made with other stations and community facilities just outside the affected area, e.g. Churchdown and Bamfurlong, and that the Police response could be maintained and supplemented to ensure compliance with rest breaks etc. The Member understood that it had taken more than 24 hours to get water to the Public Services Centre and she sought an explanation as to why it had taken so long and why a small bowser with an inadequate pumping mechanism had been sent to fill a 6,000 gallon tank. The Severn Trent Water Deputy Chief Engineer advised that the Public Service Centre was not currently classified as sensitive and therefore did not have a site-specific contingency plan in the same way as hospitals and prisons. A breakdown in communications had meant that it had been prioritised wrongly and it had not been understood that the water needed to be pumped to the top of the building. Severn Trent Water accepted that the response was not what had been expected and there was a need to look at whether the building could be classed as sensitive. A Member pointed out that the building had been used as a rest centre during the floods in 2007 so there was an expectation that a provision would be in place to identify it as a priority for resources. The Tewkesbury Borough Council Head of Community Services felt that the Council could have been clearer about its requirements and this would be discussed with Severn Trent to ensure both parties were fully aware of what was needed going forward.
- 90.21 In response to a query around how vulnerable members of the community were effectively identified and water promptly delivered, the Gloucestershire LRF Secretariat Manager explained that there was a protocol in place and information had been gathered in accordance with the vulnerable people plan. The LRF was not able to hold a master list sensitive data could not be retained "just in case", furthermore, the list would be constantly changing and was likely to be out of date at any one point in time. In an emergency situation, the LRF requested postcodes of affected areas and asked the social care teams to check these against their databases; this information was then passed on to Severn Trent in order for bottled

water to be delivered. The Severn Trent Water Head of Customer Strategy and Experience clarified that Severn Trent had its own priority services register and, in the event of a major incident, these customers would be contacted to establish their needs. This list was cross-referenced with the information from the LRF to ensure it was as accurate as possible and any vulnerable person contacted throughout the event would be asked if they wanted to be added to Severn Trent's register. A Member raised concern that there could potentially be a number of gaps, particularly as the criteria for vulnerability could change over the course of an event. The Severn Trent Water Head of Customer Strategy and Experience advised that transient vulnerability was recognised, for instance, someone who had just come out of hospital or someone with a young baby, and every attempt was made to acquire as much information as possible in this regard. Severn Trent was working with energy providers and other partners around sharing data and the website was used to promote other initiatives, such as checking on a neighbour; however, there would never be a definitive list. The Gloucestershire Police Acting Superintendent indicated that people tended to self-refer as an incident went on therefore it was crucial for lists to be checked and updated as things progressed, particularly if the issue extended beyond a 24 hour period. A Member questioned how databases and data sharing would be impacted by the General Data Protection Regulations (GDPR) being introduced in May 2018. The Severn Trent Water Head of Customer Strategy and Experience clarified that GDPR did not change the ability for Severn Trent to hold lists provided that consent had been given by the customer and everyone currently on the system was being contacted. In response to a query, the Gloucestershire LRF Secretariat Manager indicated that it was not possible to contact everyone and there was reliance on feedback from community groups so it was very important that people came forward with information. In terms of whether Flood Wardens and Parish Councils could have been used to give information on vulnerable people within the community, the Tewkesbury Borough Council Head of Community Services confirmed that Parish Councils could be a valuable source of information, particularly in terms of transient vulnerability where there was a reliance on local knowledge, and sharing data would be picked up as a key learning point. Whilst it was important to comply with GDPR, agencies also had a responsibility to keep people safe and this process needed to be reviewed. A Member noted that vulnerability would depend on the situation - some people did not have access to a car and would not be able to carry several bottles of water - and he questioned whether information had been disseminated on local radio. The Gloucestershire Police Acting Superintendent confirmed that Severn Trent had used the radio to communicate with residents; the TCG had discussed the need for neighbours to support each other and this was one of the key messages being reported on the Saturday of the incident. In terms of communications, the Severn Trent Water Deputy Chief Engineer pointed out that its website had been updated 28 times throughout the incident and there had been 278 media posts and 100 radio pieces; whilst it may not have been perfect, a lot of good work had been done to get messages out.

