

Water Quality Engagement

Background

- Protecting public health is fundamental to our role as a water provider. Therefore water quality is and always has been one of our highest business priorities
- The company operates a risk management approach for the maintenance of all drinking water supply systems from source to tap
- Water quality standards are set by the Drinking Water Inspectorate to meet EU drinking water directive (DWD) and mandatory national requirements
- Engagement with customers and stakeholders plays a key role in developing and delivering the company's water quality strategies
- This presentation focuses on the engagement directly related to tap water quality – e.g. more customer focused.
- We also carry out regular engagement with landowners to improve raw water quality, but that deserves a presentation in its own right.

Our water quality engagement

- Regulatory framework
- Customer contacts
- Sampling
- Website and social media
- Lead
- Water Safe
- Stakeholder engagement
- Developing solutions with customers

Regulatory Framework

Water Quality in England and Wales is regulated by the Drinking Water Inspectorate (DWI)

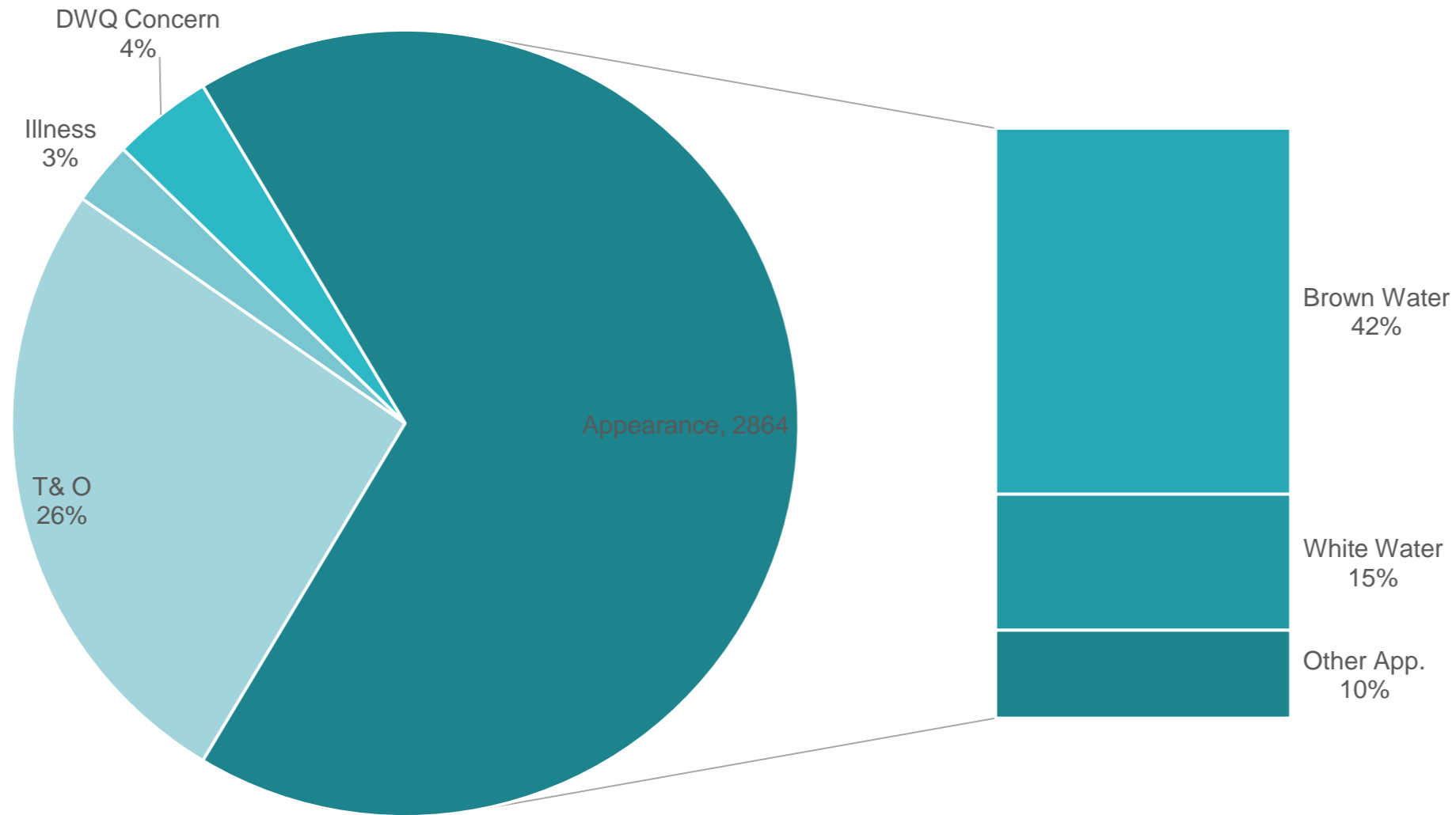
EU Drinking Water Directive transposed to UK law in Water Supply (Water Quality) Regulations 2016

