

# Principal risks and uncertainties

## Our risk management framework

We have a robust risk management framework for the identification, assessment and mitigation of risk.

### Our approach to risk and resilience

Successful management of risks and uncertainties enables us to deliver on our purpose to provide great water and more for the North West, and be more resilient across our corporate, financial and operational structures. A key objective of our approach is to support the sustainable achievement of the strategic themes that underpin our vision to be the best UK water and wastewater company delivering:

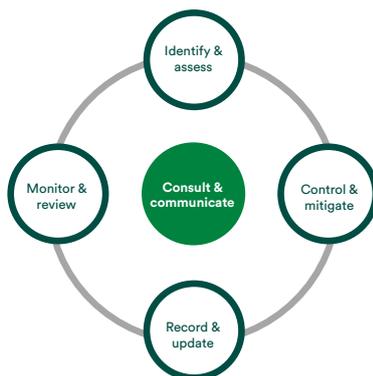
- the best service to customers;
- at the lowest sustainable cost; and
- in a responsible manner.

Our risk management framework provides the foundation for the business to anticipate threats to delivering an effective service in these challenging times, and to respond and recover effectively when risks materialise. Key components of the framework include:

- An embedded group-wide risk management process which is aligned to ISO 31000:2018 Risk management guidelines;
- A board-led approach to risk appetite, based on strategic goals;
- A strong and well-established governance structure giving the board oversight of the nature and extent of risks the group faces, as well as the effectiveness of risk management processes and controls; and
- A portfolio of policies, procedures, guidance and training to enable consistent, group-wide participation by our people.

Continuous improvement is a key feature of the framework which incorporates a maturity assessment model to identify areas to enhance. Based on risk management capabilities relative to five levels of maturity, a recent assessment has supported the development of a road map of improvements. These include an update to risk appetite statements, greater focus and analysis of cross-cutting themes and improved escalation of data from operational risk management systems.

### How we identify and assess risk



We have a number of mechanisms in place to identify risk. These include a risk universe, cross-business horizon scanning forums, consultation with third parties and comparison with National Risk Registers.

Each risk is event based and is sponsored by a senior manager who is responsible for the analysis of the corresponding causal factors, consequences and the control effectiveness, taking account of both the internal and external business environment. This process determines the likelihood of the event occurring and the full range of potential impacts from a minimum (best case) to a maximum (worst case). Comparing this position against the desired target state, in combination with the strengths, weaknesses and gaps of the control environment, supports the decisions for further mitigation as appropriate. This ongoing analysis culminates in the biannual business unit risk assessment (BURA) which forms part of the governance and reporting process (as outlined opposite) to ensure consistency of approach and a true reflection of the risk facing the company. It also serves to calibrate the most significant risks from a financial and reputational context and to assess how these relate to our risk appetite.

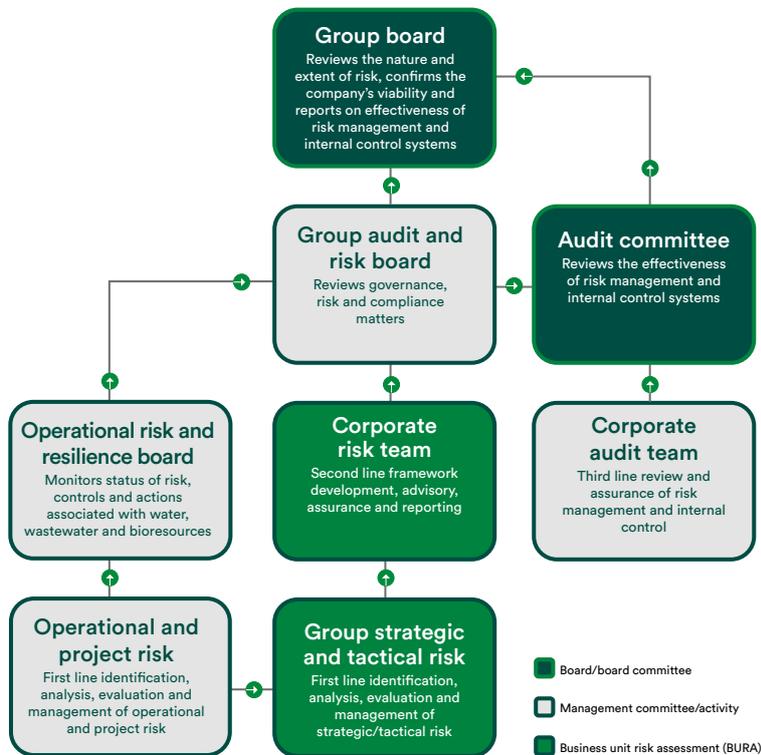
### Governance and reporting process

The board ensures that its oversight of risk remains effective, and in compliance with the UK Corporate Governance Code, through a number of established reporting routes.

