

Drinking water 2018 - Top 50 ERI scoring events 2018

Date, Duration and ERI score	Area	Estimate of population	Cause of incident	Main actions and findings from the inspectorate investigation
08 May 2018 For 2520 hours (SRN) Provisional ERI score: 4,111	Southampton and the Isle of Wight	256,000	Microbiological contamination at Testwood works.	<p>Southern Water Services Ltd Action:</p> <ul style="list-style-type: none"> • Increased chlorine residuals at treatment works • Plumbing inspection carried out • Repaired faulty equipment • Review of procedures • Sampled affected area <p>The company has investigated the cause of coliform detections and <i>E.coli</i> for a related event. Necessary work to replace the roof membranes of the contact tank and treated water storage reservoirs and to address other sources of ingress is due for completion by September 2019.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Enforcement - legal instrument <p>The Regulation 28(4) notice covering Testwood works has been amended to include additional necessary improvement works to address routes of microbial ingress. Recommendation made to include <i>Cryptosporidium</i> data in final event reports where microbiological contamination is indicated.</p>
06 Dec 2018 For 624 hours (SBW) Provisional ERI score: 1,591	Christchurch, Dorset	134,799	Failure of the UV disinfection system at Knapp Mill works.	<p>Bournemouth Water Ltd Action:</p> <p>The company increased the UV dose and brought an additional UV reactor into service. The UV treatment process is to be upgraded.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate risk assessment • Inadequate treatment process - Filtration <p>A Regulation 28 Notice has been issued requiring a full upgrade of Knapp Mill treatment works, for completion by 2025.</p>

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<p>22 Jan 2018</p> <p>For 96 hours (TMS)</p> <p>Provisional ERI score: 857</p>	<p>West London</p>	<p>4,490,688</p>	<p>Treatment failure upstream of final disinfection at Hampton works.</p>	<p>Thames Water Utilities Ltd Action:</p> <ul style="list-style-type: none"> • Replaced faulty equipment • Retrained staff • Review of procedures • Sampled affected area <p>The site is included in the on-going Thames Water transformation programme.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate risk assessment • Inadequate treatment process - Disinfection • Inadequate treatment process - Filtration • Lack of maintenance of equipment • Inadequate training / competence of staff <p>The Inspectorate has served a Regulation 28 Notice requiring improvements to the operation and maintenance of slow sand filters at all of the company's major London works.</p>
<p>13 Mar 2018</p> <p>For 192 hours (TMS)</p> <p>Provisional ERI score: 845</p>	<p>East London</p>	<p>2,767,638</p>	<p>Treatment failure upstream of final disinfection at Coppermills works</p>	<p>Thames Water Utilities Ltd Action:</p> <ul style="list-style-type: none"> • Retrained staff • Review of procedures • Sampled affected area <p>Enforcement action initiated for all slow sand filter works in the London region.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate treatment process - Filtration • Lack of maintenance of equipment • Inadequate procedures • Inadequate risk assessment • Inadequate training / competence of staff <p>The Inspectorate has served a Regulation 28 Notice requiring improvements to the operation and maintenance of slow sand filters at all of the company's major London works.</p>

Date, Duration and ERI score	Area	Estimate of population	Cause of incident	Main actions and findings from the inspectorate investigation
<p>14 Feb 2018</p> <p>For 72 hours (TMS)</p> <p>Provisional ERI score: 497</p>	<p>London</p>	<p>3,474,124</p>	<p>Treatment failure upstream of final disinfection at Ashford Common works.</p>	<p>Thames Water Utilities Ltd Action:</p> <ul style="list-style-type: none"> • Retrained staff • Review of procedures • Sampled affected area <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate procedures • Inadequate risk assessment • Inadequate training / competence of staff • Inadequate treatment process - Disinfection • Inadequate treatment process - Filtration • Lack of maintenance of equipment <p>The Inspectorate has served a Regulation 28 Notice requiring improvements to the operation and maintenance of slow sand filters at all of the company's major London works.</p>
<p>26 Jun 2018</p> <p>For 624 hours (SWT)</p> <p>Provisional ERI score: 170</p>	<p>Several towns and villages North of Barnstaple, Devon</p>	<p>39,528</p>	<p>Deterioration of raw water quality and failure of powdered activated carbon dosing at Bratton Fleming works.</p>	<p>South West Water Ltd Action:</p> <p>DWI Comments and Findings:</p> <p>Plant failure - powdered activated carbon dosing was inadequate to control taste and odour caused by increased concentrations of MIB and geosmin in Wistlandpound raw water reservoir.</p>
<p>10 Nov 2018</p> <p>For 24 hours (AFW)</p> <p>Provisional ERI score: 115</p>	<p>North and East London</p>	<p>1,130,000</p>	<p>Raw water deterioration and treatment failure upstream of final disinfection at Egham and Iver works.</p>	<p>Affinity Water Ltd Action:</p> <ul style="list-style-type: none"> • Sampled affected area • Catchment Investigation <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Enforcement - legal instrument <p>The Inspectorate served a Regulation 27 Notice on the company requiring it to review and update its risk assessment for these two works.</p>

