

A review of implementation of the Bathing Water Regulations in England

November 2024



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November 2024

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Foreword

Healthy rivers, lakes, and seas support a healthy economy, and allow nature to thrive. Government cannot meet its ambitions and legally binding targets for species abundance, the marine environment and for nature more generally without improving water quality. Good quality open water is also increasingly important for human health. With more people participating in outdoor water pursuits, it is ever more necessary to make sure that enjoying England's waters is not just fun, but good for us, rather than a risk to our health and wellbeing.

The new Government is committed to cleaning up England's rivers, lakes and seas, and has recently announced a comprehensive review of the approach in relation to all things water. We very much welcome that. For now, we see that it will be a complex, large scale, lengthy and costly task to restore and protect the quality of water resources, improve water supply, manage demand and improve infrastructure.

This report on the Bathing Water Regulations is one of a series of OEP reports relating to various aspects of water. We hope the series as a whole is helpful to the Government as it considers how best to proceed.

We have found the current Bathing Water Regulations out of step with the needs of today. They originate from developments in the 1970s and 1980s and are a product of their time. They have not kept pace with the evolving ways in which waters are now used for recreational purposes, or with public expectations.

It is fair to say that the regulations have led to significant improvements in bathing water quality over around three decades, although there has been some recent stagnation and decline. And important elements of the regulations, such as they are, are being implemented: in particular, our assessment is that the monitoring, classification and reporting obligations of the regulations are being complied with.

Nevertheless, the lack of overall improvement in water quality observed in recent years, combined with an increase in the number of bathing water sites failing to achieve sufficient standards, is a cause for concern and has been widely reported. For the public to enjoy the significant health and wellbeing advantages of being active, closer to nature and more connected to their communities, the regulatory regime needs to be more expansive and more effective.

We see room for improvement, for example, in how bathing waters are identified and in the numbers of designated areas, particularly inland. There are also opportunities to strengthen how bathing water objectives are set and achieved, and for increased coherence between the Bathing Water Regulations and other laws and policies.

An effective regulatory regime will ensure that people can safely access recreational waters and benefit from the significant health and wellbeing advantages that brings. In this report, we make practical and specific recommendations to Government, Defra and the Environment Agency to improve how the regulations are implemented and might be developed.

We are grateful to those who have given us their time and expertise, and provided information to inform our work. We hope that our analyses and recommendations will be valuable to Government as it undertakes the critical task of rethinking and revitalising the management of water resources and cleaning up England's rivers, lakes and seas.



Dame Glenys Stacey Chair, Office for Environmental Protection



Executive summary and recommendations

Executive summary and recommendations

Overview

In this report, we look at the Bathing Water Regulations¹ and their implementation in England. We consider their effectiveness as a legal instrument, their application in practice and their coherence with wider law and policy. In so doing, we assess whether the regulations are positioned to achieve their aim of improving bathing water quality to protect human health and facilitate recreational water use.

Background

The Bathing Water Regulations have their origins in European Union (EU) legislation. They were originally made to transpose the EU Bathing Water Directive.² They have now become 'assimilated law' by virtue of the Retained EU Law (Revocation and Reform) Act 2023.

The primary purpose of the Bathing Water Directive is the protection of human health. It takes two indicators of pollution as test 'markers' and requires the measurement and provision of public information about them as a means to deliver some assurance to the public that water quality is safe for bathing.

The Bathing Water Regulations and the Directive from which they were derived can only deliver results as part of a wider framework of water legislation. This is reflected in the Bathing Water Directive which states³ that its purpose 'is to preserve, protect and improve the environment and to protect human health by complementing Directive 2000/60/EC'. This is a reference to the 'Water Framework Directive' (WFD),⁴ the main EU law to protect and improve the water environment.