Twice yearly the board receives an extensive update on the risk profile as part of the full and half-year reporting cycle. This provides an overview of the nature and extent of risk exposure in the context of the group's principal risks (as detailed on pages 104 to 107), and emphasises the most significant event-based risks (summarised on pages 108 and 109) in both their current state relative to the risk appetite, and target state of acceptable exposure. The board is also advised of new and emerging risks (see page 109). In addition to the biannual risk reporting, specific risk topics are reported to the board to support decision-making. The board is therefore able to:

- make decisions on the level of risk it is prepared to manage relative to risk appetite and tolerance in order to deliver on the group's strategy;
- engage with the business to ensure appropriate controls and mitigation are in place, and test the appropriateness of plans;
- report externally on the long-term viability of the company in an informed manner; and
- monitor and review the effectiveness of risk management procedures and internal control systems.

**The governance and reporting process**



Risk-specific governance and steering groups manage ongoing individual risks. The operational risk and resilience board provides oversight of asset and operational process risk and resilience capability, escalates risks and issues to the group audit and risk board (GARB) and contributes to the BURA process.

The executive-led GARB focuses on: the adequacy, effectiveness and performance of governance processes; risk management and internal control; monitoring compliance and assurance activities; identification of emerging themes and trends; and resilience across the group.

The audit committee is also a fundamental component of the governance structure. Supported by company secretariat and the corporate audit teams, the audit committee reviews the effectiveness of risk management and internal controls before these are agreed by the board.

**Risk profile**

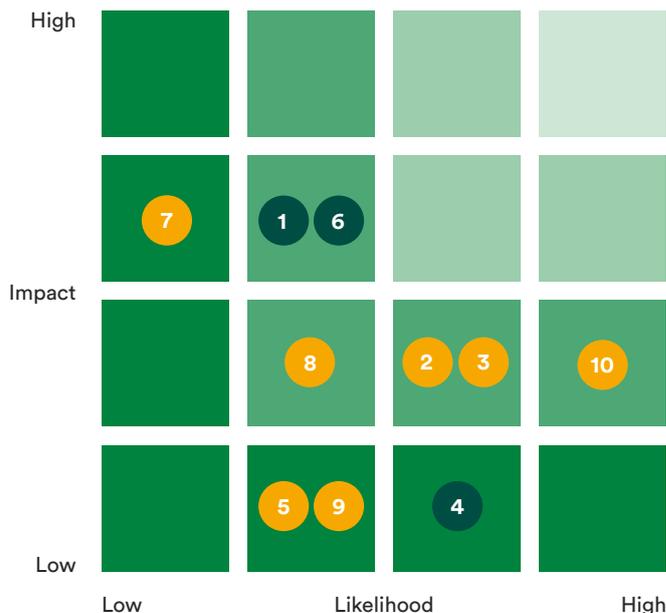
The business risk profile consists of approximately 100 event-based risks, each of which relates to one of ten inherent risk areas, which we regard as our principal risks due to their potential to affect the performance, future prospects or reputation of the company. The allocation of event-based risks to principal risks enables the company to consider risks in the context of systems and production lines, in line with our Systems Thinking approach.

**Principal risk heat map**

The heat map provides an indicative view of the current risk exposure (likelihood of occurrence and most likely impact) of each of the principal risks relative to each other.

Seven of the ten principal risks have remained relatively stable in the last 12 months. Water service, Supply chain and programme delivery and Finance have reduced due to the replacement of a section of the Haweswater Aqueduct, the trade deal with the EU and improvement in the economic outlook, respectively.

See pages 104 to 107 for further details of the principal risks.



**Principal risks**

- 1 Water service
- 2 Wastewater service
- 3 Retail and commercial
- 4 Supply chain and programme delivery
- 5 Resource
- 6 Finance
- 7 Health, safety and environmental
- 8 Security
- 9 Conduct and compliance
- 10 Political and regulatory

**RISK EXPOSURE**

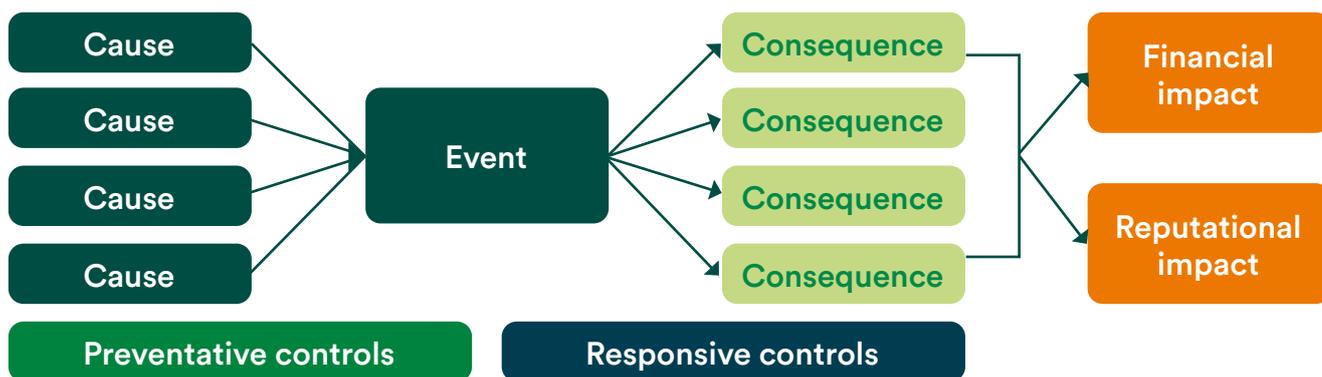
An indication of the current exposure of each principal risk relative to the prior year.