Date, Duration and ERI score	Area	Estimate of population	Cause of incident	Main actions and findings from the inspectorate investigation
<p>06 Jan 2018</p> <p>For 96 hours (TMS)</p> <p>Provisional ERI score: 103</p>	<p>Greater London</p>	<p>1,353,454</p>	<p>Treatment failure upstream of final disinfection at Ashford Common works.</p>	<p>Thames Water Utilities Ltd Action:</p> <ul style="list-style-type: none"> • Retrained staff • Review of procedures • Sampled affected area <p>Enforcement action initiated for all London slow sand filter works.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate procedures • Inadequate treatment process - Filtration • Lack of maintenance of equipment • Inadequate risk assessment • Inadequate training / competence of staff <p>The Inspectorate has served a Regulation 28 Notice requiring improvements to the operation and maintenance of slow sand filters at all of the company's major London works.</p>
<p>22 Sep 2018</p> <p>For 607 hours (SRN)</p> <p>Provisional ERI score: 97</p>	<p>Romsey and surrounding area, Hampshire</p>	<p>33,286</p>	<p>Structural failure at Michelmersh service reservoir.</p>	<p>Southern Water Services Ltd Action:</p> <ul style="list-style-type: none"> • Removed service reservoir from supply • Review of procedures • Sampled affected area <p>Company's initial attempts to isolate the contaminated service reservoir cell proved unsuccessful. This event was a repeat event (sample failure) from this reservoir in under a year. An internal inspection of the affected cell highlighted root intrusion into the structure, the risk of which was not evident from the external surface, nor from the previous internal inspection in 2015. Remedial work has been completed.</p> <p>DWI Comments and Findings:</p> <p>Recommendations have been made to prevent further reoccurrences by reducing risk. The company is currently under a Transformation Programme through a series of legal instruments, which will continue to improve the company's performance and reposition the company as a service company, with a central focus on the service of Drinking Water Quality, with this being the core motivation for all company staff.</p>

Date, Duration and ERI score	Area	Estimate of population	Cause of incident	Main actions and findings from the inspectorate investigation
<p>07 Sep 2018</p> <p>For 300 hours (UUT)</p> <p>Provisional ERI score: 83</p>	<p>Wigan, South Ribble</p>	<p>166,898</p>	<p>Raw water deterioration.</p>	<p>United Utilities Water Plc Action:</p> <ul style="list-style-type: none"> • Rezoned area (brought in water from different source) • Sampled affected area <p>PR19 technical submission made for further treatment.</p> <p>DWI Comments and Findings:</p> <p>Company has submitted a PR19 proposal to install GAC for taste and odour control, to be delivered by 2022. The proposal has been supported by the Inspectorate, and will be covered by a Regulation 28(4) notice.</p>
<p>22 Aug 2018</p> <p>For 168 hours (SRN)</p> <p>Provisional ERI score: 68</p>	<p>Twyford, Hampshire</p>	<p>168,744</p>	<p>Raw water contamination by spillage of phosphoric acid at Twyford works.</p>	<p>Southern Water Services Ltd Action:</p> <ul style="list-style-type: none"> • Sampled affected area • Shut down treatment works <p>The works was returned to service after concentrations of phosphate in the treated water had returned to normal levels.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • No further DWI action to be taken <p>Existing legal instruments issued as part of Southern Water's transformation programme require the company to implement a range of actions to address risks to water quality, which include actions to review instrument maintenance regimes and condition of chemical dosing facilities (with reference to the company's HazRev programme).</p>

