Cardiff University Press
Gwasg Prifysgol Caerdydd

JCaDS
JOURNAL OF CORPORA AND DISCOURSE STUDIES 2025, 9:89–116
E-ISSN 2515-0251

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FRAMING WATER FOR FUTURE ACTION: CORPORATE COMMUNICATIONS

CITATION

Smith, J., Bowerman, T., Elliott B., & Taylor, C. (2025). Framing water for future action: Corporate communications. *Journal of Corpora and Discourse Studies*, *9*:89–116

ABSTRACT

In this study, we explore how UK water companies frame water when communicating with consumers versus investors. We take a corpus and discourse approach, combining quantitative corpus tools with qualitative discourse analysis to examine how water is constructed in two purpose-built corpora: one comprising consumer-facing communications and the other investor-facing texts. Our analysis triangulates findings from analysis of collocation, transitivity processes, pronoun usage, keyness, and metaphor to investigate how water is ideologically positioned across institutional narratives. Investor-facing texts predominantly frame water as a manageable and commodified resource, positioning companies as competent actors through material processes such as *supply*, *manage*, and *secure*. In contrast, consumer-facing discourse constructs water as a shared and vulnerable resource, attributing it varied processes (*break, run, save*). The analysis consistently shows how consumers are made responsible for water and how the water companies background their own agency in communicating with this audience. Metaphor analysis reveals a surprising degree of consistency across both corpora as metaphors of COMMODITY and PRECIOUS RESOURCE dominate investor and consumer texts alike. This shared framing suggests a financial orientation that transcends audience type, with economic considerations consistently foregrounded over ecological concerns. The study contributes to environmental discourse, corporate communication, and sustainability framing research, highlighting how institutional narratives may shape perceptions of water, responsibility, and environmental risk.

KEYWORDS

water; corporate communication; ecolinguistics; corpus-assisted discourse analysis; framing

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DOI

10.18573/jcads.176

ISSUE DOI

10.18573/jcads.v9

ORCID

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Manuscript accepted 2025-10-07

Framing water for future action: Corporate communications

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1. Introduction

It's everyone's water (Thames Water)

Water on tap (Severn Trent Water)

Water for life (Southern Water)

Water scarcity is emerging as a critical and comparatively under-discussed environmental challenge in the UK and beyond. Climate change is intensifying drought risk, while demand for water continues to rise due to industrial use and population growth. The UK Environment Agency projects that by 2050, an additional 5 billion litres of water per day will be needed to meet the needs of the UK's people, economy, and environment (Environment Agency, 2024). Yet many parts of England are already under strain. In 2021, the Environment Agency officially classified large areas of the South and East of England as seriously water-stressed (Environment Agency, 2021).

Despite this, the media in the UK have focused predominantly on water quality issues, such as pollution and sewage discharges, with much less attention paid to water scarcity. Where scarcity does feature, it is often framed reactively, focusing on acute drought events and emergency measures, rather than being addressed as a long-term challenge that requires proactive, sustainable management (Grecksch & Landström, 2021). This discrepancy is shown in Table 1 (see also, The Times View, 2025; Vaughan, 2025), which shows the volume of media coverage dedicated to both water quality and water quantity (i.e. scarcity) in the SiBol (2021) corpus of nine British newspapers. As the table shows, water quality receives almost four times as much attention as water scarcity.

Smith et al. (2025) Framing water for future action: Corporate communications. DOI 10.18573/jcads.176

Focus area	Search term	Raw freq.
	water quality	316
	water pollution	62
	sewage pollution	20
	contaminated water	61
Water quality total		**459**
	water scarcity	43
	water shortage	29
	water stress	10
	water availability	11
Water quantity total		93

***Table 1**: Frequency of media coverage of water quality vs. water quantity in the SiBol (2021) UK newspaper corpus*

Analysis of collocates of WATER in Parlamint (Erjavec *et al.*, 2024), the corpus of UK parliamentary debates 2015–2022, shows a similar picture with the most salient collocates concentrating on quality (e.g. *clean*, *quality*, *drinking*, *sewage*, *sewerage* in the first 20) while the first to clear point towards future quantity risk (*shortages*) comes in at rank 98.

Water companies are both essential service providers and strategic communicators, responsible for shaping how water scarcity is publicly understood. Whether scarcity is framed as a looming crisis demanding conservation, or as a manageable investment opportunity promising returns, has important consequences for policy design, public behaviour, and investor decision-making. This study examines this by asking: how is water framed by UK water companies when communicating to consumers, and does this differ when communicating to investors? In doing so, it aims to offer insight into how water companies navigate the tensions between public interest, commercial needs, and environmental responsibility, and to consider whose interests are ultimately centred in these competing narratives.

The study focuses on England and Wales, whose approach to water management is highly unusual within Europe. Since privatisation in 1989, all water and sewerage services in these regions have been delivered by private companies, a model unique across Europe (Ofwat, 2021). For instance, in the Netherlands, water utilities are entirely publicly owned, and their privatisation is prohibited by law (We Own It, 2024). The English model has long attracted criticism, particularly over environmental harm, underinvestment in infrastructure, and a lack of financial transparency (Laville, 2024).

Within this landscape, three companies were selected for analysis. Thames Water, Severn Trent Water, and Southern Water operate in regions identified as among the most water-stressed in the UK (Environment Agency, 2021). They also reflect a range of ownership structures typical of the privatised sector, from pension fund investors to private equity ownership. By analysing how these companies frame water scarcity across consumer-facing and investor-facing communications, the study investigates not only the language of water, but also the interests that language serves, raising broader questions about the role of private companies in managing what remains an essential public resource.

2. Framing water

In this section, we briefly position our work within the wider context of ecolinguistics before identifying patterns of construction in existing work.

2.1. Corporate ecological discourses

Ecolinguistics emerged as a way to broaden sociolinguistics by addressing the growing awareness among both individuals and organisations of ecological challenges and threats (Halliday, 2001). Since then, it has focused on analysing the discourses that humans live by, both figuratively and literally. These have included 'economic discourses which represent the main goal of society as unending economic growth, the deceptive discourses of greenwash, [and] agricultural discourses which treat the natural world mechanistically as a resource to be exploited' (Fill & Penz, 2018, p. 239). Investigating ecolinguistic discourses has taken on an ever-increasing urgency as the potential ramifications become more apparent. This was reflected in a recent review of ecological discourse analysis in which Song *et al.* (2025) found a rapid increase in the number of studies in this area between 2014 and 2023—with a majority focus on news coverage.

