

Annual report of Southern Water Independent Climate and Environment Group

2022/23

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1. Executive summary

Southern Water have a poor environmental reputation, in part a legacy from unacceptable historic practices which led to the largest environmental penalty in UK history. In recent years they have had only low 1 or 2-star Environmental Performance Assessment (EPA) ratings from the Environment Agency.

This masks positive environmental actions. We are strongly supportive of Southern Water's surface water pilots. We commend Southern Water for their transparency over published data on sewer overflows on the coast and are pleased they are planning to extend this to inland waterways. There is good intent on and monitoring of carbon emissions - and though emission reductions may be thrown off course in the short-medium term by some large construction projects it is welcome that the company continues to seek 'softer' nature-based alternatives, prior to falling back on offsetting. The catchment team (Environmental Resilience) continue to do much good work with partners, many of whom are represented on the group.

That said, and despite support for ICEG and the environment from the leadership, in improving its reputation we are concerned that Southern Water remains an inwardly facing and siloed organisation on environmental issues. This is in our view inhibiting the repair of its environmental reputation, even where - see above - this is now justified. There is a real need for culture change to accelerate in three directions:

- a) Consistency across the company. We hear credible and fairly widespread reports that different parts of the company (functional units and/or local teams) give varying messages/show varying commitment to the environmental agenda. More join up can also be done between customer engagement and environmental engagement, building on welcome ad hoc discussions. Access to WRMP/DWMP has not been matched on the WINEP or EIRs.
- b) Willingness to build on existing and planned catchment work to look more widely to local/third sector partners for delivery. Southern Water's procurement could more fully recognise the value of working with NGOs/SMEs/local authority delivery partnerships. We believe this could both reduce cost and enhance outcomes, while bringing the company closer to its locality.
- c) Greater consistency of co-invention/joint solutions with local partners. Good practice in the Isle of Wight and Kent pilots is partly offset by a systematic tendency to invent, then communicate. A poor example here has been the handling of water recycling at Havant Thicket.

Areas where the ICEG have agreed ongoing discussion and work with Southern Water include:

- Further improving the management information we receive, and therefore our ability to actively hold Southern Water to account on the environment. A particular focus here is on the glide path to Southern Water's targets for CSO reductions;
- Helping move to a better place based/locational presentation of issues and data;
- Helping Southern Water understand the NGO/local authority/SME business model so as to improve joint delivery;
- Building consistent messaging to and working with communities;
- Nesting individual environment actions and communication within a coherent big picture.

Finally, we would like to offer a suggestion. There are many sources of information about the state of the aquatic environment across Southern Water region but no annual state of the environment report - or gap analysis. We can see merit in producing such a report and would be happy to help codesign coverage.

Professor Martin Hurst Chair

2. Background

This is the first annual report of this group, which was formed at the suggestion of Southern Water at the start of 2022-23. It covers both our assessment of Southern Water's performance on environment and climate, so far as we are able, to add to the regulatory 2 star EPA scoring from the Environment Agency, and our assessment of how Southern Water are working with the group and with its wider environmental community.

The membership of the group has expanded over the year, and the current membership is attached at annex 2. It now comprises local and national NGOs, government regulators, the consumer council for water, local authorities (including their delivery partnerships) and national parks, a climate expert and an independent from Portsmouth University. I was asked to chair the group in my capacity as chair of the Southern Regional Flood and Coastal Committee.

The group is very grateful to Sean Ashworth in Southern Water for highly professional support and has enjoyed good access to senior executives from the CEO down. Inevitably given that this is our first year Southern Water are still learning how to work with the group, and while there is more to do (see below) access and the quality of material have both improved through the year.

The group have also had access to, and we hope informed, many of the key Southern Water processes/statutory or regulatory documents: the DWMP, WRMP, LTDS and PR24.

3. Environmental water quality

The region covered by Southern Water has a number of important types of aquatic biodiversity:

- Globally important chalk streams, with 2/3 of the chalk streams in the world being located in the south and east of England. The Test and the Itchen are rightly regarded as the jewels in the crown, but many other chalks streams are also important.
- Marine ecosystems including Kelp, and sea grass. These also support an important shellfish industry.
- Coastal ecosystems including salt marsh/intertidal habitats. These provide among other things important habitats for overwintering waders.

There are a number of sources of data on the environment in the company's region, but many of these are partial/driven by reporting against particular pieces of statute. There is also little if anything which is brought together at the company level.

Data sources include:

- EA data against water framework directive status and under river basin management plans
- Southern Water Catchment risk assessments for chemical and nutrients across 4 key abstraction catchments
- DWMP mapping of wastewater impacts
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We also welcome the company's production in 22-23 of natural capital accounts for 3 catchments, and the commitment to extend this to the rest of its catchments by 24-25.