Regulations are highly prescriptive and set out :

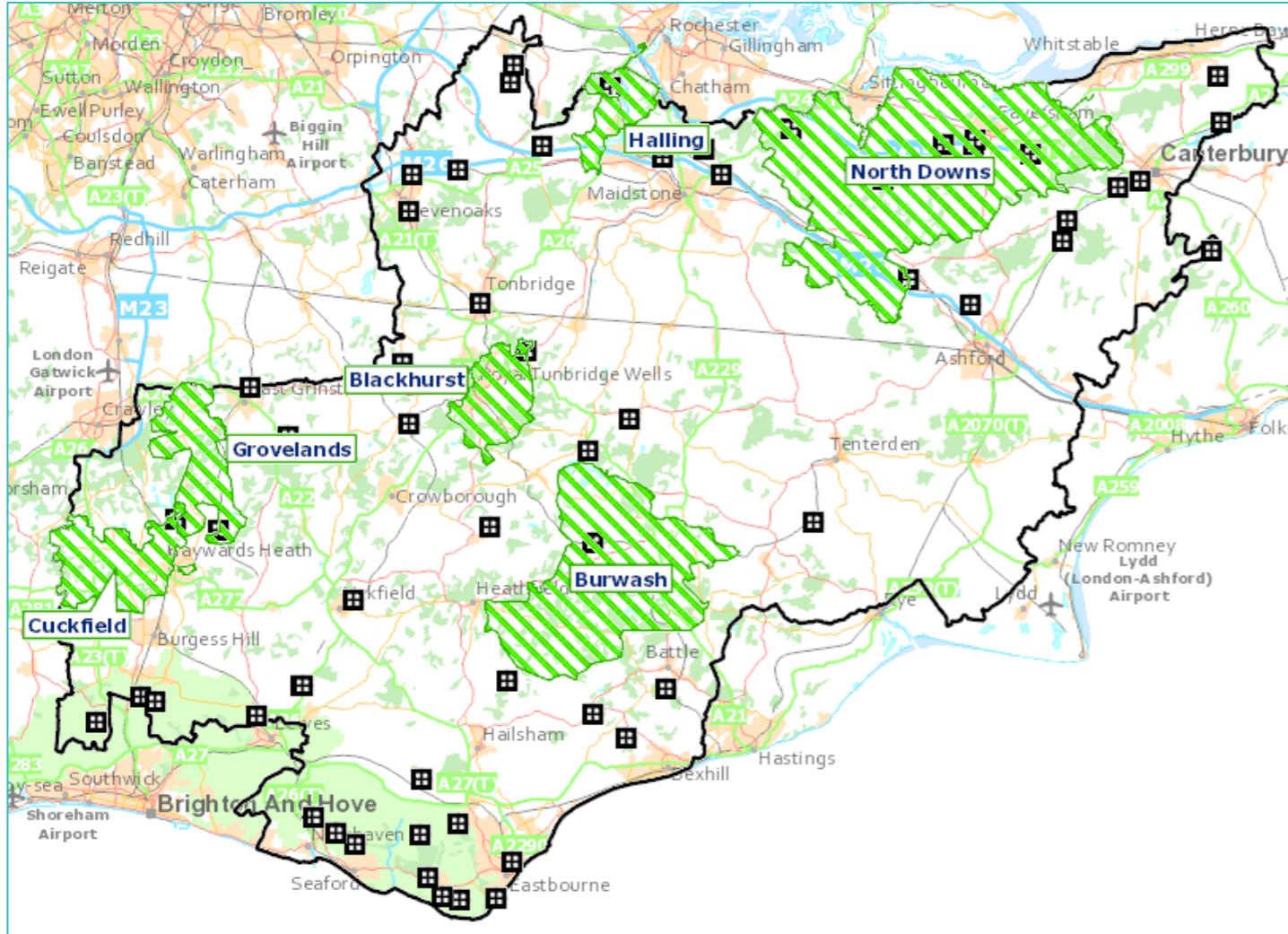
- the self monitoring regime required to be carried out by water companies (85 parameters and over 200,000 tests per year)
- the standards to be met
- investigation of failures
- requirements for analytical systems
- treatment requirements
- requirement for public availability of all results