In its analysis of *corporate* ecological discourses, this paper follows in the footsteps of work such as Poole (2016), a corpus-assisted study in which corporate mining texts were contrasted with those from an environmental advocacy group, Fernández-Vázquez's (2021) analysis of corporate sustainability websites which revealed how various types of media can work together to further the greenwashing narratives of major polluting companies, and Jaworska's (2018) examination of how ecological discourse is constructed in corporate social responsibility reporting. With its focus on private water companies, this study aims to add to this growing body of research and to shed light on the potentially planet-altering consequences they may contribute to or even exacerbate. In so doing it aims to feed into Bortuluzzi and Zurru's (2024) discourses of awareness in order that a more *ecoliterate* world may arise.

2.2. Framing of excess water

Flooding is identified as 'one of the most important climate change challenges facing the UK, and people affected by flooding are more likely to experience adverse health out-

comes including long-term impacts on mental health and wellbeing' (UK Health Security Agency, 2023) which creates expectations of newsworthiness – especially considering the dramatic effects of flooding. Previous research has highlighted the role of media in raising awareness and representation of cause and effect. For instance, Gavin, Leonard-Milsom and Montgomery (2011) analysed 1200 news reports on flooding and found that only a very small number (55) linked the cause to climate change. Albrecht (2022) also examined media framing of flooding by focussing on the politicization of major floods in Britain in 2005 and 2015, finding that certain parts of the press constructed discourses of government failure in response. Thus, the crisis functions as a vehicle for criticism of the incumbent governing party.

In other parts of the world currently suffering the consequences of climate change more urgently than Western Europe, recent research has also looked at the influence on policy of discourse around flooding. Adekola and Lamond (2018) examined the situation in Nigeria in terms of how policy actors frame flooding in the media and the effect on policy as a result. A discrepancy between governments and local businesses who saw flooding as preventable, and NGO's, who advocated for new policies, was highlighted in the research. Ghana, Terkper and Baddianaah (2024) used a corpus analysis to examine how the local press framed flooding as a threat without examining the underlying causes —showing an absence of agency similar to that in the UK research.

2.3. Framing of insufficient water

Framing of water scarcity similarly follows a crisis frame. As Grecksch and Landström (2021) note, it tends to be addressed only during acute events, reinforcing its positioning as exceptional or short-term. Studies of Ireland's 2018 drought (Augustenborg *et al.*, 2022), the Flint water crisis (Kong, 2022), and European water reporting (Weder, Voci & Vogl, 2019) show that scarcity is frequently constructed through crisis-oriented narratives, with limited attention to citizen agency, long-term adaptation, or behavioural guidance. Institutional discourses reflect similar tendencies. Hussein (2017), for example, finds that Jordanian schoolbooks portray water scarcity as a natural or external threat, legitimising large-scale technical solutions while deflecting political responsibility. Kassirer (2022) shows how Israeli water campaigns have evolved towards discourses of individual behaviour change, while Boyer, Le Lay and Marty (2021) describe the emergence of a 'conservation imperative' in US media which frames water management as a consensus-based, non-mandatory lifestyle shift. Both studies highlight a tendency to depoliticise scarcity, downplaying government responsibility. Similarly, Dayrell *et al.* (2022) find that UK media have historically downplayed the long-term risks of drought, further marginalising environmental and political factors in public debate. In contrast, Weder, Voci and Vogl (2019) note that in Europe routine water governance receives limited critical scrutiny. Their analysis reveals that water is predominantly framed in economic terms, with little counterargument or space for sustainable alternatives, rendering scarcity under-problematised in mainstream narratives. While environmental communication research has explored media and policy discourse (Augustenborg *et al.*, 2022;

Hussein, 2018), it has largely overlooked how highly-influential corporate actors strategically frame water in non-crisis contexts and how water issues are framed in day-to-day institutional messaging.

2.4. Framing water quality

Studies on water quality reveal a similarly risk-oriented framing but differ in their focus on allocating blame and responsibility. Poor water quality is often framed through narratives of contamination, neglect, and crisis, invoking threats to public health and institutional trust. For instance, Kong's (2022) corpus-assisted analysis of news coverage of the Flint water crisis illustrates how polluted water is framed not only as an environmental hazard but as a failure of governance and social accountability. Media coverage foregrounded political responses while downplaying health risks and community action. Ford *et al.* (2025) show the downplaying of threat in corporate communication. They identify how England's nine Water and Sewerage Companies (including those analysed in this study) have employed communicative strategies to manufacture doubt, deflect blame, and greenwash widespread pollution. Their corpus-based analysis applies Goldberg and Vandenberg's (2021) framework of 28 disinformation tactics. In the UK, where the water sector is increasingly financialised and majority-owned by global investors (Ford *et al.*, 2025), communicative choices carry significant weight and understanding how companies shape water narratives is critical for assessing both institutional accountability and environmental governance.

3. Methodology

As outlined above, this study investigates how three UK water companies frame water in their communications with two distinct audiences: investors and consumers. These datasets are described in the first sub-section here. The discourse comparison is grounded in the assumption that language does not neutrally reflect reality but actively constructs it. In this view, representation refers to how entities, such as water, the companies themselves, and the public, are positioned within discourse. Framing in this context is treated not as a matter of tone or style, but as a set of discursive choices that shape perception, assign responsibility, and legitimise institutional roles (Taylor & Heritage, 2024). The frames are identified through a combination of corpus linguistic and (critical) discourse analytic approaches which are briefly described in the following sub-sections.

3.1. Corpus description

The specialised corpus was constructed from web-based communications by three companies: Thames Water, Southern Water, and Severn Trent Water. These companies were selected due to their operation in some of England's most water-stressed regions (Environment Agency, 2021) and their representation of key ownership variations within the privatised UK water sector. Following Love and Busso's (2024, p. 66) view that a corpus

should reflect the linguistic context under investigation, care was taken to ensure the corpus accurately captures communicative practices relevant to each audience.

The investor corpus was built from the most recent (2024) annual reports, chosen for their strategic significance and standardised format. Figure 1 illustrates the style of communication used with this audience. An annual report produced by a privately owned utility company is a strategic communication tool. It operates at the intersection of financial accountability and reputational positioning, shaping stakeholder perceptions while reinforcing corporate legitimacy in a sector of high public interest.