Date, Duration and ERI score	Area	Estimate of population	Cause of incident	Main actions and findings from the inspectorate investigation
<p>30 Jun 2018</p> <p>For 648 hours (SRN)</p> <p>Provisional ERI score: 66</p>	<p>Crawley, Surrey</p>	<p>32,080</p>	<p>Weirwood works was returned to supply prematurely without GAC treatment and final dechlorination because of high demand for water during a prolonged spell of hot weather.</p>	<p>Southern Water Services Ltd Action:</p> <ul style="list-style-type: none"> • Blended supply with another source • Sampled affected area <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Did not forewarn customers • Inadequate treatment process - Disinfection <p>Recommendations were made concerning the need to forewarn consumers in the event of operational changes that could cause consumer concern, and to improve control of automated shutdown. Regulation 28 notice was amended to include a paragraph 4(d) clause, requiring the company to provide an updated risk assessment report to the Inspectorate at least one month in advance of the works being permanently returned to supply.</p>
<p>09 Nov 2018</p> <p>For 24 hours (TMS)</p> <p>Provisional ERI score: 42</p>	<p>East London</p>	<p>1,107,056</p>	<p>Treatment failure upstream of final disinfection at Coppermills works</p>	<p>Thames Water Utilities Ltd Action:</p> <ul style="list-style-type: none"> • Fast tracked <i>Cryptosporidium</i> samples • Investigated the treatment process <p>DWI Comments and Findings:</p> <p>Detection of <i>Cryptosporidium</i> in the final water. The Inspectorate has served a Regulation 28 Notice requiring improvements to the operation and maintenance of slow sand filters at all of the company's major London works.</p>

Date, Duration and ERI score	Area	Estimate of population	Cause of incident	Main actions and findings from the inspectorate investigation
<p>22 Aug 2018</p> <p>For 72 hours (SRN)</p> <p>Provisional ERI score: 40</p>	West Sussex	172,958	Failure to follow manufacturer's instructions for use at Burpham works.	<p>Southern Water Services Ltd Action:</p> <ul style="list-style-type: none"> • Review of procedures <p>The company is reviewing all the run to waste facilities at all of its amazon filter installations, there are 13 sites and only 1 has a run to waste.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate procedures • Inadequate training / competence of staff <p>Inadequate construction of amazon filters meant they could not be run to waste in contravention of the instructions for use. Therefore the company was in contravention of Reg 31 for the duration of the event.</p>
<p>17 Jun 2018</p> <p>For 72 hours (TMS)</p> <p>Provisional ERI score: 39</p>	West London	1,379,153	Treatment failure upstream of final disinfection at Ashford Common works.	<p>Thames Water Utilities Ltd Action:</p> <ul style="list-style-type: none"> • Sampled affected area <p>DWI Comments and Findings:</p> <p>Detection of <i>Cryptosporidium</i> in the final water</p> <p>The Inspectorate has served a Regulation 28 Notice requiring improvements to the operation and maintenance of slow sand filters at all of the company's major London works.</p>
<p>11 Nov 2018</p> <p>For 24 hours (SRN)</p> <p>Provisional ERI score: 39</p>	Southampton area	256,408	Microbiological contamination at Testwood works.	<p>Southern Water Services Ltd Action:</p> <p>Refer to commentary under Southern Water event on May 8 2018.</p>