Water Industry (suppliers' information) Direction 2017 specifies reporting requirements including events and the annual provision of all WQ contact data

Water Quality Customer Contacts 2017



Customer contacts

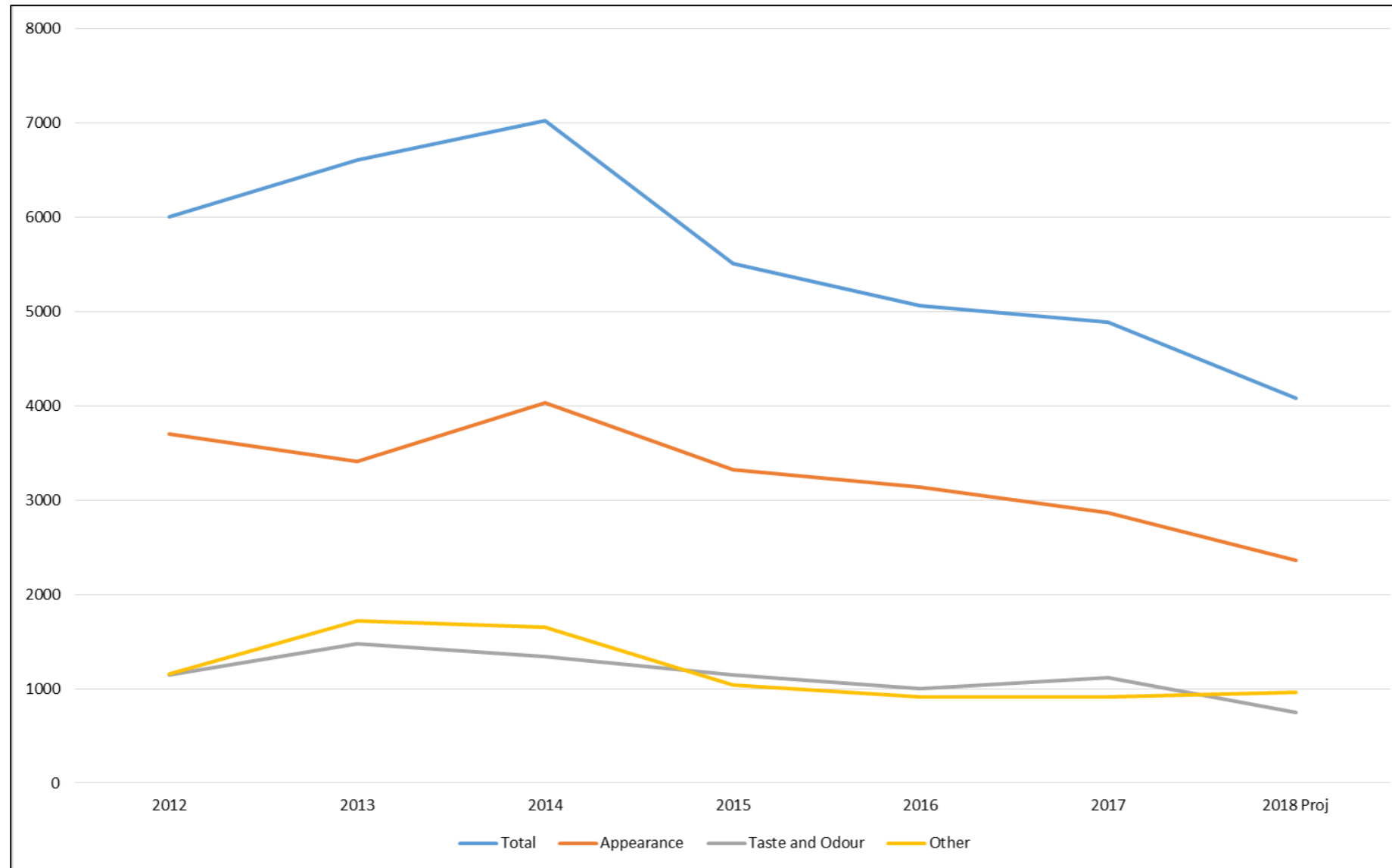


- Real time spatial monitoring of WQ customer contacts to identify developing issues
- Technician response in the field to identify cause and to rectify issues
- Call back to all customers to ensure resolution achieved
- Monthly review of contact rates by call type and area to identify areas with higher volume of calls
- Data feeds directly in to water quality strategies and targets activity and capital investment programmes to areas of need:
 - Sequential flushing programme
 - Mains replacement / rehabilitation
 - WTW performance optimisation
 - WTW capital maintenance
 - WTW improvement programmes