- Decreased
- Stable
- Increased

# Principal risks and uncertainties

## Common themes

As illustrated in the bow-tie diagram below, each of the event-based risks has multiple causes and consequences which in turn lead to financial and/or reputational impact. Preventative and responsive controls are applied to reduce the likelihood of the event occurring and limit the impact if the event were to materialise. New and emerging circumstances in respect of causes, consequences and controls make the profile multifaceted and dynamic. Analysis of the profile highlights common themes, notably associated with the causes and consequences. These common themes can then be considered more holistically to enable a more integrated, Systems Thinking approach to risk mitigation. Analysis of the control environment indicates the strengths, weaknesses and gaps in the mitigation of risk, as well as the interdependencies across the business to manage risk as part of the integrated approach.



### Common causal themes

The event-based risks include multiple causal factors which individually or in combination could trigger the risk event to occur. Categorisation illustrates six common causal themes:

- **Extreme weather/climate change:** In the majority of cases our water resources, asset base and operations can cope with extreme weather conditions, although these can become overwhelmed in intense situations. Climate change projections highlight increased temperatures, rainfall, wind and more frequent extreme variations in weather patterns. This means that climate change remains a key focus for us, because of its impact on our capacity and capability for service delivery, and because of the effect on the environment that we strive to protect and enhance. We are committed to the principles set by the Financial Stability Board’s Task Force on Climate-related Financial Disclosures (TCFD) – see pages 86 to 99.
- **Demographic changes:** Demographic changes, including population growth and evolving age profiles, can impact the capacity and capability of water and wastewater treatment and network assets; can affect demand on water resources; and increase uncertainty in relation to pension obligations.
- **Legislative and regulatory change:** Changes in legislation and/or regulation can have implications for the business model, asset base and ways of working. For example: the anticipated post-Brexit changes in law bring an element of uncertainty; and the introduction of competition, whilst positive to customers and markets, can affect ongoing revenue and the asset base.

- **Economic conditions:** Macro events, such as the financial crisis in 2008 and more recently COVID-19, can have multiple financial implications, including: lower revenue; increased bad debt; increased operational cost; increased cost of borrowing; and a reduction in the Regulatory Capital Value. The events can also impact the wider supply chain with knock-on effects to our service delivery and cost to serve.
- **Asset health:** General use, exposure to natural hazards, pressure and load all contribute to the deterioration of assets. In addition, other factors such as technological obsolescence and operating assets beyond their optimal capacity to cope with increased demand (population growth and/or climate change) also affect asset health. Ageing assets therefore provide an underlying and cross-business risk and uncertainty both to efficiency and for the long-term resilience of asset integrity and the associated service capability.
- **Culture:** Embedded through processes, reward mechanisms, values and behaviours, corporate culture is important to maintain high performance and cuts across the majority of risks in the profile. In an increasingly challenging business environment, our focus is to continue to embed a culture of innovation, customer service and behaving in a responsible manner at the same time as being open and transparent.