Date, Duration and ERI score	Area	Estimate of population	Cause of incident	Main actions and findings from the inspectorate investigation
23 Feb 2018 For 24 hours (SRN) Provisional ERI score: 39	Southampton and Isle of Wight	256,000	Microbiological contamination at Testwood works.	Southern Water Services Ltd Action: Refer to commentary under Southern Water event on May 8 201.8
07 Feb 2018 For 24 hours (SVT) Provisional ERI score: 36	Worcestershire, Warwickshire parts of the East and West Midlands	974,000	Ingress into contact tank at Strensham works.	Severn Trent Water Ltd Action: <ul style="list-style-type: none"> • Carried out temporary repairs to the contact tank • Review of procedures • Sampling The company has found that major structural repairs are required to the contact tank. DWI Comments and Findings: Enforcement is in progress
03 Apr 2018 For 24 hours (SVT) Provisional ERI score: 36	Worcestershire, Warwickshire parts of the East and West Midlands	974,000	Ingress into contact tank at Strensham works.	Severn Trent Water Ltd Action: Refer to commentary under Severn Trent event on 7 Feb 2018.
30 Apr 2018 For 24 hours (SVT) Provisional ERI score: 36	Worcestershire, Warwickshire parts of the East and West Midlands	974,000	Ingress into contact tank at Strensham works.	Severn Trent Water Ltd Action: Refer to commentary under Severn Trent event on 7 Feb 2018.

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<p>05 Aug 2018</p> <p>For 39 hours (SST)</p> <p>Provisional ERI score: 35</p>	<p>Cannock, Staffordshire</p>	<p>98,321</p>	<p>Failure of planned work by company staff.</p>	<p>South Staffordshire Water Plc Action:</p> <ul style="list-style-type: none"> • Sampled affected area <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate risk assessment <p>This is a repeat event. Company accepted a caution for the previous event in 2016.</p>
<p>20 Jul 2018</p> <p>For 19 hours (ALB)</p> <p>Provisional ERI score: 33</p>	<p>Rissington, Gloucestershire</p>	<p>1,762</p>	<p>Burst main</p>	<p>Albion Water Ltd Action:</p> <ul style="list-style-type: none"> • Provided bottled water on request • Sampled affected area <p>Thames Water repaired their burst main and supplies were restored. The company are discussing with Thames Water how to improve their lines of communication as there was some delays in the notification from the bulk supplier.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The event was caused by Thames Water. No further DWI action to be taken.
<p>26 Jan 2018</p> <p>For 48 hours (SRN)</p> <p>Provisional ERI score: 32</p>	<p>Lewes, W.Sussex</p>	<p>139,190</p>	<p>Deterioration of raw water quality at Southover works.</p>	<p>Southern Water Services Ltd Action:</p> <ul style="list-style-type: none"> • Sampled affected area • Shut down treatment works <p>The company installed temporary UV treatment at the works to inactivate <i>Cryptosporidium</i>, and carried out catchment risk assessments. The risk assessment has updated and now identifies <i>Cryptosporidium</i> as a risk at this site.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Supplied unwholesome water in breach of regulations <p>A legal instrument in the form of a Regulation 28(4) notice, (groundwater hazard review) has been served on Southern Water, requiring hazard reviews to be carried out at all groundwater treatment works by 2020. UV treatment was installed at the works to inactivate <i>Cryptosporidium</i>.</p>

Date, Duration and ERI score	Area	Estimate of population	Cause of incident	Main actions and findings from the inspectorate investigation
<p>31 Aug 2018</p> <p>For 120 hours (SWT)</p> <p>Provisional ERI score: 32</p>	<p>Prewley, North Devon</p>	<p>51,192</p>	<p>Burst main.</p>	<p>South West Water Ltd Action:</p> <ul style="list-style-type: none"> • Flushed mains • Repaired main • Sampled affected area <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Supplied unwholesome water in breach of regulations <p>Two recommendations were made in the event assessment letter. A discolouraion notice is in place for Prewley West and the works at Prewley.</p>
<p>23 Nov 2018</p> <p>For 24 hours (SRN)</p> <p>Provisional ERI score: 26</p>	<p>West Sussex</p>	<p>172,958</p>	<p>Failure of <i>Cryptosporidium</i> removal stages at Burpham works.</p>	<p>Southern Water Services Ltd Action:</p> <ul style="list-style-type: none"> • Review of procedures • Sampled affected area <p>The company have reviewed their procedures.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate treatment process - Filtration <p>A broken amazon filter was found but a replacement was not installed, it was left empty allowing for shortcutting of the treatment process. Two positive <i>Cryptosporidium</i> detections in the treated water were found during this time and this gives weight to the potential that unwholesome water was supplied from this works.</p>
<p>04 Mar 2018</p> <p>For 144 hours (SVT)</p> <p>Provisional ERI score: 25</p>	<p>Across company area</p>	<p>225,000</p>	<p>Loss of supplies due to extreme cold weather.</p>	<p>Severn Trent Water Ltd Action:</p> <ul style="list-style-type: none"> • Provided an alternative supply by tanker / bowser • Provided alternative supplies as far as possible. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • No further DWI action to be taken