***Figure 1**: Southern Water, investor-facing webpage (24.03.25)*

The consumer-facing corpus required a more selective approach to maintain comparability across the three companies. Selection criteria focused on material directed at individual consumers, excluding content for businesses, institutional partners, or schools. Following cross-validation, a set of topics which were addressed across the three companies were identified: water saving and metering, leakage and water quality, sewer blockages, and environmental or community engagement. The style of communication is illustrated in Figure 2. These sub-corpora were smaller, as shown in Table 2, but found to be sufficient for meaningful comparison, in line with Gabrielatos's (2018, p. 233) emphasis on representativeness over size.

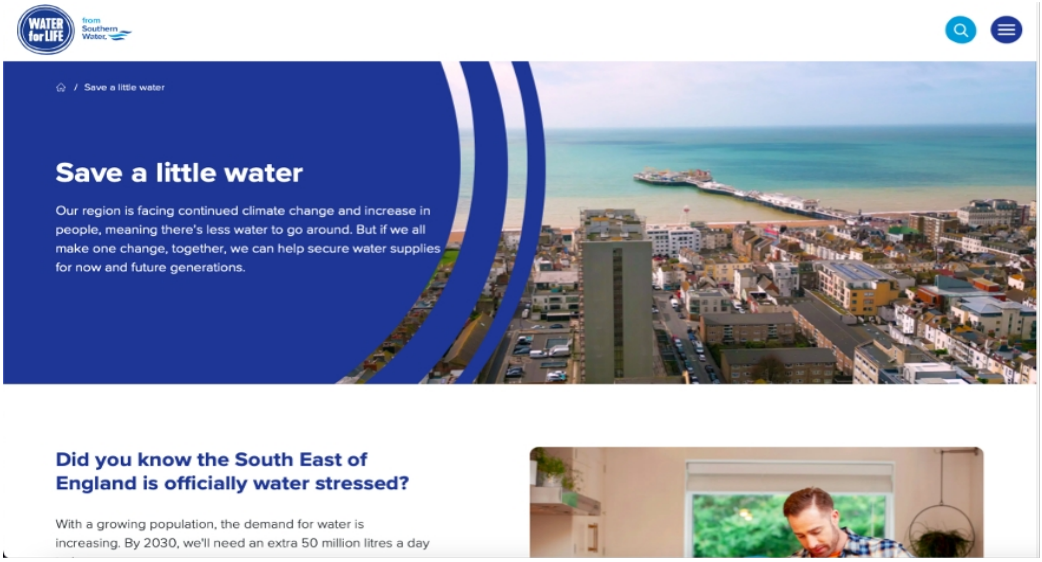

***Figure 2**: Southern Water, consumer-facing webpage (24.03.25)*

Water company	Investor sub-corpus	Consumer sub-corpus
Severn Trent	123,424	8,098
Southern	113,886	5,544
Thames	174,274	5,378
Total	411,584	19,020

***Table 2:** Corpus size (in tokens as calculated on SketchEngine)*

The sub-corpora were uploaded to SketchEngine (Kilgarrif *et al.*, 2014) which was used for all analysis.

3.2. Collocation

Collocation analysis provides analysts with a systematic way to analyse the most important and relevant relationships between lexical items (Baker, 2023). This is determined by word association measures that look at whether 'the words have a measurably strong preference to occur together as opposed to being randomly associated' (Brookes & McEnery, 2020, cited in Kennedy *et al,* 2024, p. 56). By using collocates to investigate *the company that water keeps* when discussed with the consumers and investors of the water companies, we aim to shed light on the underlying linguistic patterns discursively influencing stakeholder perception and behaviour.

The first phase of analysis focussed on collocates of the lexical item WATER in the six sub-corpora. The three sub-corpora for each variable were not merged in this stage to ensure the reliability of the sub-corpora (checking for anomalies that may skew data etc.).

The Word Sketch function on Sketch Engine was used on the basis that the automated grammatical categorisation would aid with semantic grouping and transitivity analysis. The collocates were identified using the default settings and a minimum frequency of two. This number was chosen because low frequency collocates 'may contribute towards a more common pattern if they function in similar ways to other collocates' (Baker, 2023, p. 143). Analysts worked independently to semantically categorise collocates based on attested use in the concordance lines. Final coding was checked across raters to ensure consistency during this potentially imprecise but ultimately useful (Baker, 2023) stage.

The second phase focussed on transitivity analysis to identify who is given agency in relation to WATER. Transitivity is grammatical structuring whereby a social actor can be presented as more or less active, responsible, involved in, or absent from an activity. A speaker or author's usage of transitivity is considered a subconscious choice reflecting and perpetuating their world view, or how they might wish to be viewed by the world (Hunt, 2024). Processes and pronoun use were identified through Word Sketch and then manually sampled and categorised.

3.3. Metaphor

Metaphor is central to how humans think and communicate, allowing abstract or complex issues to be understood through more familiar concepts. According to Lakoff and Johnson (1980), metaphor works by mapping a source domain (e.g. WAR, COMMODITY) onto a target domain (e.g. ARGUMENT, WATER), thereby shaping how we perceive and act on real-world problems. These mappings are not neutral: they are shaped by experience, culture, and power relations (Charteris-Black, 2006). Following Charteris-Black (2004) and Bisiada (2024), we view metaphors as strategic tools that frame perception, align audiences with particular viewpoints, and serve institutional interests. As Hart (2014) notes, metaphors can naturalise political decisions or institutional positions, presenting them as inevitable or commonsense. To capture this, we adopt Musolff's (2006) concept of metaphor scenarios, which treats metaphor not just as a lexical mapping but as a structured narrative involving roles, actions, and values. For example, metaphors such as WATER IS A COMMODITY, a PRECIOUS RESOURCE, or a VULNERABLE ENTITY invite distinct ways of thinking about responsibility, control, and urgency. Metaphors like WATER STRESS or WATER SHORTAGE tend to surface in crisis contexts and often legitimise technical or market-based solutions (Weder, Voci & Vogl, 2019; Augustenborg *et al.*, 2022). In contrast, framing water as precious or vulnerable may promote conservation or shared responsibility, but it may also appeal to investors by positioning water as a scarce and therefore valuable asset.