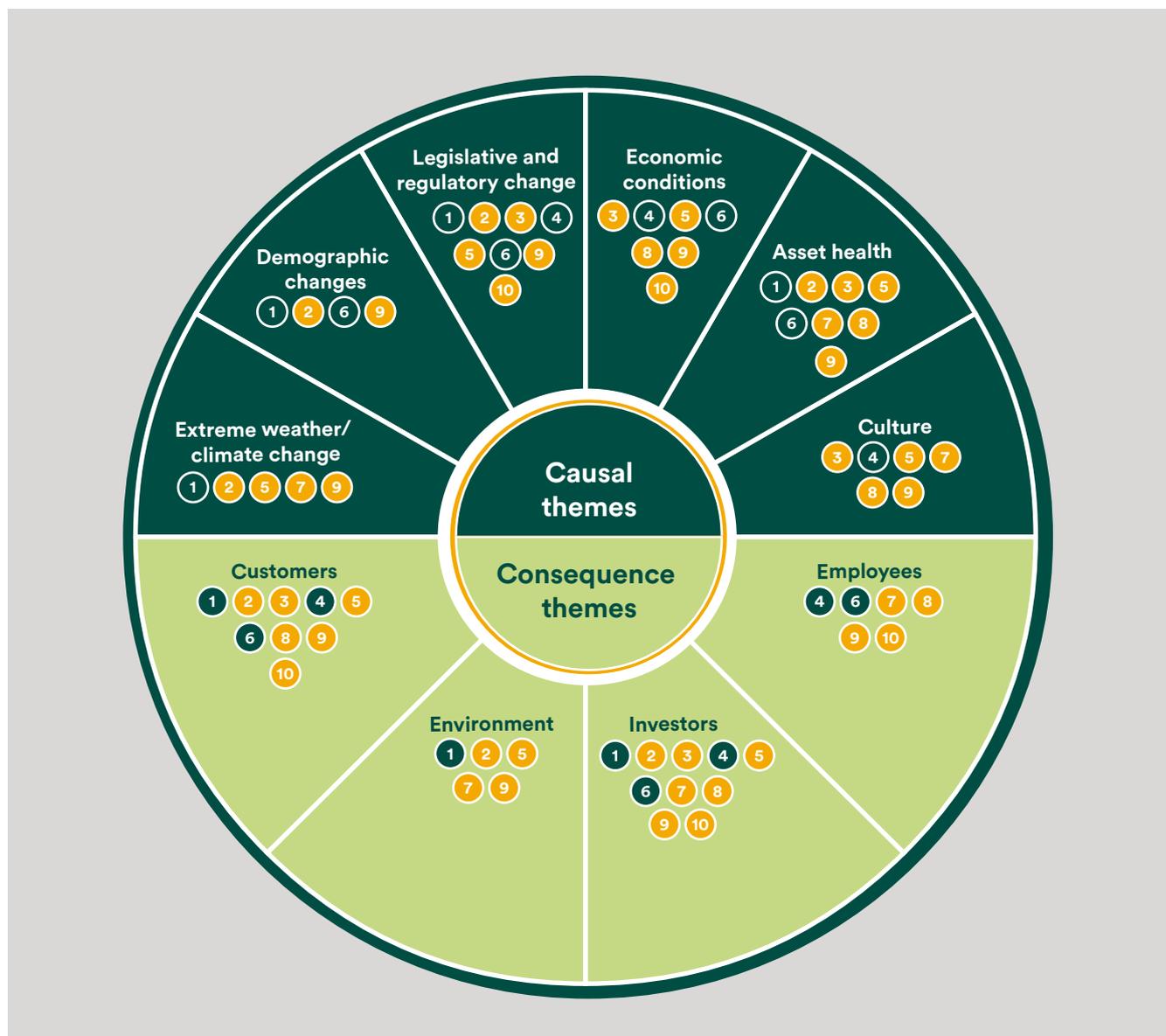
### Common consequence themes

Each consequence is analysed for the financial and reputational implications relative to multiple stakeholders. Categorisation of the consequences illustrates four common impact themes:

- **Customer:** Customers are impacted through our service offering, the quality of their experience when dealing with us, and how our operational and capital schemes affect them in the community.
- **Environment:** Our assets, operations and capital programmes can have a significant impact on the environment in both rural and urban settings. As a major land owner and operator of a large fleet of vehicles, the way we manage these also has environmental implications.
- **Investors:** The vast majority of risks in the profile have financial implications that could affect shareholder investment in the short and long term. Reputational impact associated with ethics, environmental protection and efficiency is also relevant for investors’ interest in the company.
- **Employees:** Our employees are fundamental to delivering our service requirements as well as our strategic objectives. Equally, our employees can be affected by multiple risks across the business, but primarily in relation to employment and health, safety and wellbeing risks.

### Mapping of common themes to the principal risks

The diagram below illustrates how the common themes (causal and consequence) relate to the principal risks (see pages 104 to 107).



#### Principal risks

- 1 Water service
- 2 Wastewater service
- 3 Retail and commercial
- 4 Supply chain and programme delivery
- 5 Resource
- 6 Finance
- 7 Health, safety and environmental
- 8 Security
- 9 Conduct and compliance
- 10 Political and regulatory

#### RISK EXPOSURE

An indication of the current exposure of each principal risk relative to the prior year.

- Decreased
- Stable
- Increased

# Principal risks and uncertainties

## Our principal risks

Pages 104 to 107 provide details of our principal risks, including a description of the risk, a summary of the risk exposure, control mitigation actions and references to performance indicators and related event-based risks.

### RISK EXPOSURE

An indication of the current exposure of each principal risk relative to the prior year.

- Decreased
- Stable
- Increased

### OUR STRATEGIC THEMES

-  The best service to customers
-  At the lowest sustainable cost
-  In a responsible manner

### MOST SIGNIFICANT RISKS

- ⊛ Indicates a significant event-based risk reported to the board (see pages 108 and 109).

## CORE OPERATIONS AND SERVICE PROVISION

1

### Water service

A failure to provide a secure supply of clean, safe drinking water and the potential for a negative impact on public confidence in water supply.

### Main strategic theme



### Risk exposure

Covering the entire water system from source to customers' taps, threats include: extreme weather which not only affects supply and demand through reduced rainfall, but can also affect raw water quality through fire or flooding; demographic changes affecting demand; asset health contributes to the frequency and magnitude of failure; and legal and regulatory change potentially increases the quality standards which will require time and investment in order to maintain compliance.

Potential impacts include: regulatory non-compliance; interruptions to water supply; or, in extreme cases, a danger to public health caused by poor water quality.

### Control and mitigation

Strict quality controls supplement the physical and chemical treatment including a rigorous sampling regime, alarm systems and 'shut down and start up to waste' processes. Asset inspections, regular maintenance and cleaning are undertaken across our water assets, supported by a prioritised replacement regime. Water resources management, production planning, pressure/flow management and leak detection are undertaken to maintain supply and minimise interruptions. The integrated network, alternative supply vehicles and maintenance crews provide a response capability.