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01 Nov 2018 For 73 hours (SRN) Provisional ERI score: 24	Isle of Wight (South East area)	55,620	Microbiological contamination of Sandown service reservoir.	Southern Water Services Ltd Action: <ul style="list-style-type: none"> • Replaced faulty equipment • Sampled affected area Prepared boil water advice in anticipation of escalation. Collected additional large volume and <i>Cryptosporidium</i> samples. Installed temporary membrane. Investigated UV disinfection on outlet mains at the service reservoir. DWI Comments and Findings: Recommendations made.
05 Mar 2018 For 144 hours (SST) Provisional ERI score: 23	Across company area	35,117	Loss of supplies due to extreme cold weather.	South Staffordshire Water Plc Action: <ul style="list-style-type: none"> • Provided an alternative supply by tanker / bowser DWI Comments and Findings: <ul style="list-style-type: none"> • No further DWI action to be taken A number of recommendations have been included in an industry report published by DWI on 19 June 2018 and companies have been advised to work with Water UK and a working group on these issues.
08 Jan 2018 For 73 hours (BRL) Provisional ERI score: 22	Clevedon, near Bristol	17,700	Raw water deterioration.	Bristol Water Plc Action: <ul style="list-style-type: none"> • By-passed service reservoir • Flushed mains • Issued a boil water notice • Removed service reservoir from supply • Rezoned area (brought in water from different source) • Sampled affected area • Shut down treatment works DWI Comments and Findings: <ul style="list-style-type: none"> • Enforcement - legal instrument Regulation 28 (4) notice issued requiring actions to address risks from <i>Cryptosporidium</i> .

Date, Duration and ERI score	Area	Estimate of population	Cause of incident	Main actions and findings from the inspectorate investigation
<p>20 Jun 2018</p> <p>For 480 hours (SVT)</p> <p>Provisional ERI score: 21</p>	<p>Area North of Derby</p>	<p>114,500</p>	<p>Consumer complaints of taste and odour.</p>	<p>Severn Trent Water Ltd Action:</p> <ul style="list-style-type: none"> • Sampled affected area <p>Catchment to tap investigation did not identify a root cause.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • No further DWI action to be taken
<p>27 Jul 2018</p> <p>For 90 hours (YKS)</p> <p>Provisional ERI score: 19</p>	<p>Hull</p>	<p>93,727</p>	<p>Failure of planned work by Company staff caused discoloured water to be supplied to consumers.</p>	<p>Yorkshire Water Services Ltd Action:</p> <ul style="list-style-type: none"> • Flushed mains • Sampled affected area <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Enforcement - legal instrument • Supplied unwholesome water in breach of regulations • Inadequate follow up sampling • Inadequate training / competence of staff <p>The Inspectorate is considering enforcement to address the risk of discolouration in water supplied to consumers. The company was required to produce an Impact Plan to directly address the risk; to include short medium and long term mitigations and timescales to prevent further breaches of Regulation 4.</p>
<p>02 Mar 2018</p> <p>For 168 hours (SEW)</p> <p>Provisional ERI score: 18</p>	<p>Parts of Kent and Sussex</p>	<p>26,705</p>	<p>Loss of supplies due to extreme cold weather, with discolouration when supplies were restored.</p>	<p>South East Water Plc Action:</p> <ul style="list-style-type: none"> • Provided an alternative supply by tanker / bowser <p>The company's bottled water provider was initially unable to supply the required volume of bottled water.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • No further DWI action to be taken <p>Recommendations made and consolidated review of all companies reported published on 19 June 2018.</p>