In England, the WFD was transposed by the WFD Regulations.⁵ Like the Bathing Water Regulations, the WFD Regulations are now 'assimilated law'. We have reported on their implementation in a separate, recent report.⁶

Protection of public health is also a key concern of the numerous groups engaging in the changing patterns of use for bathing waters, as the public press to develop more bathing waters, to use them for longer, and to use them differently. There is a now a much greater variety of potential 'bathers' than when the current legislation was first developed, and a whole variety of activities which result in people bathing, or swimming, from time to time. This raises important questions about the ways in which the existing regulations are working.

¹ The Bathing Water Regulations 2013, Statutory Instrument 2013 No. 1675.

² Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC [2006] OJ L 64/37.

³ Art 1(2), Bathing Water Directive.

⁴ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy [2000] OJ L 327/1.

⁵ The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017, Statutory Instrument 2017 No. 407.

⁶ Office for Environmental Protection, 'A Review of Implementation of the Water Framework Directive Regulations and River Basin Management Planning in England' (2024) <<u>www.theoep.org.uk/report/oep-finds-deeply-concerning-issues-how-laws-place-protect-englands-rivers-lakes-and-coastal</u>> accessed 28 May 2024.

Previous assessments

Failure to achieve intended outcomes under the regulations is a longstanding issue. Over our last two assessments^{7 8} of progress in protecting the natural environment in accordance with England's statutory Environmental Improvement Plan (EIP),⁹ we have outlined that the previous Government had not achieved the 2015 target to ensure all bathing waters are classified as at least 'sufficient' (the lowest quality considered safe for bathing). We viewed progress against this target as being 'partially on track'. We also highlight in our most recent progress assessment that neither that target, nor the Bathing Water Regulations, are comprehensive when assessed against current societal trends. We elaborate on that view in this report.

In May 2024 we reported separately on implementation of the WFD Regulations in England.¹⁰ That report highlights a failure to effectively apply the WFD Regulations to protect rivers, lakes, coastal and other waters. It also identifies several underlying and seemingly endemic issues relating to delivery mechanisms and governance structures to protect and improve the water environment.

This previous work on the WFD Regulations and the EIP provides important context for this more specific report on the Bathing Water Regulations. Building on these earlier assessments, we highlight in this report the opportunity for the Department for Environment, Food and Rural Affairs (Defra) and the Environment Agency (EA) to improve the current application of the regulations, and to consider, in applying their functions, how best to respond to the current uses of waters for swimming and other recreational activity and the known pollution risks to human health.

The Bathing Water Regulations

Implementation of the Bathing Water Regulations is led by Defra, acting on behalf of the Secretary of State for the Environment, Food and Rural Affairs ('the Secretary of State'), and the EA. Local authorities and water companies also have a role under the regulations as outlined below. Though not specifically referenced in the regulations, their focus on public health protection means that other authorities, particularly the Department of Health and Social Care (DHSC) and the UK Health Security Agency (UKHSA), additionally have an interest.

The Bathing Water Regulations require the Secretary of State to identify, and maintain, a list of bathing waters. These are surface waters where, among other criteria, the Secretary of State expects 'a large number of people to bathe'.¹¹

Defra has produced guidance that sets out the approach for the Secretary of State to identify bathing waters and how proponents should make the case for them.¹² At the time of this report, the application process is closed following the announcement under the

⁷ Office for Environmental Protection, 'Progress in Improving the Natural Environment in England, 2021/2022' (2023) <<u>www.theoep.org.</u> <u>uk/report/progress-improving-natural-environment-england-20212022</u>> accessed 11 January 2024.

⁸ Office for Environmental Protection, 'Progress in Improving the Natural Environment in England 2022/2023' (2024) <<u>www.theoep.org.uk/report/government-remains-largely-track-meet-its-environmental-ambitions-finds-oep-annual-progress</u>> accessed 22 January 2024.

⁹ Defra, 'Environmental Improvement Plan 2023' (7 February 2023) <<u>www.gov.uk/government/publications/environmental-improvement-plan</u>> accessed 9 November 2023.