90.22 A Member explained that she had assisted with bottled water distribution during the 2007 floods and one of the difficulties had been the lack of hard and fast rules about how many bottles people were entitled to etc. This had caused some arguments and confrontation. The Gloucestershire Police Acting Superintendent indicated that, in reality, there was very little that could be done in this regard; Severn Trent was required to provide water and it was important to be flexible in terms of distribution. Ultimately, if more bottled water was used than anticipated then this was not a particular problem and it was a matter for the conscience of anyone taking more than required, and potentially for the Police if a situation got out of hand.

- 90.23 As alluded to earlier in the debate, the Scrutiny Review Working Group had heard from famers that the incident had put livestock at risk and a Member questioned whether any consideration was given to water distribution for agricultural purposes. In response, the Severn Trent Water Head of Customer Strategy and Experience advised that Severn Trent's first priority had to be its vulnerable customers followed by other domestic customers. There was a statutory requirement to provide water to sensitive buildings such as prisons, hospitals and care homes. Any additional capacity in terms of tankers/bowsers could then be used to support business customers. Prior to market opening, Severn Trent had local arrangements in place with individual businesses and had been able to support them accordingly but this had not necessarily been fair to all businesses; market opening meant that it was necessary to be fair and equitable and there was now a hierarchy in terms of the type of business and the order assistance was provided e.g. a bookshop where water was not needed for its processes would be a low priority whereas farms would be higher up the list. In any event, Severn Trent would look at what capacity was available and it had not been in a position to provide tankers to support farms at the start of this particular event. She was meeting with the National Farmers Union (NFU) the following week to understand how they could better work together. She pointed out that some water retailers were looking at offering additional services, potentially at a cost. In addition, she felt that businesses needed to ensure they had contingency plans in place, particularly farms, and she gave an example in another area where a farmer had no tanks and therefore the help that could be offered was very limited. A Member indicated that she had been concerned to hear that, when water had eventually been delivered to a farm in the area during the incident, the tanker had come from London. The Severn Trent Water Head of Customer Strategy and Experience confirmed that Severn Trent had its own fleet available but, in a major incident, there were opportunities to ask other water companies to assist. The Gloucestershire Police Assistant Chief Constable felt that it should be borne in mind that decisions were made by the various agencies according to a joint decision model which called upon legislation such as the Human Rights Act which stated that animals were not a priority in terms of the preservation of life; this was not to say that judgements would not be made according to the situation but the legislation was very clear. In response to a auery, the Tewkesbury Borough Council Head of Community Services advised that only a handful of the 50 Parishes within the borough had an emergency plan in place and he felt it was important for the Council to work with the remainder to develop their own plans.
- 90.24 The Chair indicated that the next set of guestions related to communications. A Member raised concern that mixed messages had gone out during the incident, for example, the water distribution point at Gloucester Road car park, and he questioned if there as a communication strategy and who was in charge of it. The Gloucestershire Police Acting Superintendent advised that a communication lead had been nominated for each agency; they had been able to have conversations outside of the TCGs and report back as a single voice, in this case Severn Trent had taken that role. There was an issue on the Saturday when communications were not as co-ordinated as they could have been and it was now thought that a category one responder should have been responsible for leading that element of the response. This had been identified in the debrief and the LRF would be implementing this going forward. The Tewkesbury Borough Council Head of Community Services felt that there was general point around the management of communications, who was leading each agency and the main responder etc. A Member noted there had been a delay in the uptake and dissemination of health advice and she questioned why this information had not been publicised sooner. The Severn Trent Water Deputy Chief Engineer explained that Severn Trent had a number of prepared messages in place and, whilst public health handwashing