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<p>18 Nov 2018</p> <p>For 39 hours (TMS)</p> <p>Provisional ERI score: 18</p>	<p>South London</p>	<p>305,202</p>	<p>Disinfection failure at Deptford works caused by an interruption to the power supply.</p>	<p>Thames Water Utilities Ltd Action:</p> <ul style="list-style-type: none"> • Flushed mains • Sampled affected area • Shut down treatment works <p>Company identified a failure of disinfection and shut down the treatment works. 1.3 million litres of undisinfected water had been supplied into distribution. The company set up flushing points to remove as much undisinfected water as possible, however the presence of an unrecorded cross connection meant that some consumers may have received unwholesome water.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate contingency planning • Lack of maintenance of equipment • Supplied unwholesome water in breach of regulations <p>Poor installation and commissioning of the shutdown system alongside a poor testing regime meant that the system designed to safeguard Regulation 26 compliance and shut down the site was not connected to the borehole pumps or one of the distribution pumps.</p>
<p>01 Mar 2018</p> <p>For 73 hours (AFW)</p> <p>Provisional ERI score: 17</p>	<p>Tendering Area, Essex</p>	<p>147,128</p>	<p>Minor increase in chlorine concentrations and social media attention.</p>	<p>Affinity Water Ltd Action:</p> <ul style="list-style-type: none"> • Increased chlorine residuals at service reservoir • Increased chlorine residuals at treatment works • Increased chlorine residuals in the distribution system • Sampled affected area <p>Consumer information and info-graphics added to social media and website.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Did not forewarn customers <p>Suggestion made</p>

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<p>13 Mar 2018</p> <p>For 24 hours (TMS)</p> <p>Provisional ERI score: 17</p>	<p>West London</p>	<p>3,474,124</p>	<p>Treatment failure upstream of final disinfection at Ashford Common works.</p>	<p>Thames Water Utilities Ltd Action:</p> <ul style="list-style-type: none"> • Sampled affected area <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • No further DWI action to be taken <p>No further action.</p>
<p>01 Apr 2018</p> <p>For 24 hours (SVT)</p> <p>Provisional ERI score: 16</p>	<p>Leicestershire and other parts of the East Midlands</p>	<p>1,300,000</p>	<p>Microbial contamination at Melbourne works.</p>	<p>Severn Trent Water Ltd Action:</p> <ul style="list-style-type: none"> • Increased chlorine residuals at treatment works • Sampled affected area <p>The company's investigation identified a raw water microbiological challenge from surface run-off, the company increased the effective contact time on site by lowering the flow rate and also increased the pre-filtration chlorine levels to combat this challenge. The company have engaged with the local farmers to work together to try and change farming practices in a way that reduced surface run off from fields. The company did not detect any other failures on this site.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • No further DWI action to be taken <p>No further action required, the company robustly investigated and are working with local farmers to find a solution to the issue of surface run-off which is believed to have caused this issue.</p>
<p>26 Apr 2018</p> <p>For 27 hours (SST)</p> <p>Provisional ERI score: 16</p>	<p>Wednesbury, Nr Walsall, Birmingham</p>	<p>84,051</p>	<p>Burst main.</p>	<p>South Staffordshire Water Plc Action:</p> <ul style="list-style-type: none"> • Repaired main • Sampled affected area <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Supplied unwholesome water in breach of regulations

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<p>02 Oct 2018</p> <p>For 73 hours (SVT)</p> <p>Provisional ERI score: 15</p>	<p>Willenhall and Wolverhampton City</p>	<p>100,000</p>	<p>Treatment failure upstream of final disinfection.</p>	<p>Severn Trent Water Ltd Action:</p> <ul style="list-style-type: none"> • Sampled affected area <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Enforcement - legal instrument <p>Enforcement to address the risk to consumers from disinfection by products fed from the upstream water treatment works at Hampton Loade.</p>
<p>10 Oct 2018</p> <p>For 72 hours (SWT)</p> <p>Provisional ERI score: 15</p>	<p>Summercourt Cornwall</p>	<p>120,000</p>	<p>Burst main with discolouration when supplies were restored.</p>	<p>South West Water Ltd Action:</p> <ul style="list-style-type: none"> • Flushed mains • Provided bottled water on request • Repaired main • Sampled affected area <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • No further DWI action to be taken
<p>14 Mar 2018</p> <p>For 24 hours (SVT)</p> <p>Provisional ERI score: 15</p>	<p>Gloucestershire</p>	<p>400,000</p>	<p>Raw water deterioration causing breakthrough of microbial faecal indicators at Mythe works.</p>	<p>Severn Trent Water Ltd Action:</p> <ul style="list-style-type: none"> • Increased chlorine residuals at treatment works • Sampled affected area <p>The company investigated the performance of treatment processes and there was no indication of any process operating outside of normal parameters. Cause attributed to deterioration of raw water quality. Treatment processes were challenged for a period of around six weeks.</p> <p>DWI Comments and Findings: See under Severn Trent event on 4 April 2018.</p>

