

## SUPPORTING INFORMATION

### Water Performance Tables

**Table 8** Summary of SW Assets 2022

Summary Asset Information	
Water Abstraction Points	672
Length of Water Mains (km)	48,640
Water Treatment Works	229
Storage Points	964
Water Supply Zones	281

**Table 9** Summary of Water Quality at WTW

Parameter	Prescribed Concentration or Value (PCV)	No. of tests	No. of tests failing	% of tests failing	No. of WTW failing
Coliform bacteria	0 number/100ml	25285	18	0.071%	17
Colony counts after 3 days at 22°C	No abnormal change	21079	n/a	n/a	n/a
Colony counts after 48hrs at 37°C	No abnormal change	21148	n/a	n/a	n/a
<i>Cryptosporidium</i>	N/A - no regulatory standard	6277	19	0.303%	13
<i>E. coli</i>	0 number/100ml	25285	0	0.0	0
Nitrite	0.1mg NO <sub>2</sub> /l	3201	0	0.0	0
Radon	N/A (100Bq/l parametric value)	39*	0	0.0	0
Residual disinfectant - free	N/A - no regulatory standard	25247	n/a	n/a	n/a
Residual disinfectant - total	N/A - no regulatory standard	25246	n/a	n/a	n/a
Turbidity	1NTU	6899	7	0.101%	3

\* Counted for 56 water supply zone tests

**Table 10** Summary of Water Quality at Storage Points

Parameter	Prescribed Concentration or Value (PCV)	No. of tests	No. of tests failing	% of tests failing	No. of SR failing
Coliform bacteria	0 number/100ml	48321	49	0.10%	49
Colony counts after 3 days at 22°C	No abnormal change	40417	n/a	n/a	n/a
Colony counts after 48hrs at 37°C	No abnormal change	40428	n/a	n/a	n/a
<i>E. coli</i>	0 number/100ml	48321	3	0.006%	3
Residual disinfectant - free	N/A - no regulatory standard	48296	n/a	n/a	n/a
Residual disinfectant - total	N/A - no regulatory standard	48291	n/a	n/a	n/a

**Table 11** Water Quality at Consumers' Taps

Parameter	Prescribed Concentration or Value (PCV)	Total No. of Samples	No. Failed Samples	No. Zones with Failures	% Compliance in 2022	% Compliance in 2021	% Compliance in 2020
<b>Key Parameters</b>							
<b>Bacteria</b>							
Coliform Bacteria	0 number/100ml	14,806	38	29	99.74%	99.83	99.87
<i>E. coli</i>	0 number/100ml	14,806	4	4	99.97%	99.99	99.99
<i>Clostridium perfringens</i>	0 number/100ml	5,227	1	1	99.98%	99.94	100.00
<b>Total Bacteria</b>		<b>34,839</b>	<b>43</b>	<b>34</b>	<b>99.88%</b>	<b>99.91</b>	<b>99.94</b>
<b>Metals</b>							
Aluminium	200µg Al/l	5,222	1	1	99.98%	99.96	99.96
Copper	2mg Cu/l	1,452	1	1	99.93%	100.00	100.00
Iron	200µg Fe/l	5,222	29	21	99.44%	99.58	99.60
Lead	10µg Pb/l	1,151	6	6	99.48%	99.73	99.74
Manganese	50µg Mn/l	5,222	17	15	99.67%	99.37	99.71
Nickel	20µg Ni/l	1,452	1	1	99.93%	99.25	99.09
<b>Total Metals</b>		<b>19,721</b>	<b>55</b>	<b>45</b>	<b>99.72%</b>	<b>99.61</b>	<b>99.73</b>
<b>Other key parameters</b>							
Colour	20mg/l Pt/Co	5,235	0	0	100.00%	100.00	100.00
Hydrogen ion (pH)	6.5-9.5 pH	5,235	3	3	99.94%	99.96	99.98
Nitrite	0.5mg NO <sub>2</sub> /l	2,731	2	2	99.93%	99.96	100.00
Odour	Acceptable / No abnormal change	5,236	8	7	99.85%	100.00	100.00
Taste	Acceptable / No abnormal change	5,234	4	4	99.92%	100.00	100.00
Total Trihalomethanes	100µg/l	1,450	1	1	99.93%	99.86	99.93
Turbidity	4NTU	5,235	0	0	100.00%	100.00	99.98
<b>Total Other Key Parameters</b>		<b>30,356</b>	<b>18</b>	<b>17</b>	<b>99.94%</b>	<b>99.98</b>	<b>99.99</b>
<b>Scotland total</b>		<b>134,698</b>	<b>116</b>		<b>99.92%</b>	<b>99.92</b>	<b>99.95</b>