3.4.1 Identification and coding process

The analysis of metaphorical framing focussed on the target item WATER. Given the smaller size of the consumer corpus, all 284 concordance lines of WATER were reviewed. For the larger investor corpus, a random sample of 300 concordance lines was selected (concordance lines referring primarily to company names were excluded). The identifica-

tion and coding process was cyclical and collaborative, involving multiple rounds of sampling, coding, cross-checking and refinement. The key steps were as follows:

a) Text-to-collocate: The concordance lines were read to identify potential metaphor candidates. Once these were identified, surrounding collocates were explored to test for patterned source domains.
b) Substitution test: In cases where the metaphorical nature of a phrase was ambiguous, a substitution test was applied (Cameron, 2003). Water was replaced with other concepts (e.g., 'money' in a hypothesised WATER IS A PRECIOUS RESOURCE framing) to assess whether the sentence still made sense. If the sentence retained coherence, it was generally considered metaphorical.
c) Lexicalisation: Some lexical items aligned with multiple source domains. In such cases, the primary source domain was selected based on context, and a secondary source domain was noted where applicable. For instance, *quality* could align with PRECIOUS RESOURCE (when focusing on preserving water quality for sustainability) or COMMODITY (when focusing on managing water quality as a service for consumer or business use).
d) Classification: Once a metaphor was identified, it was assigned to the closest matching source domain from eight categories which emerged from the classification process (listed below). If the metaphor was ambiguous, it was marked with a question mark for further review. Ambiguous cases were cross-checked by a second coder to ensure consistency across the coding process.
e) Cross-checking: To ensure inter-coder reliability, analysts independently coded the same sample of lines. Discrepancies were discussed, and the coding framework was refined through this iterative process. Given the interpretive nature of metaphor identification, this methodology aligns with best practices in the field of CADS (Bisiada, 2024).
f) Documentation: For each occurrence of WATER, the following details were recorded in a spreadsheet:
    - Is it a metaphor? (Yes/No)
    - Source domain(s) (primary and secondary, if applicable)
    - Lexicalisation (key word or phrase)
    - Comments (if necessary, to clarify the decision-making process)

3.4.2 Metaphor scenario categories

Through pilot coding, the following metaphor scenario categories were identified:

1. COMMODITY: e.g. water framed as a product that can be *measured* or *bought*.
2. PRECIOUS RESOURCE: e.g. water framed as *valuable* and requiring *conservation*.
3. VULNERABLE ENTITY: e.g. water framed as needing *care*, *protection*, or *defence*.
4. FUGITIVE: e.g. water framed as *escaping* or needing to be *captured*.
5. TRAVELLER: e.g. water personified as *journeying* and moving with purpose or agency

6. PROBLEMATIC ENTITY: e.g. water framed as *causing damage*, blockages, or requiring management.
7. OBJECT OF LEARNING: e.g. water framed as something to be *studied* or *discovered*.
8. PERSONIFICATION: e.g. water personified as *moving purposefully*.

These categories were not mutually exclusive, and overlapping cases were noted, following Musolff's (2006) notion of metaphor scenarios.

3.4.3. Comparative focus

To compare the relative frequency and framing of these metaphor scenarios across the two corpora (investor-facing vs. consumer-facing), the relative frequencies were calculated from the total concordance lines analysed (284 for the consumer corpus, 186 for the investor corpus). This approach ensures that every occurrence of the item *WATER* was treated as a *potential* site of metaphorical framing. In other words, each concordance line represents an opportunity for metaphor to occur, allowing for a proportional comparison of metaphor realisation against the total metaphor potential within each corpus.

3.4. Keyness

Keyness is used here to triangulate the findings by providing a more bottom-up approach as it provides the lexical items which, as Scott (2006, p. 56) phrases it, tell us 'what the text boils down to'. We used an external reference corpus so we were not obscuring potential similarity in framings (Taylor, 2013) and identified categories emerging from the keywords, rather than entering with a pre-established set. Categories were assigned based on collocates of keywords.

3.4.1 Testing reference corpora and target corpora

In the first stage, we investigated the viability of several corpora to act as reference corpora. We ruled out comparing each corpus against the other, for example, the investor corpus tested against the consumer corpus, as this method does not allow for identification of similarities between corpora (see also discussion in Baker, 2023). We identified three possible reference corpora available on SketchEngine; enTenTen21, for its size, up-to-dateness, and breadth, the British National Corpus (BNC) for its balance of different sources, and EcoLexicon, for its potential shared content with our two corpora. These were each used as reference corpora against the compiled investor corpus and a consumer corpus. Surprisingly, we found that no reference corpus provided unique keywords. In other words, our corpora were so distinctive that they generated overlapping keywords in comparison with three different reference corpora, providing strong evidence for Scott's (2009) assertion that there is no bad reference corpus in this case. Given the lack of distinctiveness among the reference corpora, we chose enTenTen21 for future (para)replicability.

In this stage, we also tested the similarity between the three company sub-corpora in each corpus. We found that when comparing each individual consumer and investor corpus to enTenTen21 there was little difference in unique keywords produced by sub-cor-

pora belonging to different water companies; Severn Trent and Southern only generated two unique keywords, and Thames had three (based on a comparison of the top fifty keywords excluding company-specific terms). Therefore, in the analyses, we combined the three company sub-corpora.

4. Findings

4.1. *The company WATER keeps: Overview of collocation patterns*

Five main semantic categories for collocates that *modified* WATER were identified, as shown in Table 3.

	Investor Corpus	Consumer Corpus
Quality	*clean, drinking, high-quality, wholesome, safe, fresh, quality*	*wonderful, clean, drinking*
Quantity	*much, less*	*much, excess, more*
Regulation	*regulated, core, ongoing*	
Processes	*surface, raw, use, recycled*	*surface, storm*
Misc.	*river*	*hot, coastal*

Table 3: *Collocate modifiers of WATER*

For collocates that were *modified by* WATER five categories were identified, as shown in Table 4.

	Investor Corpus	Consumer Corpus
Processes	*supply, treatment, main, use, network, source, meter, bill, consumption, cycle, storage, service, butt, recycling, saving, abstraction, usage, pressure, wastewater, infrastructure, site, separation, run-off, transfer, course, collection, management, process*	*wastewater, meter, butt, supply, pipe, pressure, flow, use, main, energy, usage*
Industry	*company, sector, industry, future, customer, utility, standard, project, compliance, plan*	*company*

	Investor Corpus	Consumer Corpus
Commodity	*resource, efficiency, demand*	
Problems	*poverty, resilience, scarcity, interruption, failure, appearance, availability, complaint, risk, event*	*bottle, programme*
Misc.	*quality, work, environment, improvement, measure, Activity, performance, program*	*quality, vole*

Table 4: *Collocate modified by* WATER

4.1.1 Collocates in the investor corpora

In the investor corpora, in line with UK media framing discussed in Section 1, the largest semantic group of modifiers relates to water 'quality' (Table 3). All collocates carry a positive connotation (*clean*, *drinking*, *high-quality*), as illustrated in (1). This positive framing of water appears important for the companies to attract investment as it suggests competent management.