Date, Duration and ERI score	Area	Estimate of population	Cause of incident	Main actions and findings from the inspectorate investigation
<p>04 Apr 2018</p> <p>For 24 hours (SVT)</p> <p>Provisional ERI score: 15</p>	<p>Gloucestershire</p>	<p>400,000</p>	<p>Raw water deterioration causing breakthrough of microbial faecal indicators at Mythe works.</p>	<p>Severn Trent Water Ltd Action:</p> <ul style="list-style-type: none"> • Increased chlorine residuals at treatment works • Sampled affected area <p>The company investigated the performance of treatment processes and there was no indication of any process operating outside of normal parameters.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate investigations into root cause • Inadequate risk assessment • Inadequate treatment process - Disinfection • Supplied unwholesome water in breach of regulations <p>This event was assessed with event where <i>E.coli</i> was detected in a sample of Mythe final on 12/03/18.</p> <p>The cause of both <i>E.coli</i> detections was attributed to a deterioration in raw water quality after a period of severe weather, and the treatment processes operating under challenge. Sporadic detections of <i>Cryptosporidium</i> oocysts occurred throughout the period - approximately 40 days.</p> <p>The Inspectorate considered that the company should have reviewed the operation of the pre-treatment stage in its investigation of works' performance.</p> <p>The ozonation stages were mothballed, and the company did not consider whether it would be beneficial to reinstate ozonation to improve disinfection.</p> <p>Further enforcement may be considered.</p>

Date, Duration and ERI score	Area	Estimate of population	Cause of incident	Main actions and findings from the inspectorate investigation
<p>05 Sep 2018</p> <p>For 134 hours (YKS)</p> <p>Provisional ERI score: 14</p>	<p>Mytholmroyd, Yorkshire</p>	<p>45,736</p>	<p>Failure of planned work by company staff causing discoloured water to be supplied to Consumers.</p>	<p>Yorkshire Water Services Ltd Action:</p> <ul style="list-style-type: none"> • Flushed mains • Repaired main • Sampled affected area <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Enforcement - legal instrument • Inadequate contingency planning • Inadequate risk assessment • Supplied unwholesome water in breach of regulations <p>The Inspectorate is considering enforcement to address the risk of discoloration in water supplied to consumers. The company was required to produce an Impact Plan to directly address the risk; to include short medium and long-term mitigations and timescales to prevent further breaches of Regulation 4.</p>
<p>02 Mar 2018</p> <p>For 168 hours (SWT)</p> <p>Provisional ERI score: 14</p>	<p>Across company area</p>	<p>15,675</p>	<p>Loss of supplies due to extreme cold weather.</p>	<p>South West Water Ltd Action:</p> <ul style="list-style-type: none"> • Provided an alternative supply by tanker / bowser <p>The company provided alternative supplies in the form of bottled water, tankers and bowsers. The company are developing a new Drinking Water Safety Plan system to address inadequacies in Regulation 28 reports and have a plan across the region to reduce discoloration.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate risk assessment <p>The Inspectorate made recommendations regarding adequacy of Regulation 28 risk assessments and discoloration risks.</p>