**Table 11** Water Quality at Consumers’ Taps (Continued)

Parameter	Prescribed Concentration or Value (PCV)	Total No. of Samples	No. Failed Samples	No. Zones with Failures	% Compliance in 2022	% Compliance in 2021	% Compliance in 2020
<b>Other Parameters</b>							
1,2 Dichloroethane	3µg/l	1,460	0	0	100.00%	100.00	100.00
Aldrin	0.1µg/l	0	0	0	N/A	N/A	N/A
Other Individual Pesticides	0.1µg/l	0	0	0	N/A	N/A	100.00
Ammonium	0.5mg NH4/l	5,235	0	0	100.00%	100.00	100.00
Antimony	5µg Sb/l	1,452	0	0	100.00%	100.00	100.00
Arsenic	10µg As/l	1,452	0	0	100.00%	100.00	100.00
Benzene	1µg/l	1,459	0	0	100.00%	100.00	100.00
Benzo 3,4 Pyrene	0.01µg/	1,452	0	0	100.00%	100.00	100.00
Boron	1mg B/l	1,452	0	0	100.00%	100.00	100.00
Bromate	10µg BrO3/l	1,451	0	0	100.00%	100.00	100.00
Cadmium	5µg Cd/l	1,452	0	0	100.00%	100.00	100.00
Chloride	250mg Cl/l	1,450	0	0	100.00%	100.00	100.00
Chromium	50µg Cr/l	1,452	0	0	100.00%	100.00	100.00
Conductivity	2500µS/cm at 20C	5,235	0	0	100.00%	100.00	100.00
Cyanide	50µg CN/l	1,451	0	0	100.00%	100.00	100.00
Dieldrin	0.1µg/l	0	0	0	N/A	N/A	N/A
<i>Enterococci</i>	0 number/100ml	1,452	0	0	100.00%	99.86	99.93
Fluoride	1.5mg F/l	1,450	0	0	100.00%	100.00	100.00
Gross alpha activity	0.1Bq/l	1,446	0	0	100.00%	100.00	100.00
Gross beta activity	1Bq/l	1,446	0	0	100.00%	100.00	100.00
Heptachlor	0.03µg/l	0	0	0	N/A	N/A	N/A
Heptachlor epoxide	0.1µg/l	0	0	0	N/A	N/A	N/A
Mercury	1µg Hg/l	1,448	0	0	100.00%	100.00	100.00
Nitrate	50mg NO3/l	2,730	0	0	100.00%	100.00	100.00
Nitrite/Nitrate formula	< 1mg/l	2,730	0	0	100.00%	100.00	100.00
PAH - Sum of 4 Substances	0.1µg/l	1,443	0	0	100.00%	100.00	100.00
Pesticides - Total Substances	0.5µg/l	1,046	0	0	100.00%	100.00	100.00
Selenium	10µg Se/l	1,452	0	0	100.00%	100.00	100.00
Sodium	200mg Na/l	1,452	0	0	100.00%	100.00	100.00
Sulphate	250mg SO4/l	1,411	0	0	100.00%	100.00	100.00
Tetrachloroethene/ Trichloroethene	10µg/l	0	0	0	N/A	100.00	100.00
Tetrachloromethane	3µg/l	1,450	0	0	100.00%	100.00	100.00
<b>Total other parameters</b>		<b>49,820</b>	<b>0</b>	<b>0</b>	<b>100.00%</b>	<b>100.00</b>	<b>100.00</b>
<b>Scotland total</b>		<b>139,971</b>	<b>116</b>		<b>99.92%</b>	<b>99.92</b>	<b>99.95</b>

Gross alpha and gross beta activity are not included in the Total other parameters or Scotland total figures and are not used to calculate the total compliance figure. This is because there is no PCV value for these variables. They form part of a monitoring program to detect any radionuclides in accordance with The Public Water Supplies (Scotland) Amendment Regulations 2017. The total number of samples including monitoring for radon, which is taken at WTW final water but applied across Water Supply Zones. \*\* A supply zone can fail for more than one parameter. This means that the total number of zones that failed for at least one parameter is less than the sum of the No. Zones with Failures column

**Table 12** Water Quality Consumer Contacts Received by Scottish Water

Contact Category	Number of Contacts				% Change on 2021	Contact rate per 10,000 population	
	2022	2021	2020	2019		2022	2021
<b>Appearance</b>							
Discoloured Water	<b>12,251</b>	17,887	12,989	6,623	-32%	<b>22.4</b>	32.7
Aerated (Milky) Water	<b>1563</b>	1,662	1,660	882	-6%	<b>2.9</b>	3.0
Particles in Water	<b>469</b>	543	553	365	-14%	<b>0.9</b>	1.0
Organisms in Water	<b>32</b>	30	40	33	7%	<b>0.1</b>	0.1
<b>Taste and Odour</b>							
Chlorine	<b>522</b>	731	985	578	-29%	<b>1.0</b>	1.3
Metallic	<b>347</b>	602	356	358	-42%	<b>0.6</b>	1.1
Solvent/Fuel Taste/Smell	<b>13</b>	14	31	21	-7%	<b>0.0</b>	0.0
Musty/Earthy	<b>725</b>	1,058	621	639	-31%	<b>1.3</b>	1.9
TCP/Chemical Taste/Smell	<b>381</b>	505	525	302	-25%	<b>0.7</b>	0.9
<b>Other Water Quality Contact</b>							
Illness due to Water	<b>315</b>	733	286	240	-57%	<b>0.6</b>	1.3
Other Contact	<b>0</b>	5	96	617	-100%	<b>0.0</b>	0.0
<b>Total Contacts about Water Quality</b>	<b>16,618</b>	23,770	18,142	10,124	-30%	<b>30.4</b>	43.5

## 7.2 SUMMARY OF EVENTS AND INCIDENTS 2022

Scottish Water is required to tell the Drinking Water Quality Regulator for Scotland (DWQR) about events that could affect water quality. DWQR assesses all events and categorises them in consideration of their impact on public confidence in the water supply. There are five categories used with the three most severe declared by DWQR to be incidents.

The following tables detail the significant, serious and major events declared as incidents. A summary of each individual incident assessment can be viewed on the DWQR website: [2022 Incidents \(dwqr.scot\)](https://www.dwqr.scot.nhs.uk/2022-Incidents)

**Table 13** Classification of Incidents

Category	Not Significant or Minor	Significant	Serious	Major
	<b>789</b>	<b>23</b>	<b>3</b>	<b>0</b>



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