### Performance indicators

- C-MeX
- Leakage
- Interruptions to supply
- Water quality compliance (CRI)

### Most significant event-based risks

- Failure of significant water supply systems<sup>⊛</sup>
- Failure of the distribution system (leakage)<sup>⊛</sup>
- Dam failure<sup>⊛</sup>
- Water sufficiency (dry weather)
- Water network failure

2

### Wastewater service

The failure to remove, treat and return water to the environment and recycle sludge to land.

### Main strategic theme



### Risk exposure

Covering the entire wastewater and bioresource systems from customer properties to land, river or the sea, the key factors are: the capacity and capability of assets and operational processes; and the availability of sludge recycling outlets. Compounding issues include unauthorised third party discharges into the sewer network, changing demographics and extreme weather. Whilst generally designed to cope with the vast majority of storms, high intensity rainfall can overwhelm the system. Legal and regulatory change potentially increases standards or imposes restrictions which will require time and investment to maintain compliance.

Potential impacts include: regulatory non-compliance; interruptions to drainage services; pollution incidents (including odour nuisance and sewer flooding); and inability to dispose of sludge to land.

### Control and mitigation

The sewer network is managed through a combination of the drainage and wastewater management plans and the wastewater network operating model which include asset condition surveys to identify defects, sewer rehabilitation projects, customer campaigns and sewer cleaning programmes. Integrated drainage area studies and the adoption of a pollution incident reduction plan aim to make further enhancements. Proactive maintenance, operative training, sampling, compliance audits and odour management systems supplement the treatment processes across our wastewater and biosolids systems.

### Performance indicators

- C-MeX
- EA performance assessment
- Internal flooding incidents
- Pollution incidents

### Most significant event-based risks

- Failure of wastewater network (sewer flooding)<sup>⊛</sup>
- Failure to treat wastewater<sup>⊛</sup>
- Failure of wastewater assets (serious pollution)<sup>⊛</sup>
- Recycling of biosolids to agriculture

## FUNCTIONAL SERVICE AND SUPPORT

3

**Retail and commercial**

Failing to provide good and fair service to domestic customers and third-party retailers or a failure of or issue in relation to non-United Utilities Water operations or businesses.

**Main strategic theme****Risk exposure**

Key factors include the social deprivation across the North West, the macroeconomic environment, and the experience and perception of customers towards our operations and service. Commercial contractual terms and conditions and the structure, positioning and efficiency of joint ventures, subsidiaries and undertakings are also factors.

Potential impacts include financial losses and an impact on profitability associated with poor cash flow and an increase in bad debt. Poor service and associated decreased customer satisfaction could result in regulatory penalties and reputational harm.

**Control and mitigation**

Our customer-focused initiatives aim to drive excellent service and enhance the experience of all our customers. We have an award-winning Priority Services scheme for vulnerable customers and those needing help to pay, which has driven up our success in recovering charges. Bad debt risk is managed through best practice collection techniques, segmentation of customers and the use of data sharing to determine the most effective and collaborative collection and support activities.

The wholesale business maintains processes, systems and data to deal fairly with market participants and the central market operator in the business retail market in order to generate and collect revenue. Similarly strong governance applies to non-United Utilities Water operations and businesses.

**Performance indicators**

- C-MeX
- Customer complaints
- D-MeX

**Most significant event-based risks**

- Billing accuracy
- Customer experience

4

**Supply chain and programme delivery**

The potential ineffective delivery of capital, operational and change programmes/ processes.

**Main strategic theme****Risk exposure**

As the supplier of essential water and wastewater services with a significant asset base, key factors include the consistent supply of critical goods and services and the ongoing development of operational facilities, distribution networks and systems. Disruption and delay can occur through macroeconomic conditions, political issues or natural disasters in the country of origin. Contractual issues, technical or engineering complications, natural hazards such as extreme weather or legal aspects such as planning permission or access rights are also factors.

Potential impacts include: implications to cash flow; failure to take opportunities and competitive advantage; and ultimately failure to meet our obligations and customer outcomes.

**Control and mitigation**

Category management and supplier relationship management are key areas of control underpinned by contract management across our extensive supply chain. Capital, change and operational programmes are undertaken in order of priority following approval. Within the capital programme we have created better alignment and integration between our capital delivery partners, engineering service providers and our operating model. Our programmes and project management include risk and issue management.

**Performance indicators**

- Percentage of invoices paid within 60 days
- Time, cost and quality index

**Most significant event-based risks**

- Unfunded developer-led projects
- Dispute with supplier

5

**Resource**

The potential failure to provide appropriate resources (human, technological or physical) required to support business activity.

**Main strategic theme****Risk exposure**

The nature and scale of our operations warrants a highly efficient, effective and competent set of resources that is adaptable to a constantly changing business environment. Key factors include: the recruitment and selection of talent, employee engagement, skill-set and knowledge; obsolescent systems due to innovative new ways of working and advances in technology; the quality of tools, equipment and vehicles; and ongoing deterioration of property, land and other assets.

Potential impacts include the inability to maintain efficiency, optimise opportunity and competitive advantage, or meet our obligations and customer outcomes.