¹⁰ Office for Environmental Protection, 'A Review of Implementation of the Water Framework Directive Regulations and River Basin Management Planning in England' (n 6).

¹¹ Reg 3(1), Bathing Water Regulations.

¹² Defra, 'Designate a Bathing Water: Guidance on How to Apply' (13 May 2024) <<u>www.gov.uk/government/publications/bathing-waters-apply-to-designate-or-de-designate-a-bathing-water-guidance-on-how-to-apply</u>> accessed 7 June 2024.

previous Government of a review of the regulations and guidance.¹³ The intentions of the current Government have not yet been confirmed.

The EA must monitor water quality to classify bathing waters as 'excellent', 'good' 'sufficient' or 'poor'. Defra, the EA, local authorities and water companies must also exercise certain functions to manage and report on bathing waters. Among other requirements, Defra and the EA must exercise their functions so that all bathing waters are classified as, at least, 'sufficient'.¹⁴ They must also take such realistic and proportionate measures as they consider appropriate to increase the number of bathing waters classified as 'good' or 'excellent'.¹⁵

In common with many other environmental laws, the regulations contain a 'postimplementation review' provision.¹⁶ This requires the Secretary of State to review and report on the regulations every five years. The reports must set out the objectives of the regulations and the extent of their achievement. They must also assess whether those objectives remain appropriate and, if so, the extent to which they could be achieved in a less burdensome way.

Current status of bathing waters in England

England has 451 bathing waters.¹⁷ Of these, 82% (369) are coastal, 11% (50) are at 'transitional' sites (such as on estuaries), while the remaining 7% (32) are inland at rivers and lakes.

These are relatively small numbers of bathing waters compared to other European countries, particularly for inland sites. For instance, Germany has over two thousand bathing sites on lakes and rivers and France has over a thousand.¹⁸

Similarly, the number of coastal sites identified as bathing waters is low when considered against other figures. For instance, the independent UK 'Beach Guide' lists 828 beaches in England.¹⁹ This illustrates the relatively limited focus and application of the current regulations compared to other information that people may consider when deciding which sites to visit for bathing or other recreational activities.

The most recent water quality results are from 2023, when there were 424 sites, of which 423 could be assessed. Some 66.4% of the designated bathing waters (281 sites) in England achieved 'excellent' status. Although the figures have been broadly stable in recent years, this is the lowest percentage since 2017.²⁰ In 2023, 4.3% of bathing waters (18 sites) were rated as 'poor'.

While these outcomes represent a major improvement since the 1990s, they remain worse than in most other European countries. For example, England's results in achieving 'excellent' bathing water quality status exceed those of only three EU Member States – Poland, Hungary and Estonia.

¹³ Defra, 'Record Number of New Bathing Sites Get the Go Ahead' (13 May 2024) <<u>www.gov.uk/government/news/record-number-of-new-bathing-sites-get-the-go-ahead</u>> accessed 2 July 2024.

¹⁴ Reg 5(1)(a), Bathing Water Regulations.

¹⁵ Reg 5(1)(b), Bathing Water Regulations.

¹⁶ Reg 20, Bathing Water Regulations.

¹⁷ Defra, 'Record Number of New Bathing Sites Get the Go Ahead' (n 13).

¹⁸ Stantec and Centre for Research into Environment and Health, 'Assessment of the Implementation of Environmental Law in Relation to Bathing Waters' (2024) s 5.2.

¹⁹ The Beach Guide, 'Great British Beaches – UK Beach Guide' (2024) <<u>www.thebeachguide.co.uk/</u>> accessed 9 September 2024.

²⁰ Defra, '2023 Statistics on English Coastal and Inland Bathing Waters: A Summary of Compliance with the 2013 Bathing Water Regulations' <<u>www.gov.uk/government/statistics/bathing-water-quality-statistics/2023-statistics-on-english-coastal-and-inlandbathing-waters-a-summary-of-compliance-with-the-2013-bathing-water-regulations</u>> accessed 4 July 2024.