advice had been provided, it was not a requirement. When the TCG had indicated that this information needed to be communicated. Severn Trent had included this on its website. A Member understood that the handover between Severn Trent Officers at the TCGs had been badly organised and led to a delay in updates. She questioned whether there was a formal handover procedure and why it had not worked on this occasion. The Severn Trent Water Head of Asset Management advised that shifts were overlapped to ensure a 30 minute handover. The issue in this instance was with Severn Trent's control room where there were multiple workstreams in operation; a single point of contact had been established on the Saturday and this had been extremely helpful in terms of consistency and the smooth running of the TCGs. A Member questioned whether setting up a joint communication cell early in the incident would improve communication to the public and the Gloucestershire Police Acting Superintendent confirmed that there was a communication cell from the outset; the issue was the balance between the category one responders and the commercial entity and she confirmed that communications would be led by a category one responder going forward. In response to a query as to what level of contact had been made with Parish Councils in the affected areas to keep them informed, the Severn Trent Water Head of Asset Management advised that there was direct engagement with affected Parish Councils; this was of key importance to him and he had met with some of them subsequently. Emergency plans had already been discussed - selfserving in an emergency would be extremely helpful and this was something Severn Trent could assist with.

90.25 The Chair advised that questions would now be posed around the impacts on businesses. A Member questioned whether Severn Trent recognised the cost of the outage to local businesses. The Severn Trent Water Head of Customer Strategy and Experience was aware that the nature, duration and timing of the incident had been critical and she provided assurance that every effort had been made to restore the water and get everything working normally. Another Member noted that businesses had been offered £50 compensation and he queried how that figure had been derived and whether it was sufficient for the loss of business experienced. The Severn Trent Water Head of Customer Strategy and Experience advised that there was a standard level of compensation for each type of incident and this varied according to duration. This information was agreed with regulators and publicised on Severn Trent's website. The standard amount of compensation for businesses was a starting amount of £50 and it depended on the length of time specific businesses had been without water as to whether that amount increased. It was important to recognise that Severn Trent was compensating for the interruption to the water supply and not for loss of business. In response to a further question about the process for paying compensation, Members were informed that Severn Trent wrote to each individual business to advise them of the compensation, this was then given to the retailers for distribution to businesses in accordance with the prescribed timescales. A Member raised concern that businesses had been passed from pillar to post between Severn Trent and Waterplus and he sought clarification as to who businesses should contact if this incident happened again. The Severn Trent Water Head of Customer Strategy and Experience agreed that this was unacceptable and she apologised for the situation. Waterplus was the biggest retailer in the area and she had met with them following the event to discuss lessons learnt. It was recognised that Severn Trent had caused some of the confusion and mandatory training had been re-rolled out to all staff that came into contact with customers. As the supplier, it was important that Severn Trent owned the message in that sort of event, it was not something which should be passed on to the retailer; whilst retailers may offer added value, and therefore may be able to help, this was not their responsibility. She was conscious that the communications on the website currently had a domestic focus and consideration would be given as to how that could be made more specific for business customers. She clarified that Severn Trent did not hold

business customer details but they could be invited to register a contact number if they wished to be kept informed during incidents. A Member stressed the importance of Severn Trent having first responders who were properly trained for emergencies. She made reference to a farmer who had been told by Waterplus that he could get bottled water from Morrison's and pointed out that communications with Severn Trent had been repeatedly criticised by participants in the Scrutiny Review. The Severn Trent Water Head of Customer Strategy and Experience agreed completely but pointed out that she had no control in respect of the staff at Waterplus. She was aware of incidents of miscommunication, and this was part of the challenge of working with other organisations, but she provided assurance that these conversations were taking place. In response to a query, the Tewkesbury Borough Council Chief Executive indicated that he was not sure what insurance was available for loss of business arising from water outages but this was something which could be discussed with businesses.