**Control and mitigation**

We develop our people with the right skills and knowledge and deliver effective technology to support the business in meeting its objectives. Employees are kept informed regarding business strategy and progress through various communication channels. Training and personal development programmes exist for all employees in addition to talent management programmes and apprentice and graduate schemes. We focus on change programmes and innovative ways of working to deliver better, more resilient and more cost-effective operations. Resources are closely monitored because of COVID-19, with home working and safe site working practices being adopted. People with multiple skill sets are able to add resilience across the business.

**Performance indicators**

- Employee engagement

**Most significant event-based risks**

- Land management
- Business critical data

# Principal risks and uncertainties

## Our principal risks

### FUNCTIONAL SERVICE AND SUPPORT

6

#### Finance

The potential inability to finance the business appropriately.

#### Main strategic theme



#### Risk exposure

The extent of our capital programme and the scale of our operations means that it is important that we are able to raise finance when needed to preserve adequate liquidity. Key factors include unexpected and/or higher costs associated with an operational incident, fluctuations in commodity prices and our exposure to movements in interest rates and inflation. A reduction in credit ratings, the over payment of tax and a worsening of the pension scheme funding position are also factors. Contributing factors include the macroeconomy, the political and regulatory environments relative to the water sector, and our internal financial structure.

Potential impacts include cash flow implications, reduced profit and ultimately the solvency of the company in extreme cases.

#### Control and mitigation

We arrange long-term refinancing with staggered maturity dates and maintain significant liquidity to minimise the effect of short-term downturns. Counterparty credit exposure and settlement limits exist to reduce any potential future impacts. These are based on a number of factors, including the credit rating and the size of the asset base of the individual counterparty. The group employs hedging strategies to manage the impact of market fluctuations for inflation, interest rates and energy prices. Sensitivity analysis is carried out as part of the business planning process, influencing the various financial limits employed. Continuous monitoring of the markets takes place, including movements in credit default swap prices and movements in equity levels.

#### Performance indicators

- Return on Regulated Equity (RoRE)
- Underlying operating profit
- Gearing (net debt : RCV)

#### Most significant event-based risks

- Financial outperformance\*
- Credit ratings\*
- Pension deficit\*
- Fair payment of tax\*

### HAZARD-BASED

7

#### Health, safety and environmental

The potential harm to employees, contractors, the public or the environment.

#### Main strategic theme



#### Risk exposure

The nature and scale of our operations presents multiple hazards to employees, contractors, the public and the environment. These include confined spaces, excavations, explosive atmospheres or high volume asset failures (e.g. dams or aqueducts), and polluting sewage and chemicals if accidentally or uncontrollably released.

Potential impacts include: serious injury or loss of life; catastrophic damage to property/infrastructure; and damage to, or destruction of, wildlife, fish or natural habitats. Environmental hazards, notably extreme weather, can affect our operational assets and service delivery.

#### Control and mitigation

We have a strong health, safety and environmental culture supported by strong governance and management systems certified to OHSAS 18001 and ISO 14001 respectively. We actively seek to improve health, safety and wellbeing across the group through targeted improvements and benchmarking against our peers and seek to protect and improve the environment through the responsible delivery of our services. This includes helping to support rare species and habitats through targeted engagement and activity, as well as our commitment to reducing our carbon emissions by designing out waste from our operations, generating our own energy and looking at ways to reduce our use of raw materials. Due to the impact the environment can have on our services, extreme weather and climate change is being integrated into our risk, planning and decision-making processes.

#### Performance indicators

- EA performance assessment
- Accident frequency rates

#### Most significant event-based risks

- Disease pandemic\*
- Process safety\*
- Personal safety
- Carbon commitments
- Failure of above-ground assets (flooding)

8

#### Security

The potential for malicious activity (physical or technological) against people, assets or operations.

#### Main strategic theme



#### Risk exposure

As the supplier of essential services and the owner and operator of critical national infrastructure, security is of paramount importance against an ever evolving and increasingly sophisticated threat through physical, technological, chemical or biological means. This could originate from rogue independent actors, nation states, organised crime, disgruntled employees, or as a result of commercial espionage.

Potential impacts include the loss or compromise of commercially sensitive data, the disruption of business activity and/or damage or destruction of systems, assets or infrastructure with a knock-on impact to service delivery and community infrastructure.

#### Control and mitigation

Security measures and awareness training combined with strong governance and inspection regimes aim to protect infrastructure, assets and operational capability. We work closely with our industry peers, the Centre for the Protection of National Infrastructure (CPNI), the National Cyber Security Centre (NCSC), the Drinking Water Inspectorate and Defra. We liaise with these organisations to shape the sector approach to security, understand how to better protect our business, and be compliant with the Network and Information Systems (NIS) Directive. Ongoing system and network integration improves operational resilience and we maintain robust incident response, business continuity and disaster recovery procedures. We maintain insurance cover for loss and liability, and the instrument of appointment (licence) of the regulated business also contains a 'shipwreck' clause that, if applicable, may offer a degree of recourse in the event of a catastrophic incident.

#### Performance indicators

- Cyber incidents

#### Most significant event-based risks

- Cybercrime\*
- Terrorism\*

## REGULATORY AND LEGAL

9

**Conduct and compliance**

The failure to adopt or apply ethical standards, or to comply with legal and regulatory obligations and responsibilities.