Underlying principles of the regulations

Who the regulations are intended to protect – the meaning of 'bathers'

In its application of the regulations to date, like many other authorities Defra has interpreted 'bathing' to mean swimming. The effect of this is that other water users, including surfers, windsurfers, paddleboarders and people who take part in various forms of boating and sailing, are not considered under the regulations. This limits the ability of the regime to protect other water users against possible harmful pollution.

Our view is that the regulations, and the current interpretation of bathers as people who intend to swim, no longer properly reflect societal practices. We therefore suggest that Defra consider wider categories of people using bathing waters, given activities such as surfing and paddleboarding. This is because such activities also result in immersion and exposure from time to time and this is what the Bathing Water Regulations aim to address.

This engages the obligations of the Secretary of State under existing law. Specifically, when the Secretary of State is 'maintaining' a list of bathing waters and when the EA is updating bathing water profiles, they should consider the wider list of potential bathers. We also note Defra's intention, stated under the previous administration, to consult on applying the regulations to wider categories of 'bathers'.

The bathing water season

The regulations specify an annual 'bathing season' of 15 May to 30 September. These dates determine when the public are provided with most protection and information concerning the risks associated with polluted bathing waters.

For years, there has been concern that the bathing water season does not match the modern use of bathing waters and that, as a result, public health does not fully benefit from the protections intended. While Defra recognised and consulted upon this issue as long ago as 2013, the regulations retain the current, fixed season.

In our view, this approach is inflexible and out of step with how people use the water environment. We consider that an approach to bathing seasons that reflects public usage could help better protect public health.

The identification of bathing waters

For a site to be eligible for designation as a bathing water, it must be used by an average of at least 100 bathers a day during the bathing season, alongside other criteria. This number is reflected in government guidance rather than being a requirement of the regulations themselves.

We consider that an alternative approach to defining a 'large number of bathers' may be more appropriate than relying on a single numerical threshold. We also question why the current bathing water application guidelines strictly exclude counting bathers on organised event days, as these occasions may expose the highest number of people to pollution and increased risk of illness.

Further, we identify possibilities to increase transparency in the outcome of bathing water applications and to consider the scope for a 'pre-identification' process. Such an approach has been applied in Germany, for example, to address issues related to access, planning

and facilities, as well as investigations and works to maintain or improve water quality, before formal identification of bathing waters.

Technical implementation

Classification of bathing waters

The regulations provide for bathing waters to be classified based on concentrations of Intestinal enterococci (IE) and *Escherichia coli (E. coli)*. These bacteria are known as 'faecal indicator organisms' (FIOs) and act as 'markers' of pollution.

Currently, the classification system uses different evaluation approaches for 'excellent' and 'good' bathing water quality compared to 'sufficient' and 'poor'. We consider that the adoption of a single method of evaluation could provide a more consistent and understandable classification system. This has been recommended by the World Health Organization (WHO).²¹

The regulations also set out different classification standards for inland and coastal bathing waters. We question the extent to which different standards can be justified. The science here is complex, and the evidence limited. It may therefore be beneficial for Defra to revisit this topic, with input from DHSC and the UKHSA as appropriate, for example through incorporating insights from ongoing and future research.

When the EA has issued an alert and declared a 'short term pollution' event, samples can be discounted from the classification process. While there is some distrust and confusion among stakeholders about this discounting process, it is provided for in the regulations and appears to be applied in accordance with them. We question whether bathing water information could be provided that would both include and exclude these samples, for comparison and to provide a more complete picture.

Monitoring of bathing waters

Our assessment is that the authorities in England are performing what is required of them by the current regulations in respect of monitoring. However, the current provisions of the regulations for the location and number of sampling points may not provide for a representative assessment of water quality or health risks, especially at larger sites, over their entire length or area. We are also concerned about risks of misclassification where sample numbers are below those recommended by the WHO.