(1) Our customers expect us to deliver **wholesome water** and effectively remove wastewater. (Investor_Southern)

In terms of water 'quantity', there were fewer collocates (*much, less),* but concordance analysis revealed these also related to management competence in terms of resource planning and influencing consumer usage. The other two main semantic groups were 'regulation' (e.g. *regulated, core),* and 'processes' (e.g. *surface, raw*) which again point to self-presentation of competence around economic and technical framing for water.

The collocates modified by WATER (Table 4) also show a semantic preference for 'processes' (e.g. *supply, treatment*) in the investor corpus, again pointing technical competence being extremely important to the companies to convey to those who are potentially willing to invest. Similarly, framing water in terms of the 'industry' (*company, sector)* and as a 'commodity' (*resource, demand*) are ways for the water companies to convey economic competence to investors. The last semantic category is concerned with 'problems' (*poverty, scarcity*), specifically, the awareness of and ability to solve these issues, as shown in examples (2) and (3); once again framing water as manageable despite the risks and difficulties the companies will know that their investors are aware of.

(2) On 22 November 2022, we launched our Societal Strategy, with the objective of helping up to 100,000 people in our region, giving them improved chances in life and **tackling the underlying causes of water poverty**. (Investor_SevernTrent)

(3) A new recycling project to **solve water scarcity** in the South East (Investor_Southern)

The framing of WATER in the investor corpus around operational competence, particularly as it relates to problem solving, aligns with the findings of Weder, Voci and Vogl (2019) about the prevalence of economic framing in this sector. Water issues are presented as manageable with the right strategy which further underplays the real-world risks of water scarcity and quality. If solving problems associated with water is a matter corporate efficiency—as framed in the investor corpus—the real threats are downplayed (as in work by Kassirer, 2022, Boyer, Le Lay & Marty, 2021, Dayrell *et al.*, 2022, etc.) and the relationship of water problems and climate change is obscured (see Gavin, Leonard-Milsom & Montgomery, 2011 and Albrecht, 2022).

4.1.2. Collocates in the consumer corpora

As seen in Table 3, the modifiers of WATER, collocates in the consumer-facing materials also related to quality (e.g. *wonderful, clean*) but to a lesser extent than in the investor corpus. This could reflect the reality that emphasizing quality to consumers is less important, as unlike investors they cannot take their business elsewhere. In contrast, there is more equal focus on quantity in the consumer materials (*much, excess, more)* with concordance analysis revealing framings around consumer responsibility, as in examples (4) and (5), which fosters a sense of shared responsibility between company and consumer that is absent in communications with investors.

(4) Have you ever wondered how your water gets from the reservoir to your tap? Or how **much water** you use every day – and where it goes when you've finished with it? (Consumer_Thames)

(5) This helps **us all** save even **more water**, energy and money. (Consumer_Southern)

There were no collocates in the semantic category of 'regulation' and just two for 'processes' (*surface, storm*) in the consumer corpus, in clear contrast to the investor corpus. This discrepancy suggests that the water companies display less need to highlight these areas (related to technical and economic competence) to their consumers who cannot switch provider.

Table 4 shows that 'processes' (e.g. *wastewater, meter*) are the largest semantic category of collocates modified by WATER in the consumer facing corpus, as in the investor corpus. However, there is less emphasis on operational competence and more on a shared responsibility, as in examples (6) and (7):

(6) There are **two main groups who are responsible** for **water pipes** - the person living at the property, using the water and the water company who provides water to the property (Consumer_Severn Trent)

(7) Take a look at **your water use** by answering some quick and easy questions. our water-saving calculator will provide you with a tailored report (Consumer_Thames)

Collocates with a semantic preference for 'industry' and 'commodity' (i.e. framing for operational and economic competence) barely appear (*company*) in the consumer corpus. This contrasts with the investor corpus and again highlights the differing priorities water companies have when communicating with different audiences—in this case captive (consumers), and elusive (investors). There are fewer collocates in the 'problems' category (*bottle, programme*) than in the investor corpus which may suggest a reticence to acknowledge the full extent of water-related problems to consumers, possibly to not exacerbate dissatisfaction.

The framing of WATER in the consumer corpus focuses more on shared responsibility for saving water and maintaining functional operations between the water companies and their consumers. In this it reflects the findings of Kassirer (2022), which uncovered discourses of water conservation that centered around individual behavioral change, rather than wider climate issues and government policy. The shared responsibility framing that has been revealed by the collocate analysis in the consumer corpus, alongside the corporate competence framing in both corpora, plays into neoliberal discourses of individual responsibility and market efficiency (Harvey, 2005) that downplay and even divorce pressing issues around water from climate change and government policy and action.

4.2. Framing water and transitivity

4.2.1 Processes

The transitivity analysis focused on how WATER is framed as an actor or a goal in the investor and consumer corpora to trace patterns of agency and representation, as summarised in Table 5.

	WATER as subject	WATER as object (consumer action)	WATER as object (consumer action)
Investor Corpus	*enter, flow*	*supply, provide, return, treat, collect, manage, secure, deliver, maintain, ensure*	*save, use*
Consumer Corpus	*flow, come, break, leave, run, look*	*allow, carry, supply, keep, treat, protect, move*	*save, use, boil, have*

Table 5: *Transitivity framing of WATER*[1]

1 NB collocates which were erroneously included in the WordSketch are not included here (e.g. 'supply' is listed as a verb with water as subject but in fact is a passive form that is mis-parsed).

In the investor corpus, WATER as an Actor participates in few processes (*enter, flow*). In contrast, the consumer corpus includes a broader, and in some cases, more unpredictable, set of processes. Here, WATER appears more dynamic and at times problematic. Verbs such as *break* and *leave* introduce instability and disruption, while *run* and *come* evoke spontaneous or natural movement. This suggests that in consumer-facing texts, WATER is not only functional but also something which has agency, as in (8).

