

StormOverflowsPlanConsultation@defra.gov.uk

11th May 2022

Dear Sir/Madam,

Consultation on the Government's Storm Overflows Discharge Reduction Plan (England)

Thank you for inviting us to comment on your consultation on Westminster's plans for storm overflows in England.

These comments are from Dŵr Cymru Cyfyngedig, the statutory water and sewerage undertaker that supplies over three million people in Wales and some adjoining parts of England. We are owned by Glas Cymru, a single purpose, not-for-profit company with no shareholders. We provide essential public services to our customers by supplying their drinking water and then carrying away and dealing with their wastewater in a sustainable manner. In this way we make a major contribution to public health and to the protection of the Welsh environment. Our services are also essential to sustainable economic development in Wales and those parts of England we serve.

We have submitted online feedback, however there was insufficient scope within the questions and in particular with multiple-choice options, to provide additional relevant information.

Overall whilst we welcome the governments long overdue attention to storm overflows, we believe the new approach by Westminster for England will not deliver affordable or efficient investment if it pursues a 'one size' fits all approach, rather than an approach focused on achieving the local water quality needs of rivers (as set out in the Water Framework Regulations). The investment will also be carbon hungry, and may not efficiently deal with the challenges climate change presents, which alone may well drive huge infrastructure upgrade needs. We would therefore urge the Westminster government to reconsider its proposals to ensure that infrastructure upgrades are targeted at river needs, integrated with the needs of climate change and asset deterioration, and not at achieving an arbitrary spill frequency approach to their future design and operation.

Turning specifically to the questions now, given the wide scope and potential impact (particularly on customer bills and carbon emissions) of this consultation we were disappointed to see such limited questions. Question 11 asks "*Would you be willing to pay more in your monthly water bill in order for water companies to tackle sewage discharges as outlined in this consultation? [Yes/No/Don't know/ N/A]*". We are aware from previous consultations with our customer base, which includes some of the border areas with England, that many people might be willing to pay a small addition to their water bill but not the significant increase that we would expect to be required in order to achieve the targets set out in this consultation. We would be interested in understanding how DEFRA will be ensuring that such policy change (and the costs of implementing such policy in particular) aligns with the views of and is supported by water rate and council tax payers.

We are pleased to see the Westminster Government and Welsh Government aligned in their ambitions to work with the water industry to reduce the environmental impact of storm overflows. We would also like to express our strong support for the process currently underway as part of the Storm Overflows Assessment Framework. The framework was developed collaboratively with Water and Sewerage Companies (WaSCs) alongside our regulators and government representatives across the UK, and we are well underway with the required assessments and monitoring to produce a well evidenced investment programme for 2025-30 which we feel customers will support.

Dŵr Cymru is currently developing our PR24 plan (investment from 2025-30), our Water Industry National Environment plan (WINEP in England) and National Environment Plan (NEP – in Wales) with our regulators. We are planning an ambitious programme of environmental investment; however, the current price review structure gives

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limited scope for change within any one 5 yearly Asset Management Period (AMP). If any of the UK Governments would like to see action on storm overflows sooner than 2025, then we will need a more agile process to funding such arrangements. We will also need the regulatory flexibility to run an agile monitoring and investigation programme between 2025 and 2030 – to gather evidence to ensure we are able to prioritise and target future customer investment to maximise its value.

In the past, spill numbers have been used to represent performance, we welcome the proposal to replace the counting of spills with recognition of the actual measured impact of a discharge, and are in agreement that action must be taken to address storm overflows on this basis. That said, the scale of investment required and subsequent impact on our customer bills must not be underestimated. Our customers are facing an unprecedented rise in the cost of living and it is important that we understand where their priorities lie, so these can be reflected in our own investment plans.

Dŵr Cymru is also aware of additional requirements which may apply in England under the Environment Act (2021) such as monitoring up and downstream of discharges to assess impact. This will certainly help to understand the ecological impact of discharges, but adequate time must be allowed for both the installation of monitors and the collection of data, so that any impact on WQ is understood at each asset. We would advocate targeting mobile monitoring of discharges that can be deployed to all assets in a rolling monitoring plan, over an agreed timeframe as opposed to static monitors placed in perpetuity. Ongoing monitoring in waterbodies (over and above that already undertaken by our regulators) for waters at of good or high WFD ecological status may not in our view, represent good value for our customers.