Our assessment highlights the need for further research into new and emerging techniques for the assessment of FIOs with nearer real-time applications. Additionally, the rise in applications for designation of inland bathing waters and the popularity of swimming in freshwater environments suggests a need to increase attention on the presence of cyanobacteria ('blue-green algae'). Monitoring and warnings for cyanobacteria do happen in practice. However, we consider that a more consistent approach in this area would be desirable.

²¹ World Health Organization, 'WHO Recommendations on Scientific, Analytical and Epidemiological Developments Relevant to the Parameters for Bathing Water Quality in the Bathing Water Directive (2006/7/EC)' (11 June 2018) <<u>www.who.int/publications/m/item/</u> who-recommendations-on-scientific-analytical-and-epidemiological-developments-relevant-to-the-parameters-for-bathing-water-<u>quality-in-the-bathing-water-directive-(2006-7-ec)</u>> accessed 27 July 2024.

Reporting and communication

We recognise the importance of the current classification system and the function it serves as an indicator of effectiveness of the implementation of broader water law and policy. However, we consider that there is scope for improvements to better ensure the public are aware of their more immediate risks from bathing.

We consider the information on the EA's 'Swimfo' website to be helpful. However, some aspects of its accessibility and understandability for the general public could be improved.

There is currently a gap in pollution risk forecasting in relation to inland sites. This will become more significant if increased numbers of such sites are newly designated, as anticipated. It is therefore important that the EA continues to seek solutions to address this issue.

Coherence with related law and policy

The wider legal framework

The Bathing Water Regulations do not operate in isolation. Rather, they form part of a wider framework of laws and policies for the management, protection and improvement of the water environment. Other elements include four legally binding water targets as well as a target for the condition of protected features in relevant Marine Protected Areas under the Environment Act 2021.

More broadly, the statutory EIP adopted under the Environment Act 2021 by the previous administration provides a framework to pursue the goal of 'clean and plentiful water', alongside other key plans and strategies. Following the change of administration in July 2024, the Government has announced its intention to undertake a review of the EIP by the end of the year.²² The Secretary of State has also identified cleaning up rivers, lakes and seas as one of Defra's five core priority areas.²³

The WFD Regulations

Our findings in our recent report on implementation of the WFD Regulations include that progress is not on track to meet the Environmental Objectives set for most water bodies under that regime. This is due to a range of factors including a lack of specific and certain measures to achieve those objectives.²⁴

Bathing waters have the status of 'protected areas' under the WFD Regulations. From our assessment, we judge that many of the issues that concern how the WFD Regulations have been implemented will also apply specifically to bathing waters.

For example, while River Basin Management Plans (RBMPs) produced under the WFD Regulations identify bathing waters as protected areas, they do not set out site-specific information on measures to meet the applicable standards. Nor do they clearly reflect the

²² Defra, 'Government Launches Rapid Review to Meet Environment Act Targets' (1 August 2024) <<u>www.gov.uk/government/news/government-launches-rapid-review-to-meet-environment-act-targets</u>> accessed 1 August 2024.

^{23 &#}x27;Defra Secretary of State at Summer Stakeholder Reception' (31 July 2024) <<u>www.gov.uk/government/speeches/defra-secretary-of-state-at-summer-stakeholder-reception</u>> accessed 15 August 2024.

²⁴ Office for Environmental Protection, 'A Review of Implementation of the Water Framework Directive Regulations and River Basin Management Planning in England' (n 6).

requirement to aim for anything beyond 'sufficient' status, despite the specific requirement to do so in the Bathing Water Regulations.²⁵

Additionally, there is no clear indication or target for what overall levels of bathing water quality Defra and the EA aim or expect to achieve. We consider it would be valuable for them to set such targets, aligned with specific objectives for individual bathing waters that should be included in RBMPs.