Assessing WQ contacts by Water Supply Zone

Zone Name	March	Number - YTD	No. last 12 months	Population 2018	Month Rate	12 Month Rolling	2017 Rate	2016 Rate	2015 Rate
Halling	4	20	59	18376	0.22	3.21	3.89	3.58	1.90
Burwash	3	14	46	15817	0.19	2.91	3.50	5.32	7.28
Boxley	9	22	90	35270	0.26	2.55	2.16	0.99	0.71
Cuckfield	2	5	40	15863	0.13	2.52	2.29	5.19	1.50
Trosley	4	7	104	43354	0.09	2.40	2.78	2.45	2.33
Rushmoor		9	16	6697	0.00	2.39	1.20	0.60	1.98
Hockers		4	58	25729	0.00	2.25	3.54	1.75	3.64
Groombridge	1	17	54	26699	0.04	2.02	1.43	3.88	1.96
Powdermill	3	5	27	14520	0.21	1.86	1.94	1.39	2.62
Balcombe	6	19	48	26030	0.23	1.84	1.59	1.60	2.32
Wych Cross	2	5	13	8340	0.24	1.56	1.45	1.09	5.65
Butler's Green		3	42	27444	0.00	1.53	1.80	1.67	1.31
Burham	8	16	61	40597	0.20	1.50	1.52	1.23	0.94
Tilford	1	3	15	10581	0.09	1.42	1.14	1.81	0.64
Tilmore	1	1	23	16973	0.06	1.36	1.59	4.14	3.67
Cottage Hill		3	13	10074	0.00	1.29	1.10	1.00	0.95
Bewl	12	14	52	43822	0.27	1.19	1.21	0.99	1.31
Blackhurst	1	5	55	50887	0.02	1.08	1.27	1.35	1.64
Victoria		1	12	11316	0.00	1.06	1.16	0.81	0.30
Heathfield	3	3	12	11531	0.26	1.04	1.13	2.10	2.08