**Main strategic theme****Risk exposure**

Our business extends to multiple stakeholders and is subject to a significant amount of legislation and regulation. Long-term sustainability, resilience and reputation rely on responsible conduct and compliance across our business and extended supply chain.

Failure to comply with legal obligations could lead to financial penalties, reputational harm and loss of customer and investor confidence. Fines of up to 10 per cent of group turnover could be imposed, particularly in the areas of environmental, health and safety, competition, and information and data security. Ultimately sanctions could include, in extreme circumstances, revocation of the instrument of appointment (licence) and the imposition of a special administration regime.

**Control and mitigation**

We place high importance and focus on corporate responsibility. Our well-established internal forums and engagement activities with communities, landowners, environmental groups and other stakeholders allow us to be aware of current issues and concerns. These include ethical supply chains, modern slavery risks, the needs of vulnerable customers and diversity and equality within our own employee population.

**Performance indicators**

- Community investment
- EA performance assessment
- C-MeX

**Most significant event-based risks**

- Non-compliance with the Bribery Act
- Digital Service licensing

10

**Political and regulatory**

Developments connected with the political, regulatory and legislative environment.

**Main strategic theme****Risk exposure**

As a regulated business, the political and regulatory environment shapes how we operate as a business. Factors include the public perception of the water industry and its legitimacy to provide value, increased challenges on efficiency and the imposition of increased levels of competition across the sector.

There is the potential for increased costs of administration and for sources of income and funding to be impacted. There is also the potential for reduced Regulatory Capital Value (RCV) and for greater uncertainty of returns.

**Control and mitigation**

We continue to take part in government and regulatory consultations to influence outcomes in respect of policy and legislation. We routinely communicate with customers so that their needs and expectations can be factored into our thinking and plans.

**Performance indicators**

- Return on Regulated Equity (RoRE)
- Underlying operating profit

**Most significant event-based risks**

- Reduced revenue at the next price review\*
- Upstream competition (bioresources)\*
- DPC – Haweswater Aqueduct Replacement Programme (HARP)

## RISK EXPOSURE

An indication of the current exposure of each principal risk relative to the prior year.

- Decreased
- Stable
- Increased

## OUR STRATEGIC THEMES



The best service to customers



At the lowest sustainable cost



In a responsible manner

## MOST SIGNIFICANT RISKS

- \* Indicates a significant event-based risk reported to the board (see pages 108 and 109).

# Principal risks and uncertainties

## The company's most significant event-based risks

The most significant event-based risks represent the ten highest-ranked risks by exposure (likelihood of occurrence of the event multiplied by the most likely financial impact) and those risks which have been assessed as having a significantly high impact, but low likelihood. Depending on the circumstances, financial impacts will include loss of revenue, additional or extra cost, fines, regulatory penalties and compensation. Reputational impact relative to our multiple stakeholders is also assessed, reported and considered as part of the mitigation.

1

### Failure of significant water supply systems

**Risk exposure:** The Haweswater Aqueduct (HA) is a key asset with current low resilience due to deterioration, potentially resulting in water quality issues and/or supply interruptions to a large proportion of our customer base.

**Control/mitigation:** Capital projects for asset replacement (including HARP), as well as extensive programmes of asset monitoring, surveys and maintenance.

2

### Failure of wastewater network (sewer flooding)

**Risk exposure:** Equipment failure, collapses/bursts or inadequate hydraulic/operational capacity to cope with extreme weather and population growth, resulting in sewer flooding.

**Control/mitigation:** Preventative maintenance and inspection regimes, customer campaigns and sewer rehabilitation programmes.

3

### Cybercrime

**Risk exposure:** Data and technology assets compromised due to malicious or accidental activity, leading to a major impact to key business processes and operations.

**Control/mitigation:** Multiple layers of control, including a secure perimeter, segmented internal network zones, access controls, constant monitoring and forensic response capability.

5

### Failure to treat wastewater

**Risk exposure:** Inadequate capacity and capability of wastewater treatment works, leading to environmental permit breaches.

**Control/mitigation:** Improved Effective Operations and Maintenance (EO&M) programme and operating procedures including proactive maintenance, operative training and compliance audits.

6

### Financial outperformance

**Risk exposure:** Failure to achieve financial outperformance due to macro economic conditions and efficiency challenges, impacting the cost of debt and delivery of the company business plan.

**Control/mitigation:** Interest rate and inflation management, ongoing monitoring of markets and regulatory developments, and company business planning.

7

### Credit ratings

**Risk exposure:** Credit ratings below internal targets, due to deterioration in financial and/or operational performance and/or external factors (such as inflation) resulting in more expensive funding.

**Control/mitigation:** Continuous monitoring of markets, and the management of key financial risks within defined policy parameters.

9

### Upstream competition (bioresources)

**Risk exposure:** Competition in the bioresources market leading to a loss of business and reduced operational efficiency.

**Control/mitigation:** Delivering operational efficiency, continued engagement with Ofwat and a strategic review of the bioresources business.

10

### Failure of the distribution system (leakage)

**Risk exposure:** Network characteristics, asset condition, extreme weather or third-party damage resulting in the loss of treated water and failure of the leakage target.

**Control/mitigation:** Management of pressure and flow combined with traditional and innovative leakage detection techniques.