(8) prevent fat, oil and grease from breaking down and blocking your pipes after **water** has **left** your home (Consumer_SevernTrent)

When water is the object of a process, the framing shifts to human agency, allowing us to examine the roles of the water companies and the consumer. In the investor corpus, WATER is acted on by the water company through a wide range of purposeful, technical actions (e.g. *supply, provide)*. These material verbs consistently present the company as an active manager and protector, emphasising control, responsibility, and reliability, as in example (9). The processes are strongly associated with the ideology of stewardship and infrastructure assurance, projecting competence and long-term planning to reassure investors.

(9) we are **maintaining** the resilience of our **water** supply (Investor_Thames)

In the consumer corpus, the company's actions toward WATER are fewer and less authoritative (e.g. *allow, carry, supply*). These verbs imply facilitation rather than control, supporting a more collaborative framing where the company enables rather than dominates. The diminished verb range suggests less overt agency, consistent with consumer-facing discourses that are often more service-oriented and less technical.[2]

(10) the creation of urban wetlands and green basins that will **allow water** to drain away naturally (Consumer_SevernTrent)

Where water is acted on by the consumer, the investor-oriented texts feature the consumer performing limited actions (*save, use*) both of which contribute to a narrative of responsibilisation, as illustrated in examples (11) and (12). The water companies frame themselves as facilitating an action which ultimately depends on the individual.

(11) Motivating customers to **save water** and protect the environment (Investor_Thames)

(12) we are working with our customers to help them **use** less **water** (Investor_Southern)

The actions performed by the consumer in the consumer-oriented corpus are similar in type and responsibilisation function, as seen in (13) and (14).

(13) we have some useful water-saving advice for however you **use water** (Consumer_SevernTrent)

2 It should be noted that the smaller size of the consumer corpus naturally yields fewer collocates overall. As such, the emphasis here is less on the quantity of verb types and more on the nature of the collocates identified and the patterns of agency they suggest.

(14) we've put together some tips to help you **save water** (Consumer_Thames)

4.2.2 Pronouns

As shown in Figure 3, the relative frequency of pronouns in the two corpora varies along a number of dimensions.

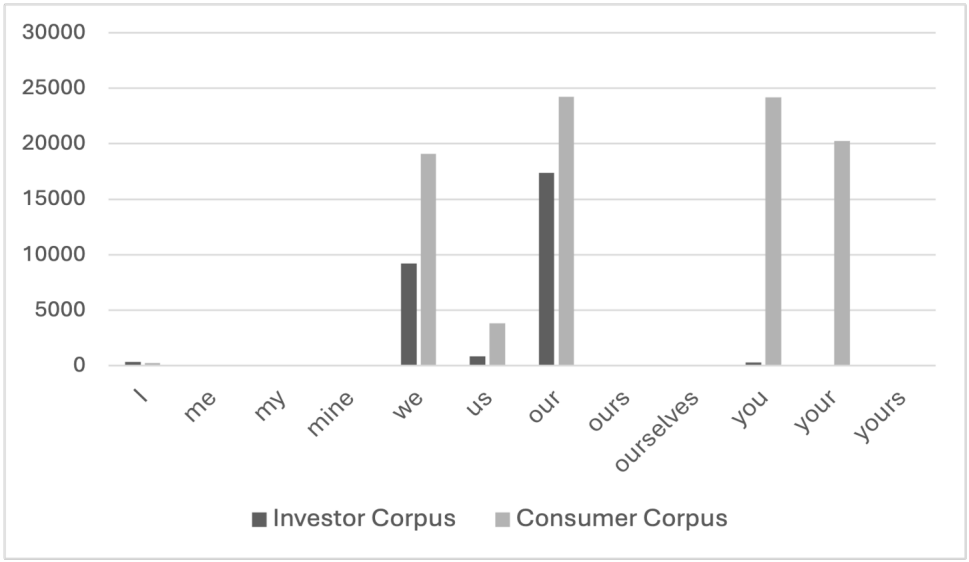

***Figure 3**: Relative frequency of pronouns*

In both corpora, *our* and *we* are the most frequent pronouns. However, who 'we' are is not consistent across the two corpora. Sampling of the concordance lines showed that first-person plurals in the investor corpus were most likely to refer to the water company alone, as in *us* shown in example (15).

(15) Our customers **want** to see **us** do more to deliver excellent bathing and river water quality (Investor_Southern)

Example (15) also illustrates one the highest-ranking collocates (5L/R LogDice) for *us* (*help*, *enable*, ***want***, *allow, deliver*). The salient collocates around shared ability (*help*, *enable*, *allow*) imply a lack of agency on the part of the water company and/or collective agency with unspecified others. In the consumer corpus, the most salient collocates of *us* (which occur in more than one sub-corpus) are: *report, can, our, on, problem*. These emerge from *us* being used in the context of asking an action of the consumer, as in example (16) representing the water company as a passive social actor.

(16) Before you **report** a **problem** to **us**, there are some checks you can do yourself to work out what and where the issue is. (Consumer_Thames)

The pronoun *we* also tended to refer to the water company alone in both corpora. The most salient verb collocates of *we* in the investor corpus are *have*, *continue*, *will*, *can, work* compared to *be*, *do*, *provide*, *will*, *have* in the consumer corpus (5L/R LogDice). However,

there is an additional pattern of shared responsibility in the consumer corpus, as in (17), in which the inclusive use of *we* is emphasised by *all*.

(17) To protect water for the future, **we all** need to save every drop we can. (Consumer_Thames)

This inclusive/exclusive pattern is more evident in the uses of *our*. The most salient collocates of *our* in the investor corpus are *customers, business, performance, Plan, region* again indicating how the use of first-person plurals excludes the consumer (and investor). In the consumer corpus, the collocates(1R/3R) are: *region*, *rivers*, *commitment*, *customers*, *business*. The first two make the shared 'ownership' of the water company and consumer salient, encouraging consumers to also assume responsibility for water usage and environmental protection, lessening responsibility on water companies.

Figure 3 also shows that the use of second-person pronouns is much more pronounced in the consumer corpus; the target readers are involved and made actors in the discourse in a way that the investors are not.

4.3. Metaphors of water

The analysis of metaphorical framing in both the consumer and investor corpora reveals key patterns in how water is conceptualised by water companies for different audiences. The investor corpus demonstrates a higher overall relative frequency of metaphorical framings of water (73% of all concordance lines) compared to the consumer corpus (59%). These contrasts in frequency and usage are summarised in Figure 4, which shows the relative distribution of metaphor source domains across the investor and consumer corpora.