Date, Duration and ERI score	Area	Estimate of population	Cause of incident	Main actions and findings from the inspectorate investigation
<p>03 Jan 2018</p> <p>For 240 hours (SEW)</p> <p>Provisional ERI score: 14</p>	<p>Medway area, Kent</p>	<p>40,957</p>	<p>Treatment failure upstream of final disinfection at Burham works causing detection of pesticides at concentrations exceeding the PCV, affecting a bulk import to SEW.</p>	<p>South East Water Plc Action:</p> <ul style="list-style-type: none"> • Sampled affected area <p>The company imports a bulk supply from Southern Water's Burham works(Burham pesticides, was reported on in CIR 2017).</p> <p>The company was unable to supply the zone from an alternative source.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • No further DWI action to be taken <p>Remedial action was taken by Southern water at Burham works.</p>
<p>03 Mar 2018</p> <p>For 168 hours (TMS)</p> <p>Provisional ERI score: 13</p>	<p>Hampstead (NW3), Norwood and Streatham (SW16, 17 & 18) and Chigwell (IG7)</p>	<p>130,635</p>	<p>Loss of supplies due to extreme cold weather.</p>	<p>Thames Water Utilities Ltd Action:</p> <ul style="list-style-type: none"> • Provided an alternative supply by tanker / bowser <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • No further DWI action to be taken.
<p>31 Jan 2018</p> <p>For 96 hours (SEW)</p> <p>Provisional ERI score: 12</p>	<p>Farnham and Lindley, Surrey</p>	<p>23,390</p>	<p>Burst main.</p>	<p>South East Water Plc Action:</p> <ul style="list-style-type: none"> • Flushed mains • Repaired main <p>South East Water supplied media statements regarding the burst water main, the subsequent aeration and the company's response to remove the air from the distribution system. The company also provided updates to consumers via their website.</p> <p>DWI Comments and Findings:</p> <p>Company completed a flushing program - legal instrument in place.</p>

Date, Duration and ERI score	Area	Estimate of population	Cause of incident	Main actions and findings from the inspectorate investigation
<p>03 Mar 2018</p> <p>For 48 hours (PRT)</p> <p>Provisional ERI score: 11</p>	<p>Portsea, Portsmouth</p>	<p>169,987</p>	<p>Power failure.</p>	<p>Portsmouth Water Plc Action:</p> <ul style="list-style-type: none"> • Repaired faulty equipment • Sampled affected area <p>Pressure control valve bypassed and mobile generator moved to site.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • No further DWI action to be taken
<p>28 Feb 2018</p> <p>For 60 hours (DWR)</p> <p>Provisional ERI score: 11</p>	<p>Merthyr Tydfil, Mid Glamorgan</p>	<p>28,750</p>	<p>Temporary run to waste facility froze leading to pumps not supplying the service reservoir and then discoloured water from mains deposits on return to service.</p>	<p>Dwr Cymru Welsh Water Action:</p> <ul style="list-style-type: none"> • Provided an alternative supply by tanker / bowser • Replaced faulty equipment • Review of procedures • Sampled affected area • Shut down treatment works <p>The company's response to the event was hampered by poor weather, poor planning, poor maintenance of turbidity monitoring at the supernatant return to the head of the works and poor strategic choices about water storage at Pengarnddu service reservoir.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate risk assessment • Inadequate treatment process - Clarification • Inadequate treatment process - Filtration • Lack of maintenance of equipment • Samples not analysed for appropriate parameters • Supplied unwholesome water in breach of regulations <p>Enforcement action is under consideration.</p>

Date, Duration and ERI score	Area	Estimate of population	Cause of incident	Main actions and findings from the inspectorate investigation
<p>31 Jan 2018</p> <p>For 42 hours (TMS)</p> <p>Provisional ERI score: 11</p>	<p>Hammersmith and Knightsbridge</p>	<p>294,350</p>	<p>Burst main.</p>	<p>Thames Water Utilities Ltd Action:</p> <ul style="list-style-type: none"> • Retrained staff <p>Any changes to advice given to consumers will in future be passed through water quality scientific staff.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate training / competence of staff <p>The Inspectorate recommended that the company undertakes a review of its procedures, training and competency checks for staff who provide water quality information to consumers', to identify appropriate mitigation to prevent a recurrence of deficiencies in water quality advice issued to consumers.</p>
<p>27 Jan 2018</p> <p>For 74 hours (TMS)</p> <p>Provisional ERI score: 11</p>	<p>Hammersmith and Chiswick, London</p>	<p>500,000</p>	<p>Burst 30 inch Main</p>	<p>Thames Water Utilities Ltd Action:</p> <ul style="list-style-type: none"> • Repaired main • Sampled the affected area <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • No further DWI action to be taken