There is notably poorer data on the state of marine/coastal habitats – even allowing for WFD reporting up to 1km offshore.

Bringing data together across the company's geography would we think be well worth doing. It would prove an invaluable internal and external communication tool and would help identify gaps such as offshore marine data.

4. Catchment working

Southern Water have a track record over some years in working at catchment level with partners such as the Rivers Trusts and Wildlife Trusts. Particularly good examples might be the Arun Valley, River Anton and the Beult. Figures for annual spend can be found in the following documents:

[Southern Water - Home \(annualreport2022.com\)](https://www.southernwater.co.uk/annualreport2022.com)

[Our Investment Areas \(southernwater.co.uk\)](https://www.southernwater.co.uk/our-investment-areas)

More recently they are directly funding a number of the formal catchment partnerships in the region. A welcome recent development has been the extension of some of the practices from catchment working to coastal areas and strengthening partnership work being undertaken in the area around Chichester, Langstone and Pagham harbours under the Three Harbours Strategy development. The partnership aims to galvanise existing collaboration and focus resources on the most pressing priorities. Its success is dependent on continued buy in from leadership across partnership organisations, particularly Southern Water, sustaining growing momentum and refining focus. Catchment level engagement for CSO work on the Isle of Wight and engagement with marine partners across the Solent is increasing marine focussed activity.

CSO frequency and action planning

The issue of sewer overflows is one with a huge public profile at present. While ultimately what matters is the state of the environment, and action on sewer overflows needs to be prioritised and judged against action on other pollution sources such as treated wastewater, land management and run off from roads and industrial estates, all agree that sewer overflows need to fall.

The ICEG has started working with Southern Water on establishing a glide path towards the medium-term aim of significant reduction in spills by 2030, and on the programme of actions to achieve this and the longer-term objectives out to 2050. From 23-24 onwards we will monitor this each meeting to enable us to give an independent assessment as to whether Southern have done what they pledged and are or are not on course to deliver their medium-term aspirations.

We recognise of course that annual or within year figures on number of overflows will be heavily weather dependent but aim to be able to assure ourselves whether the underlying trend is on track.

Surface water and pilots

We view the area of surface water as perhaps the most encouraging of Southern Water's recent initiatives. The concept is one of 'taking the top off' rainwater draining into sewers during periods of wet weather and therefore reducing pressure on sewers and storm tank capacity and thus reducing sewer overflows. The approach has multiple additional benefits: it can reduce surface water flooding and, depending on the solution selected, can create a worthwhile addition to local biodiversity (as well as indirectly reducing

carbon dioxide through negating the need for capital investment involving concrete and steel, both of which have a high carbon footprint).

Southern Water's pilots, initially on the Isle of Wight and now extended to deal, Whitstable etc, have shown good joint working with local authorities, communities and the environment agency. The use of 'smart' water butts, raingardens etc seems to have had a clear impact in reducing sewer overflows. We look forward to working with Southern Water in mainstreaming this approach more widely.

5. Pollution incidents

Southern water has a very poor historic record on pollution incidents and breaches of license conditions, as demonstrated in the table below showing EA EPA ratings:

Year	EPA Rating	Definition
2011	2 stars	Below average company
2012	2 stars	Below average company
2013	1 star	Poor performing company
2014	2 stars	Below average company
2015	3 stars	Above average company
2016	3 stars	Good company
2017	3 stars	Good company
2018	2 stars	Company requires improvement
2019	1 star	Poor performing company
2020	2 stars	Company requires improvement
2021	1 star	Poor performing company
2022	2 stars	Company requires improvement

As can be seen this performance has if anything deteriorated since 2015. Neither the ICEG nor the company view this as acceptable. The ICEG has agreed new quarterly management information with Southern Water and will be monitoring this performance closely at each of its meetings going forwards.

The raw data for number of significant pollution incidents per 10,000km of sewer had improved markedly over the decade to 2017 although in 2020 and 2021 this trend was regrettably reversed.

6. Core processes: WRMP, DWMP and PR24

The ICEG have had what we found to be valuable discussions with Southern Water on a number of key consultations such as the DWMP and WRMP. We have also valued a chance to input into and receive feedback on the new long-term delivery strategies, and have been promised input also into relevant elements of PR24. Finally, a joint session is planned with the company's customer challenge group CCG. We would have welcomed Southern Water's having more dialogue with external groups before the plans started to take shape: too much of the engagement is in 'consultation' mode rather than codesign. But much of that predated the formations of the ICEG, and we have certainly had good access in terms of consultation.