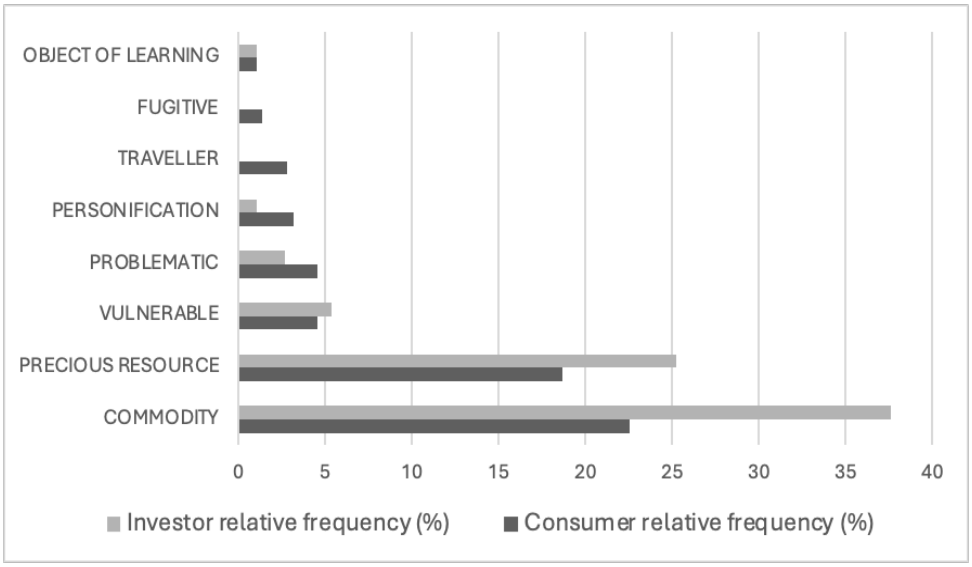

***Figure 4**: Relative frequency of metaphor source domains in water company communication: investor vs. consumer corpora*

In the investor corpus, COMMODITY (37.63% of all concordances containing WATER) and PRECIOUS RESOURCE (25.27%) emerge as the dominant source domains. These high-

light the economic value of water, aligning with the interests of investors concerned with profitability, risk management, and financial returns, as shown in example (18).

(18) **Supply** of **water** fails to meet **demand**; service disruption; financial penalty and reward position (Investor_Southern)

Such framing is consistent with the findings of Hussein (2018) and Kosovac *et al.* (2024), who argue that water is often framed in terms of market forces and financial interests, with a focus on supply-side solutions (e.g., increasing water resources) rather than improving the management of existing resources.

The consumer corpus also employs COMMODITY (22.54% of all concordances containing WATER) and PRECIOUS RESOURCE (18.66%) metaphors and these are the most frequent domains once again. However, they occur at lower relative frequencies than in the investor corpus. Where water is framed as a precious resource, the onus is on the consumer to save it, as in example (19). Where water is a commodity, it is supplied by the water company as in (20).

(19) Try these simple tips to **save water** around your home. **Saving water** in your business. **Water** is a **precious resource**. Every year the population of the South East grows, but the amount of available water remains the same. That's why we're aiming for a 9% reduction in business demand by 2037. (Consumer_Southern)

(20) Every year we invest millions in improving our infrastructure, so that we can continue to **supply** our customers with wonderful **water** (Consumer_Thames)

The FUGITIVE, TRAVELLER and PERSONIFICATION metaphors, as illustrated in (21) are all more characteristic of the consumer corpus.

(21) Typical signs of a clogged sewer line in your home include gurgling noises or water levels rising. These symptoms can come from anywhere where **water leaves the house**, such as a toilet, sink, washing machine or dishwasher. (Consumer_SevernTrent)

These function to give the water agency. For instance, in (21) which discusses consumer problems, we see water *leaves* the house rather than being *taken away* or *exported* in a commodity framing. This framing reduces the responsibility of the water company for the water movement. Such variation is significant because it illustrates how water companies may strategically tailor their language to align with the distinct profiles and interests of their audiences. As Charteris-Black (2006) argues, metaphors are tactically employed to highlight aspects of an issue that contribute to 'legitimacy formation' and policy communication (Charteris-Black, 2006, p. 569).

Another similarity in the two corpora is the underrepresentation of the VULNERABLE ENTITY metaphor which appears at only 5% in both corpora. While it is always more challenging to interpret absence than presence, this suggests that, despite the growing scarcity of water (Environment Agency, 2024), in our sample of communications water companies are not emphasising its vulnerability in their communications. Both corpora consistently prioritise economic considerations over environmental concerns, pointing

to a shared thematic direction in how water is framed across investor-facing and consumer-facing communications. This aligns with the findings of Weder, Voci and Vogl (2019), who observe that the economic framing of water supply prevails in European media. They also note that the lack of counterarguments and the homogeneity of frames indicate that the risk of water scarcity is not adequately problematised in media discourse.

As Grecksch and Landström (2021) points out, UK water companies are uniquely positioned to drive innovation in water management and to integrate new, sustainable solutions. However, our findings show that, despite this potential, water is still predominantly framed in economic terms, prioritising market-based approaches over environmental responsibility. This trend reflects broader discourse dynamics in water governance, where economic narratives continue to dominate, even in discussions of sustainability (Weder, Voci & Vogl, 2019; Boyer, Le Lay & Marty, 2021). As Boyer, Le Lay and Marty (2021) observe, water managers and political decision-makers often fail to incorporate environmental perspectives that view water as more than just a material commodity for economic growth. This framing matters because it shapes public understanding of water issues. As Wnek (2024) observes, UK public concern is disproportionately focused on pollution and sewage, with water scarcity remaining a low-salience issue. This presents an opportunity for water companies to shift both public and investor focus from immediate concerns, such as pollution and financial viability, to long-term sustainability and the risks associated with water scarcity. Such a shift could help foster a more proactive and sustainable public and investor understanding of water management.

4.4. Keyness comparison

Despite coming from the same three corporations, there was no overlap in the 100 most salient keywords from the consumer and investor corpora, highlighting how significantly differently the two audiences are addressed. However, the keywords do fall into some of the same categories, as shown in Figure 5.