Targets and achievability

The Headline target references 'no local adverse ecological impact'. In order to adequately prepare, resource and work towards meeting this target, greater clarity is required as to how 'no impact' is measured and categorised. Similarly, over what timescale and against which specific WQ or species related targets it will apply. Currently Storm overflows are designed using the Urban Pollution Manual (UPM). This refers to Fundamental Intermittent Standards (FIS) and assessment protocols which also exist within the Storm Overflow Assessment Framework (SOAF).

SOAF impact assessments are undertaken in 2 categories. Firstly, Aesthetic impact is based upon surveys undertaken through the FR0466 methodology (FWR, 1994), in addition to collating any history of substantiated public complaint, and any history of recorded pollution incidents due to storm sewage discharges. Ecological impact where possible, is assessed via collection of representative benthic invertebrate samples immediately upstream and downstream of the overflow. The impact is then calculated by assessing using abundance weighted Whalley Hawkes Paisley Trigg (WHPT) indices with the River Invertebrate Classification Tool (RICT). This is the method used for WFD assessments (UKTAG, 2014). The method is designed to detect impacts due to organic pollution and is also sensitive to toxic pollutants.

For many storm overflows it will not be possible or appropriate to collect invertebrate samples immediately upstream and downstream of the outfall, the impact of the overflow, so river water quality is assessed using water quality modelling. The assessment quantifies the impact of the storm overflow on the duration of 99 percentile exceedance, or 99 percentile quality for total ammonia and BOD, and the number of exceedances of FIS for dissolved oxygen and un-ionised ammonia. This approach could be modified to also serve to denote ecological impact under the new proposed requirements.

SOAF however, takes a risk based approach and excludes further action within the framework on assets deemed to have 'Very low impact'. We would urge you to endorse and support this existing practice to make sure that our customer's money remains targeted at those assets most in need of uprating.

In order to achieve the target for 'no local adverse ecological impact' ecological surveys will need to take place at many thousands of sites across England. As present no database of asset data and ecological assessment exists and so this will need to be developed and populated. This additional monitoring will provide a strong baseline to measure against and to support robust decision and policy making. It may also be useful for Water Framework Regulatory reporting purposes. Integrating the two monitoring programmes (the environment regulators and water industry's) would make sense.

The replacement of spill numbers with measured impact is stated in the headline targets, however, the proposal also includes a target "*Storm overflows must not discharge above an average of 10 rainfall events per year by 2050*". This is

on top of the requirement for zero local impact. We struggle to see the benefit or use of this measure particularly as by virtue of the first headline target these assets should be having no impact. Spill numbers should still of course be reported, but we do not see them as a measure of performance – impacting on Good ecological status should be the measure we are targeting.

We would also like to request some clarity on the term 'only operating in unusually heavy rainfall' contained in the consultation. As part of this new regulation we suggest that it would be prudent to review and potentially await the redrafting of the Urban Wastewater Treatment Directive (UWWTD) which we understand will be out as a draft directive in June or July of this year to ensure our UK regulatory frameworks represent an equivalent to those being developed in the EU and in line with our EU treaty arrangements.

Long term planning

We strongly support the references to Drainage and Wastewater Management Plans and agree that these plans will be key in determining the optimal areas for investment, both for climate change mitigation and to improve storm overflow performance. We have noted that during the development of round one of our plans how significant the investment needs to be just to maintain current performance – against climate change and asset deterioration. Our data shows that very significant investment well beyond previous AMPs will be needed simply to maintain current performance in the future. You should be aware therefore, that targets such as those set out in this paper will cost significantly more than previously calculated (when climate change and asset deterioration needs are added to CSO quality improvements) and well beyond the estimated bill increase in the consultation.

We must also be mindful of our ambitions towards Carbon Net Zero and the impact of increased energy usage and the carbon implications of concrete construction and /or storage solutions that will no doubt be required to meet these objectives.