Water Quality Contact Rates 2012-2018



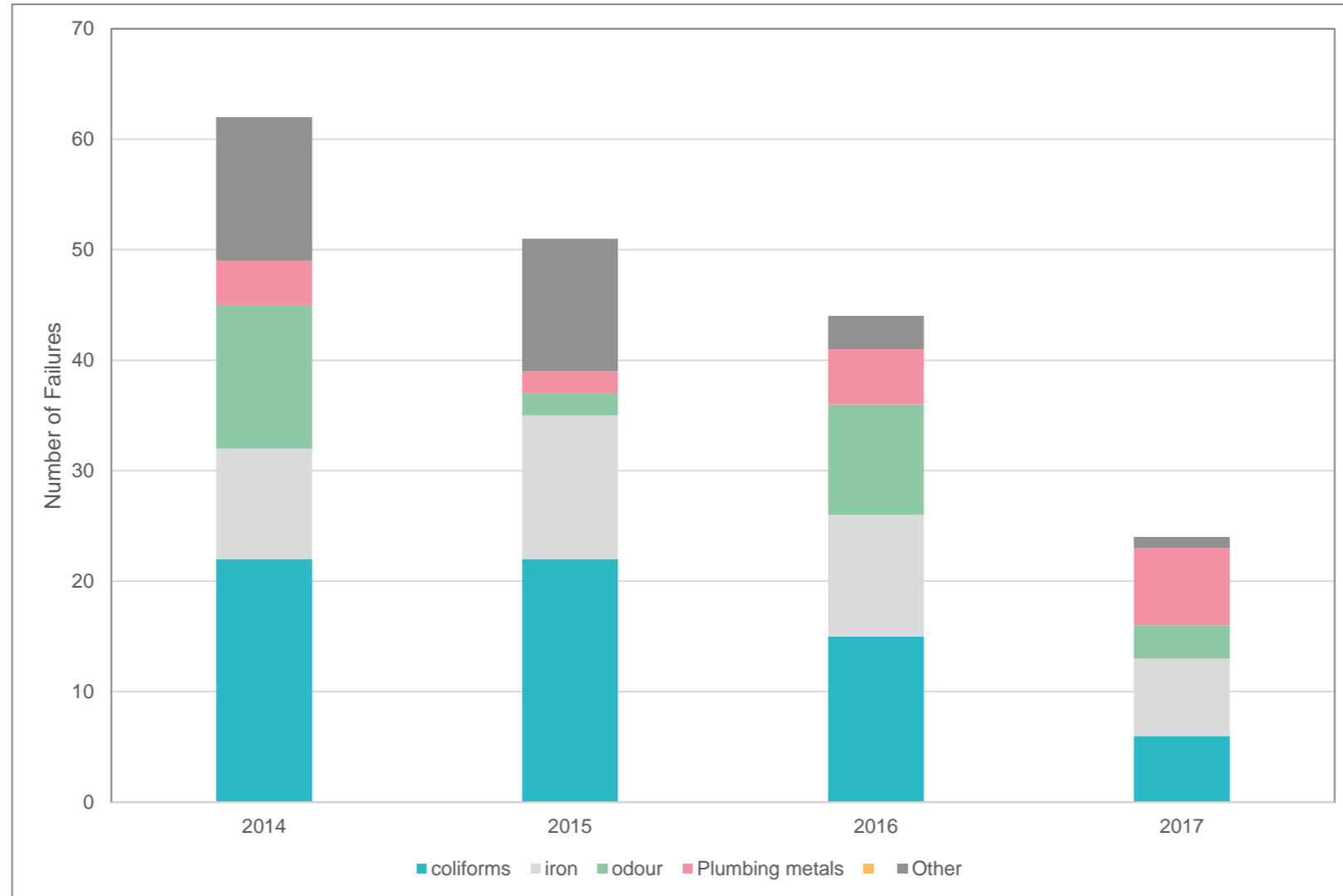
Sampling

- Each year we carry out over 8,000 samples at customers taps, testing up to 85 parameters
- Each visit represents an opportunity for direct engagement with the customer:
 - How we treat the water
 - Why we test drinking water
 - Advice on tap hygiene and plumbing issues
 - Identify need for water fittings regulation inspection
- We provide the customer with their own water quality breakdown, on request
- Our samplers identify and refer vulnerable people to the Customer Care Team
- If unusual results are identified we will revisit the property and provide further advice and provide a letter with further information on looking after water in the home
- We regularly promote bogus caller advice message (press, social media, community talks, open days) to help ensure customers know how to check for genuine samplers
- Data from customer's tap sampling is used to calculate mean zonal compliance – the company's headline WQ metric
- For the last 6 years we have achieved 99.95% compliance or above and reducing number of sample failures year on year
- Sample results and customer contacts feed into the water safety plan and link directly to investment in networks and WTW



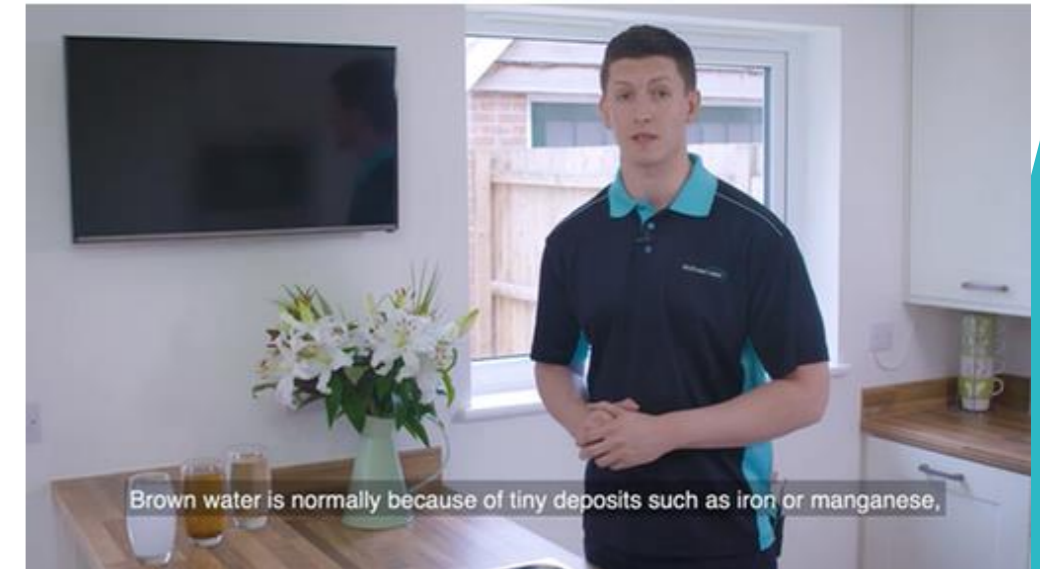
We updated our uniforms and vans. One of the reasons was to make us more distinctive to reduce risk of bogus callers being able to con customers