The company is on a journey here, and the ICEG is also a new entity. But going forwards we would make two recommendations:

- a) That reference to the ICEG become more automatic. So, for example, members have noted less opportunity to engage with EIR and WINEP.
- b) That engagement be better joined up between engagement with ICEG and with the CCG: at the moment, how the two bodies are handled on environmental issues is a little ad hoc.

7. Transparency

Southern Water's transparency on sewer discharges is a good initiative, with 'beachbuoy' leading to, in theory, full disclosure of discharges to the marine/coastal environment. The intent to extend this to inland discharges ahead of Environment Act requirements is welcome.

The ICEG views transparency as an essential part of regaining trust. We accept that it comes with a risk, and that a 'dip' in trust initially may be part of the price as people see levels of discharges they were not aware of.

Even with the discharges data however we think there is more Southern Water could do to ensure there is trusted explanation of the relationship between discharges and their implications in terms of public health and environment damage. We rather doubt the company alone can provide this, given the trust deficit they face.

More widely, we feel that Southern Water are generally reluctant to provide third party assessment and assurance. The particular issue which we have seen which exemplifies this is the handling of 'water recycling' into the new reservoir at Havant Thicket. What is in all probability the optimal solution has been presented as coming from a water company which has low public trust, and has generated an unnecessary degree of public hostility.

We would very much like to work with the company to help them move to better third party assurance and thereby ensure that their reputation for transparency is enhanced, and that the transparency comes with rapid understanding of what data/proposals are really saying.

8. Carbon/net zero

Southern Water's plans to deliver net zero carbon emissions are laid out in their document "Our Net Zero Plan". This is a clearly written plan and seems to cover the issues very well. There is a clear approach to net zero, articulating a hierarchy with reducing emissions given highest priority, through replacing sources of carbon and in some cases sequestering carbon by nature-based solutions, and then with offsetting for emissions that cannot be avoided as the last priority. If followed through in practice this should help deliver real carbon reductions without over-reliance on often controversial offsetting methods.

The aim is to achieve operational net zero by 2030. This is the industry aspiration agreed through Water UK. This does not cover emissions from supply chains - the so called 'scope 3' emissions. This could be a concern; for example, a change from delivering directly through SWs own operational activities to buying in a service from an external contractor may reduce SWs operational emissions yet overall emissions will not have reduced in practice.

That said, the plans and commitment seem robust, and Southern Water are to be commended that they have already started looking at scope 3, well before a number of other water companies.

The ICEG now receive annual returns on carbon and will continue to hold southern water to account on delivery against objectives.

9. Procurement

We have discussed procurement with Southern Water twice over the past year. Our concern is that Southern Water's procurement is understandably set up to provide for large (£10-100m) projects and/or similar sized aggregate spend on repeatable transactions such as raw materials/chemicals. We have heard from a number of sources that this type of framework/procurement does not work well in terms of access to SMEs, third sector delivery partners and local authority related delivery bodies.

Southern Water's immediate response was that they aim to expand their grant giving regime to get round this problem. While this is welcome, we are to date unconvinced, and worry that this approach may place an effective cap on the amount of local joint working which the company can undertake. It could also build in reliance on a series of one-off engagements which will struggle to create strategic relationships and could thereby jeopardise development of capability among providers.

We can see a strong case for a minor works framework which would cater to local and third sector delivery partners whilst building their capacity. While any one procurement with these players may have slightly increased risk regarding delivery, overall we can see significant environmental and reputational benefit, while we have also provided a number of examples which suggest that for works below £10m such partners may well be able to deliver very significant cost savings. With possible increased WINEP spend across the sector, and strong support in Defra's plan for Water, supply-chain design and delivery from the traditional engineering consultancies could potentially form a bottle-neck, which this wider partnership working, and inclusion of more Nature Based Solutions learning could help to relieve.

10. Annex I: Southern Water's progress towards net zero carbon.

Southern Water's plans to deliver net zero carbon emissions are laid out in their document "Our Net Zero Plan". This is a clearly written plan and seems to cover the issues very well. There is a clear approach to net zero, articulating a hierarchy with reducing emissions given highest priority, through replacing sources of carbon and removing carbon by nature-based solutions, and then with offsetting for emissions that cannot be avoided as the last priority. If followed through in practice this should help deliver real carbon reductions without over-reliance on often controversial offsetting methods.