The headline target gives the Water Industry in England 13 years to achieve 'no ecological impact' at 75% of high priority CSO targets. Within these 13 years we will need to monitor, design, build and fund improvements at many thousands of storm discharges, notwithstanding the need for additional screening. We are unsure if there are adequate engineering and construction resources in the UK to achieve such a task, along with all the other improvements (for reducing nutrient levels etc) in rivers. We believe that with the publication of the DWMPs in June it will be essential for governments to review both the cost, carbon and UK resource consequences associated with drainage systems more broadly as it may well be that in aggregate, such targets could be both unaffordable for customers, and undeliverable in an efficient manner.

No regrets investment

Dŵr Cymru supports the principle of setting an ambitious target for screening discharges, and although this will be a costly and logistical challenge, the given deadline of 2050 gives sufficient time to research and implement screens of some degree at all required sites, particularly if such infrastructure also enabled the treatment of storm discharges to take place.

We do believe that most screens / storm flow treatment solutions represent 'no regrets investment', and as aesthetics are currently not contained within other regulation it is welcome to have clear policy to help with this issue. However, we will still need time to understand the cost implications of this target and hope to have further discussion with our regulators on this requirement when we have more information. We would also seek guidance on prioritisation of this work as well as the applicability of previous regulatory guidance which focuses on amenity value and frequency of operation, which clearly needs to be reviewed.

It is important to note, that guidance is also required on what specific screens are suitable and an understanding from our regulator that we are likely to be limited by physical characteristics and geography on what is possible at some sites. An example may be where powered screens are required in more remote areas where no electricity supply is economically practicable. Such installations will need to use best available technology as powered screens may be technically infeasible or disproportionately costly. Where this is the case, we would request that there be some policy flexibility available within the specifications for screens.

Regulation

The proposed regulation and headline targets have the aim of improving the environment and aesthetics of those wastewater discharges into it. This is most welcome. As well as Combined Storm Overflows we would urge you to consider updating regulation on other industries who are contributing to the decline of our river health. The pollution caused by single use sanitary plastic products, wet wipes and single use cleaning wipes not considered 'fine to flush' should be dealt with at source, by banning such products. Wipes represent the vast majority of unsightly material found in rivers and blockages to the network. We must work collaboratively to change customer behaviour and also to phase out the use of unsuitable wet wipes (and other materials flushed) which contain plastics.

The proposed changes to regulation to empower better rainwater management are most welcome and we agree that rainwater should be discharged back to the environment as close as possible to where it lands or channelled to a watercourse without mixing with sewage. The interactions between drainage authorities however are likely to be highly complex, with these new WaSC powers it raises the wider question of how to rationalise, resource, lead and empower various stakeholders, to deliver surface water reduction in the most efficient way possible. We will need clear guidance on how DEFRA intends for us to use the proposed power in England to repair drainage on private property as well as divert waters from impermeable areas on land that does not belong to us. This could be a very powerful tool but we feel further research would be beneficial to support policy and future regulatory change.

We are also pleased to see possible restriction on the automatic right to connect to the public sewer system, which we consider essential if we are to efficiently move this agenda forward. For your information we have a memorandum of understanding in the Lougher Estuary in Wales which prevents new surface water connections into our network, and has been highly successful in driving CSO spill numbers and impacts down. We would promote this being adopted more widely in order to prevent deterioration in performance following water company investment.

In conclusion, we have some concerns over both the cost to implement these targets and their technical feasibility both due to the challenges of physical geography and available industry resource. We note your cost estimate sets a bill increase of £20 per year in England. In Wales, due to our geography and the rural nature of our catchments and asset base our own estimates to implement such changes are significantly higher and indicate that £20.4bn would be required to meet the '10 spill threshold' alone across the entire DCWW estate (England and Wales), This data has come from an average calculated cost per spill based upon previously delivered schemes and our SOAF optioneering and costing reports. This translates to £5bn per AMP over 4 AMPs and well above the figures provided in the consultation. The carbon costs for such infrastructure will also be very significant and will threaten the achievements of our target to zero aspirations. We would urge Defra to reconsider its '10 spills' approach and restrict any spill counting to reporting purposes, so that designs can be focused on the water quality needs of the receiving waters.

Please do not hesitate to get in contact if you have any further questions,

Yours faithfully



Tony Harrington
Director of Environment