Mean Zonal Compliance – reduction in failures



Website and social media

- Dedicated WQ section on the website providing information on:
 - Water treatment
 - Advice on common WQ queries
 - Taste and odour
 - Appearance
 - Lead
 - Hardness
 - Video information
 - General WQ FAQs
- Customer magazine covers all WQ topics in detail
- Live 'in your area' map for updates on planned work and developing incidents
 - Registration for live updates
 - WQ advice provided in all updates
- Incident information is provided on front page banners
- Outbound messaging service to all registered customers for interruptions to supply and incidents
- Priority services register – sampling team trained to identify vulnerable customers and engage customer care team
- Watersafe plumbing scheme



Lead

- Plumbosolvency control for lead has been in operation since 2003 for all high risk water supply zones
 - Dosing of orthophosphate to prevent lead dissolution
 - Protects company and customer side pipes
 - Risk minimised at the customer tap (but not removed entirely)
 - 26/72 water supply zones dosed
 - 98% of identified lead pipes in dosed areas
- Current policy on identified lead
 - Replacement of lead on company communication pipes
 - Customers informed of presence of lead in supply pipes and encouraged to replace
 - Financial assistance offered toward replacement costs in non-dosed areas
 - Advice provided to customers to minimise the risks prior to completion of the work

Watersafe

- **WaterSafe is a free online search facility funded by the water industry to help customers find competent and qualified plumbers in England, Scotland, Wales, and Northern Ireland.**
- The scheme is a national accreditation body which checks and approves businesses and their plumbers to give customers reassurance about the tradesmen undertaking work for them.
- It brings together thousands of qualified contractors employed by plumbing businesses from the seven existing approved contractors' schemes across the UK, including:
 - [The Water Industry Approved Plumbers' Scheme \(WIAPS\)](#),
 - [Association of Plumbing and Heating Contractors \(APHC\)](#),
 - [Chartered Institute of Plumbing and Heating Engineering \(CIPHE\)](#),
 - [Scottish and Northern Ireland Plumbing Employers' Federation \(SNIPEF\)](#),
 - [Anglian Water's APLUS](#),
 - [Severn Trent's Watermark](#) and
 - [Thames Water's TAPS](#).
- Our aim is to help you find the nearest qualified plumbing engineer local to you to help keep water supplies safe and healthy in homes and businesses.
- Using an approved plumber/plumbing business helps prevent the risk of drinking water being contaminated by poor plumbing practices or sub-standard products.



Stakeholder engagement

- The company engage with a wide range of stakeholders as part of day to day operations
 - Drinking Water Inspectorate
 - Local authorities
 - Public Health England
 - Environment Agency
 - WaterUK - the industry trade body
 - Watersafe and The Water Industry Approved Plumbers Scheme (WIAPS)
- The company are involved in industry research covering the following areas:
 - Emerging pesticides
 - Catchment management
 - Managing discolouration risks within the network
 - Micro plastics
 - Water treatment

Developing solutions with customers, for customers

- Customer engagement is at the heart of key business decisions on investment and improvement of our water treatment works and distribution network
 - Each year we carry out over 1400km of pipe flushing (10% of our piped network) targeted in areas identified through contact with our customers
 - Maintenance and investment at our treatment is targeted to ensure that our water is of the highest quality when it reaches the customer tap
 - Most of our investment is not visible to the customer as they continue to receive water that meets the highest quality standards at all times
- We engage with supply chain to find innovative solutions
 - SeaQuest to tackle discolouration
 - Catchment management solutions to address metaldehyde
- We engage with customers, customer advocate groups and industry bodies to identify and address WQ issues arising within domestic plumbing
 - WRAS, Watersafe, Local Authorities etc.
- Technical solutions will be agreed with our quality regulator, the Drinking Water Inspectorate (DWI) to ensure that appropriate action is taken to address any emerging concerns and funded as capital maintenance or specific water quality schemes through the business plan process
- Small number of regulatory accepted treatment options for most parameters
 - GAC (with or without ozone) for Pesticides
 - Ultrafiltration or UV inactivation for *Cryptosporidium*
 - Orthophosphate or replacement for lead
- Options selected on a value for money basis
- Success is measured through our continued improvement in performance on WQ ODIs
 - Mean Zonal Compliance, CRI, Discolouration