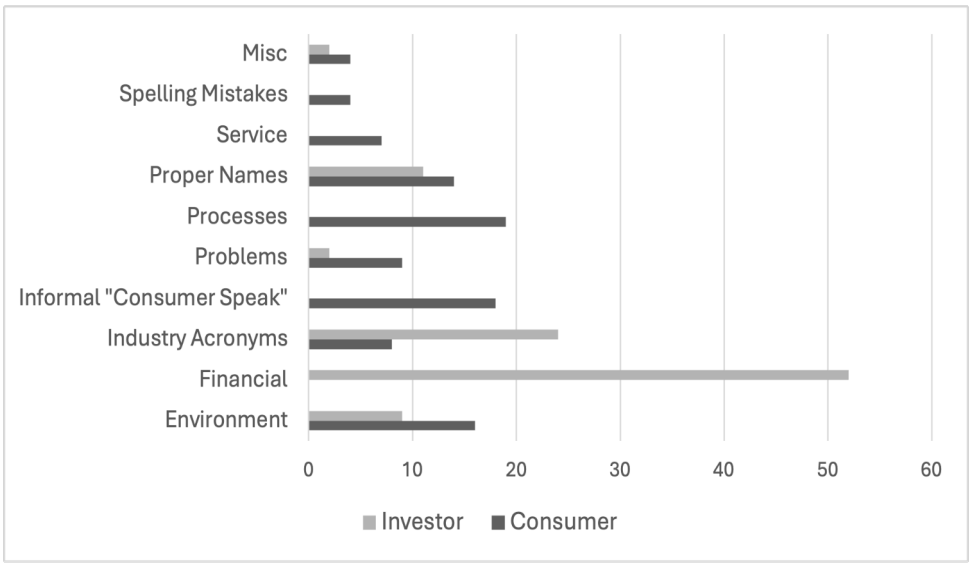

***Figure 5**: Categories of keywords*

The categories shared across the two corpora include 'industry acronyms', 'proper names', 'environment', 'problems' and 'miscellaneous'. The categories unique to the consumer-focused corpus were; 'processing water', 'informal "consumer speak"', 'service' and 'spelling mistakes'. There was only one category unique to the investor-focused corpus which was 'financial'.

The informal register of the consumer corpus appears both from the 'consumer speak category' (*poo, pee, pooperhero*), and from the fact that there were enough spelling mistakes in the consumer corpus to justify creating a new category for it. This is in stark contrast with the technical financial terms used in the investor corpus, such as *amortisation*, *shareholding* and *renumeration,* and no keywords due to spelling mistakes.

Looking at the 'problems' category which emerged from the keywords in both corpora, there are distinct patterns of use and agency. Problems in the consumer corpus are often framed with reference to how consumers can avoid them, as in (22), or how the water company can work with the consumer, as in (23); in both cases responsibility is placed with the consumer.

(22) It's easy to avoid **blockages** in **your** home. (Consumer_Thames)

(23) how our blockbusting team **help prevent flooding**. (Consumer_Southern)

The investor corpus shows a different set of terms in the 'problems' category (*leakage*, *sewerage*). The water company frames itself as taking action against problems, as in (24) and (25) but we can see that in both examples here the nominalisation of *leakage* obscures the responsibility for the leak occurring in the first place.

(24) In the last year, we've reduced **leakage** by 7%, our lowest level ever. (Investor_Thames)

(25) Our **leakage** reduction activity is supported by our smart metering programme (Investor_SevernTrent)

5. Conclusions

Across all strands of analysis (collocation, transitivity, pronoun usage, keyness, and metaphor) the investor-oriented texts framed water in technical, economic, and managerial terms. Water was presented as a controlled and commodified resource, with companies performing decisive actions such as *supplying*, *managing*, *securing*, and *maintaining*. Pronouns like *we*, *our*, and *us* signalled internal corporate action, reinforcing competence and operational control. Metaphorically, investor texts favoured COMMODITY and PRECIOUS RESOURCE framings, aligning with scarcity-driven narratives that support financialised governance.

In contrast, consumer-facing communications constructed water as shared, fragile, and occasionally unpredictable—something that is often outside the agency of the water company. Water was depicted as a dynamic actor that can *break*, *leave*, or *run*, or as a resource that must be *saved* and *shared*. Corporate actions appeared more facilitative (e.g. *allow, carry*), and consumers were seen to be framed as co-responsible at all levels of analysis from transitivity to metaphor. It is worth noting absence here as the investors are not positioned as responsible for the shared resource of water. This (re)positioning of responsibility on the consumer obscures the relative power of the actors. According to Ofwat (a), the UK water regulator, 'a fifth of water running through pipes is still lost to leakage' and in England and Wales this is equivalent to 48.8 litres of water per person per day. By way of comparison, Ofwat (b) also calculates that the total water use per day per consumer is around 150 litres. So the power of the individual to save water is significantly lower than that of the institution.

Both corpora showed consistency in the dominant metaphor source with COMMODITY and PRECIOUS RESOURCE metaphors dominating. This suggests that economic framings are not just audience-specific choices but may reflect a deeper institutional orientation, one in which market-based logics are internalised and reproduced across communicative contexts. Such homogeneity aligns with broader trends identified in European media discourse (Weder, Voci & Vogl, 2019), where scarcity is under-problematised and financial narratives dominate. These findings suggest that while UK water companies strategically adapt their language to suit different audiences, they maintain a consistent ideological framing that privileges economic value. For investors, this reinforces financial legitimacy; for consumers, it aligns conservation with shared responsibility, yet may subtly deflect corporate accountability.

Given the rising urgency of water sustainability, understanding how stakeholders are discursively positioned is critical to shaping both public perception and policy responses. Our study bridges a gap in understanding by focussing on the discourses constructed around water within corporate communication—adding context to the existing work centred around media narratives. We would like to argue for further work engaging with

corporate communications given the power these institutions and their stakeholders have over the future of our water. Changing weather patterns mean that water will become an increasingly commodified resource. It is likely that powerful actors are already discursively paving the way for future actions and we call for more research—including diachronic studies—to help us understand and anticipate the shifting discourses and implications.

Public understanding of water futures constitutes a key area of impact for (critical) discourse studies. If we consider the 2025 UK National Risk Register, a public-facing assessment of the primary risks to the UK, water is unique in occurring in many categories of risk including: coastal flooding, fluvial flooding, surface water flooding, reservoir/dam collapse, drought, water infrastructure failure or loss of drinking water, and maritime pollution incident. The fact that climate change is leading to simultaneous excess and insufficiency of water makes risk communication particularly challenging and more work is needed on how messaging affects public understanding.

Competing interests

The authors have no competing interests to declare.

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