90.26 In moving to the concluding questions, a Member asked what review mechanisms Severn Trent Water had in place following a major incident and whether there was a list of learning points following the water outage. The Severn Trent Water Head of Asset Management explained that a "lessons learnt" review was undertaken following an incident; the extent of the review would depend on the scale of the incident. A record of events was given by the people involved, highlighting what had been done well and areas for improvement, and processes and procedures would be updated accordingly. In terms of this particular outage, the co-location of the LRF had been beneficial and the importance of a single point of contact in the control room had been recognised. It was felt that good quality briefing notes had given clarity on what had been done and the next steps which helped in terms of building confidence. The vulnerable persons list had been obtained quickly which had ensured those people received assistance straight away. As for learning points, it was felt that emergency plans would help Parishes to self-serve and businesses would benefit from clarity of the relationship between the wholesaler and retailer. It was clear that work needed to be done around farming and livestock and Severn Trent was keen to work with the NFU to establish what could be done to help one another. It was also committed to a communication cell and taking a joint communication approach with the LRF. As mentioned at the start of the meeting, Severn Trent's asset records had been updated and plans were in place to ensure that bottled water distribution plans were developed in advance and that existing contingency plans contained detailed arrangements. A Member indicated that, prior to this incident, there was a water outage in Churchdown and he questioned what lessons had been learned as a result of that and whether they had been put into practice. The Severn Trent Water Head of Asset Management explained that the cumulative impact of the two incidents was something which needed to be considered and it was intended to look back at other events to ensure there was enough resilience. The Gloucestershire Police Acting Superintendent advised that, from her perspective, the TCGs had been very positive - command and control had worked well and the right people were around the table working as a team. It was noted that Worcestershire County Council had been involved in the initial TCG as there was a concern that water supplies in that area had been impacted so there had also been joint working across boundaries. She had been impressed at the speed of communications on the Friday morning and pointed out that she had heard the outage being reported on the radio on her way into work; significant information had therefore been available to enable the TCG to start a plan straight away. Tewkesbury Borough Council's Head of Community Services felt that the clarity of the TCGs had been excellent, particularly given the amount of voices in the room and on the telephone. This was echoed by the Severn Trent Water Deputy Chief Engineer. The Gloucestershire Police Acting Superintendent reiterated that there had been a multi-agency debrief following the event documenting the learning - as there would be for any incident and this had been shared with all agencies. There would be a number of

recommendations, both from that report and the Scrutiny Review, to be taken forward in order to help with the management of any incidents going forward. A Member questioned whether there were any issues arising from the LRF review that had not been covered at the meeting today. The Tewkesbury Borough Council Head of Community Services was pleased to report that the outcomes and key points had been very similar.

90.27 The Chair thanked the witnesses for attending the meeting and for being open and transparent. He felt it had been a very positive session and he thanked Members and Officers for their hard work throughout the review. The next stage would be to produce a report and action plan which would be presented at the Overview and Scrutiny Committee meeting in July.

The meeting closed at 7:50 pm

#### SCRUTINY REVIEW OF WATER SUPPLY OUTAGE ACTION PLAN

	Recommendation / Action	Responsible Authority	Target Date	Status	Progress to Date
1	To proceed as quickly as possible with the replacement or re-lining of two of the three pipes running across the Severn Ham.	Severn Trent Water	08/2020	$\odot$	Project promoted and feasibility work underway.
2	Check electronic and paper network records to ensure they are accurate and up-to-date.	Severn Trent Water	01/2018	1	Action complete. Electronic records of the network in the area updated with information gathered during the incident.
3	Consider introducing a real-time communication system for emergency incidents.	Gloucestershire Local Resilience Forum			
4	Ensure that the needs of agriculture, distribution sites, vehicle access, traffic impact etc. are included in the Gloucestershire Local Resilience Forum's review of its water distribution plan.	Gloucestershire Local Resilience Forum			
5	Produce a local water distribution plan for events not classed as major incidents.	Tewkesbury Borough Council	10/2018		

	Recommendation / Action	Responsible Authority	Target Date	Status	Progress to Date
6	Ensure that Gloucestershire Highways is included as a Category 1 responder in respect of emergency events.	Gloucestershire Local Resilience Forum / Gloucestershire County Council		~	Action complete. Gloucestershire County Council Works Team Manager has confirmed that a Gloucestershire County Highways representative is involved in the response to future emergency events.
7	Reiterate to all partners the need for directives from the Tactical Co-Ordinating Group to be responded to in a timely manner.	Gloucestershire Local Resilience Forum			
8	Ensure that robust handover procedures are in place during incidents.	Severn Trent Water	01/2018	~	Action complete. Handover procedures are in place during incidents. The learning of having a dedicated person to interface between the control room and people located with the Gloucestershire Local Resilience Forum has been embedded.