A

### Pension deficit

**Risk exposure:** The potential for the pension scheme funding deficit to increase because of life expectancy rates leading to additional contributions.

**Control/mitigation:** Constant monitoring combined with hedging against interest rates, inflation and growth asset risk.

C

### Dam failure

**Risk exposure:** Uncontrolled release of a significant volume of water from reservoirs due to flood damage, overtopping, earthquake or erosion leading to catastrophic impacts downstream.

**Control/mitigation:** Each reservoir is regularly inspected by engineers. Where appropriate, risk reduction interventions are implemented through a prioritised investment programme.

D

### Disease pandemic

**Risk exposure:** Serious illness in a large proportion of the UK population and consequences to our workforce, the wider supply chain and macroeconomy.

**Control/mitigation:** The incident management process would be invoked, supported by the Pandemic Response Plan. This includes the implementation of multi-channel communication with non-pharmaceutical interventions as per government guidance.

E

### Terrorism

**Risk exposure:** A significant asset to be compromised by terrorist activity leading to loss of supply, contamination and/or pollution.

**Control/mitigation:** A risk-based protection of assets in line with the Security and Emergency Measures Direction (SEMD) and close liaison with the Centre for the Protection of National Infrastructure (CPNI), regional counter terrorist units, local agencies and emergency services.

## KEY

- The top ten ranking risks relative to likelihood and impact
- High impact, low likelihood risk

4

### Reduced revenue at the next price review

**Risk exposure:** One of many potential issues relates to the totex allowances through AMP8 revenues for labour costs, due to the Office of National Statistics ASHE Index taking account of lower wages associated with COVID-19.

**Control/mitigation:** Reviewing the rule book once published and liaising with Ofwat accordingly.

8

### Failure of wastewater assets (serious pollution)

**Risk exposure:** The unintended introduction of pollutants (including sewage) into the environment due to the capacity and capability of wastewater assets.

**Control/mitigation:** Proactive identification of asset defects through condition surveys, staff training, incident analysis, drainage area studies and improvement plans.

B

### Fair payment of tax

**Risk exposure:** Failure to maximise the available tax efficiencies and reliefs due to changing mechanisms.

**Control/mitigation:** Tax policies and objectives cover: efficient structuring of commercial activities; maintaining a robust governance and risk management framework; and an open and transparent relationship with tax authorities.

F

### Process safety

**Risk exposure:** The unintentional generation and/or release of dangerous substances and explosive atmospheres in sludge digestion or other processes, resulting in a catastrophic incident.

**Control/mitigation:** The design and engineering of facilities, training and maintenance of equipment. Effective control points exist with alarms monitored remotely and statutory inspections.

## New and emerging risks

We continue to review and monitor external and internal business environments to establish and understand risks and issues that are new, developing, growing or becoming more prominent. We do this through a combination of business unit risk assessments, a specific new and emerging risk forum and other horizon scanning forums such as a compliance working group. This enables us to plan our strategy and operations to minimise threats of this nature. Notable new and emerging risks and some possible impacts are set out below.

- **Post-Brexit supply chain:** Despite the agreement of a trade deal with the EU, there remains some uncertainty in relation to the supply of goods and services. We manage the supply chain through category management, with chemicals and critical spares being two categories which are fundamental to the delivery of our service provision. We will continue to monitor how the supply chain emerges and will adapt accordingly through category management and supplier relationship management.
- **Post-Brexit legislative change:** Post-Brexit uncertainty remains in relation to how European legislation will transition into UK law, for example, data protection laws governing the flow of data and information between the EU and UK. Changes in UK law, such as the Environment Bill, Sewage (Inland Waters) Bill and changes to Public Procurement will all have implications for the water sector.
- **Regulatory change:** The political landscape remains challenging for the water sector. There remains uncertainty regarding the introduction of further competition and therefore the associated implications for revenue and the asset base. Looking ahead to Price Review 2024 (PR24), the methodology remains uncertain, particularly in light of the outcome of other water companies' PR19 CMA appeals.
- **Plastics:** The current attention on single use plastics and microplastic pollution in water, wastewater effluent discharge and sludge disposal (see biosolids recycling to agriculture) could have implications for our assets and operations.
- **Biosolids recycling to agriculture:** The practice of disposing of biosolids to agriculture could be banned (partially or in full) in the UK based on similar actions within Europe.
- **Water scarcity and water trading:** Water scarcity is an emerging issue within the UK, which has knock-on implications for us in relation to the proposed strategic transfer of water from the North West to the South East of England, and the associated service, commercial and reputational impacts.
- **COVID-19:** To a large degree, COVID-19 has become business as usual, however, the longer-term implications of the economic downturn, with potential corporate failures and high unemployment, could affect cash collection. Continued lower inflation will affect revenues, financing costs and RCV, however, rising inflation will have an upside over the longer term.

### Material litigation

The group robustly defends litigation where appropriate and seeks to minimise its exposure by establishing provisions and seeking recovery wherever possible. Litigation of a material nature is regularly reported to the group board. Beyond that reported in previous years on the Argentina multiparty 'class action' and the Manchester Ship Canal Company matters (to which there have been no material developments), there is nothing specific to report on material litigation.