The aim is to achieve operational net zero by 2030. What is included in this aim is illustrated on page 5 of "Our Net Zero Plan", essentially outlining that it is the *operational emissions* that are covered by the net zero aim- the industry aspiration agreed through Water UK. This does not cover emissions from supply chains - the so called 'scope 3' emissions. This could be a concern; for example, a change from delivering directly through SWs own operational activities to buying in a service from an external contractor may reduce SWs own emissions yet overall emissions will not have reduced in practice (and could potentially have increased). The company must ensure against any potential increase through its procurement policies, and any carbon reporting or relevant performance commitments must be set up such that outsourcing is not advantageous in terms of achieving targets.

The net zero aim falls within the government target of achieving net zero by 2050. It is, however, clear that climate impacts are set to accelerate and therefore requirements to address climate change will inevitably become more urgent. A 2030 target therefore, though challenging, is entirely appropriate; the next few years are likely to see a tightening of requirements not a loosening so an active approach to climate mitigation now might give the company a measure of "early adopters advantage".

SW have produced detailed spreadsheets for carbon reporting going from 2012/13 to 2021/22. These show a gradual reduction from a peak of around 286 K tonnes (gross) CO₂e in 2013 to 165 in 2020. Renewable energy produced on-site reduces the net emissions a little (by about 5 K tonnes). This overall trend of ongoing reduction is welcome and significant but may be difficult to maintain. In line with most approaches to reducing emissions, SW has probably achieved this largely through good management and efficiency measures. This is the right approach but will suffer from diminishing returns - the first 50% efficiency improvement might be easy - the other 50% may prove impossible! Future improvement in carbon emissions may come from stepwise changes to new systems rather than gradual changes through efficiency in existing systems. An example that may already have happened might be in transportation. Much can be achieved by moving to more efficient internal combustion engine vehicles. But a stepwise change would occur with a change to EVs. Another stepwise change could take place with moves to systems that require no transportation.

Significantly, parts of the carbon reporting do show a marked impact from a stepwise reduction. A gradual reduction in operational emissions occurred from 2012 to 2019, perhaps a result of improving management and efficiency measures. This was followed by a jump downwards for 2020 to 2022. This resulted from a switch to purchasing low carbon or 100% renewable grid electricity.

At present, on-site generation of renewable energy has a relatively low impact in reducing net emissions. This should now become a growth area. Renewable energy generation will probably become the wise economic choice in future anyway and will also help offset emissions from SW operations that cannot be avoided.

Unusually, and welcome, SW has estimated some scope 3 emissions since 2012. This should include emissions (not counted elsewhere) from supply chains and outsourced activities. So far, only some of these scope 3 emissions have been included in the calculations but SW will be reporting wider scope 3 emissions, such as chemicals, disposal of waste, purchased good and services and capital goods, in reports to Ofwat from 2022/23 years onwards. Whilst some of these scope 3 emissions might seem relatively small against the large operational emissions of SW others could be highly significant. Materials used in construction, methods of construction and material transport could have a significant carbon impact. The scale of this might not yet be clear. Considering the carbon emissions associated with water use by customers could also be valuable in confirming the case for water efficiency measures.

SW may be faced with a quandary in the near future. There is a need to proceed as quickly as possible to net zero by *reducing* carbon footprint. However, there is also a need for significant investment in water supply and water treatment which could *increase* the company's carbon footprint. This might partially be reconciled by investment decisions that move to systems that are inherently low (or negative) in terms of carbon emissions. Nature-based solutions could be important here. "Heavy engineering" solutions to infrastructure requirements are likely to be high carbon emitters whereas nature-based solutions could sequester carbon. SW will be able to incorporate amounts sequestered in their carbon reporting through their natural capital accounting systems. This is articulated in their document "Natural capital in our catchments", an approach developed for 3 catchments that SW aims to roll out for all 11 in their area over the next year.

Requirements for needed investment in infrastructure for environmental improvement, which cannot be achieved by inherently low carbon or nature-based solutions could, however, be a legitimate reason for a properly managed offset approach. This should be recognised and planned for in advance so that offsets are appropriately considered at the right point in the hierarchy.

11. Annex II: Group membership

Chair - Martin Hurst
National Farmers Union - Isobel Budden
South Est Rivers Trust - Dave Brown
South East Climate Alliance - Tony Whitbread
Environment Agency - Sarah Powell
Environment Agency - Cat Fuller
Natural England - Aldous Rees
Coastal Partners and Southern Coastal Group - Lyall Cairns
Waterwise - Laura White
Kent County Council - Max Tant
The Wildlife Trusts - Ali Morse
Water Resources South East - Meyrick Gough
RSPB - Heather Richards
University of Portsmouth - Alex Ford
New Forest National Park Authority - Alison Barnes
Consumer Council for Water - Michael Barnes
Blue Marine Foundation TBC