	Recommendation / Action	Responsible Authority	Target Date	Status	Progress to Date
9	Ensure that water distribution plans include consideration of the type of vehicles used to deliver water to distribution sites, access routes to those sites and how those sites are to be manned.	Tewkesbury Borough Council / Severn Trent Water / Gloucestershire Local Resilience Forum	10/2018		Severn Trent Water – Changes have been made to the process for manning sites and discussions held with our supplier to access alternative vehicle sizes. Suitable distribution sites identified in the area. Meeting to be held with Tewkesbury Borough Council and Gloucestershire Local Resilience Forum to get feedback and formalise the plans.
10	Ensure that water distribution plans include consideration of how to help communities to self-serve.	Tewkesbury Borough Council / Severn Trent Water / Gloucestershire Local Resilience Forum	10/2018		Severn Trent Water – Discussions held with our supplier to access alternative vehicle sizes to service more remote areas. Suitable distribution sites identified in the area. Meeting to be held with Tewkesbury Borough Council and the Gloucestershire Local Resilience Forum to get feedback and formalise the plans.
11	Explore the potential for the Gloucestershire Fire and Rescue Service to supply water to farms in an emergency.	Gloucestershire Fire and Rescue Service			

	Recommendation / Action	Responsible Authority	Target Date	Status	Progress to Date
12	Consider whether the Tewkesbury Borough Public Services Centre should be classed as a sensitive building and, if so, put a contingency plan in place for the future.	Tewkesbury Borough Council /Severn Trent Water	10/2018		Severn Trent Water – The Public Services Centre does not meet the criteria to be classed as sensitive during normal operation. However, it would be prudent to put a contingency plan in place and Severn Trent Water can hold a copy of this so that in any future incident the needs are clear and the appropriate actions can be taken.
13	Review how data on vulnerable people is shared between agencies and consider the role that Town and Parish Councils could play in identifying vulnerable people.	Gloucestershire County Council / Tewkesbury Borough Council			
14	Severn Trent Water to meet with the National Farmers' Union to gain a better understanding of the needs of farmers and consider what, if any, arrangements could be put in place to improve joint working in future.	Severn Trent Water	05/2018	*	Meeting held with the National Farmers' Union on 4 May. Guidelines being developed which the National Farmers' Union can use with their members to ensure they are prepared for events such as this.

	Recommendation / Action	Responsible Authority	Target Date	Status	Progress to Date
15	Encourage and assist businesses to put contingency plans in place for emergencies.	Gloucestershire Local Resilience Forum / Tewkesbury Borough Council			
16	Work with Town and Parish Councils to develop emergency plans.	Tewkesbury Borough Council	04/2019		
17	Consider and establish a clear communication procedure addressing the need for a joint communication cell led by a Category 1 responder and seamless handovers between teams.	Gloucestershire Local Resilience Forum			
18	Consider how to improve communications with business customers, including clarification of the relationship between the retailer and the wholesaler, and review information on the website to cover the business community in the event of a water outage.	Severn Trent Water	05/2018	~	Action complete. Review of communications with retailers and business customers has been undertaken. For large scale incidents Severn Trent Water will now have a dedicated team supporting retailers and business customers.

	Recommendation / Action	Responsible Authority	Target Date	Status	Progress to Date
19	Work with businesses to ensure they are aware of how to protect against loss of business e.g. insurance.	Tewkesbury Borough Council	09/2019		
20	Review the water outages in the area in 2017 to assess the cumulative impact to ensure that sufficient resilience arrangements are in place.	Severn Trent Water	05/2018	~	Action complete. Outages reviewed and actions taken where appropriate.

#### STATUS KEY

÷	Action is progressing well and on target to achieve completion date/within agreed budget (if applicable) etc.
	Action has some issues or delays but is likely to achieve completion date/within agreed budget (if applicable) etc.
⊗	Significant risk to not achieving the action or there has been significant slippage in the timetable.
~	Action is complete.
	Action not yet commenced. (may not yet be programmed for action)