Water industry regulation and investment

The application and regulation of measures in the water industry to limit sewage discharges and ensure appropriate treatment are critical to meeting and raising bathing water standards. However, they are not the only source of pressure on bathing waters, with agriculture in particular also being significant.

Our report on the implementation of the WFD Regulations discusses several issues regarding their interaction with mechanisms for water industry improvements and investments. Again, these issues will also apply specifically when it comes to application of the WFD Regulations to protect and improve bathing waters. We also highlight a number of areas where it will be helpful for Government to confirm its intentions as regards particular commitments made under the previous administration, including the Storm Overflows Discharge Reduction Plan.²⁶

A further, more specific issue is the cyclical timing of major water industry improvements, which generally work on the basis of five-year investment cycles. The Bathing Water Regulations provide that a bathing water that is 'poor' for five consecutive years is automatically 'declassified'. The result is that such a site is 'no longer a bathing water' and 'permanent advice against bathing' must be issued.

We consider that this provision for automatic declassification is inflexible and may be counter-productive. Allowing up to five years to bring a site out of 'poor' status should not be used as a basis to delay improvements that could be applied over a shorter timescale. However, in some cases even five years may not be enough to identify, plan for and implement measures in the water industry sector, or elsewhere, to achieve the necessary improvements.

Marine strategy

We highlight that ongoing implementation of the Bathing Water Regulations, and their possible review, should also take account of the interaction with the Marine Strategy Regulations.²⁷ This should address, for instance, the implications of only setting the minimum objective of 'sufficient' for bathing waters under the WFD Regulations, for the pursuit of 'Good Environmental Status' under the Marine Strategy Regulations.

²⁵ Reg 5(1)(b), Bathing Water Regulations.

²⁶ Defra, 'Storm Overflows Discharge Reduction Plan' (2023) <<u>https://assets.publishing.service.gov.uk/</u>

media/6537e1c55e47a50014989910/Expanded_Storm_Overflows_Discharge_Reduction_Plan.pdf> accessed 10 July 2024.

²⁷ The Marine Strategy Regulations 2010, Statutory Instrument 2010 No. 1627.

Bye-laws that restrict swimming or other recreational activity

Finally, we discuss the interaction of the Bathing Water Regulations with bye-laws that may prohibit or restrict swimming or other uses of water. We do not question the need for authorities to impose such controls in certain circumstances. However, we consider that there is the potential for the interaction of different measures to act as a barrier to improving water quality under the Bathing Water Regulations and, by extension, the WFD Regulations.

In conclusion

Overall, we see a regime that is being implemented effectively in terms of compliance with monitoring, classification and reporting obligations in the Bathing Water Regulations. Application of the regulations has also seen significant improvements in bathing water quality since the regime was introduced in the 1990s, albeit with some recent stagnation and decline.

At the same time, we see room for improvement in how the current regulations are applied, including how bathing waters are identified and in the numbers of designated areas, particularly at inland sites. There is also considerable scope to achieve better outcomes, with England currently being one of the worst performers in Europe in realising 'excellent' bathing waters. We think there needs to be a clearer, more ambitious and purposeful approach to setting and pursuing objectives for bathing waters under the WFD Regulations. It also needs a greater degree of coherence between the Bathing Waters Regulations and other laws and policies to address all relevant sources of pollution, including from agriculture as well as the water industry.

More fundamentally, we consider that the design of the current regulations is not comprehensive when assessed against current societal trends. In particular, their focus on 'bathing' and a fixed 'bathing season' limits the ability of the regime to protect people's health when they use waters for other recreational purposes or at other times. Public expectations and uses of water for leisure purposes have moved on significantly since the legislation was developed. The regulations have not kept up with those changes.

While some of the more specific points that we highlight in this report can be dealt with as matters of implementation under the current regulations, changes in law would likely be necessary to deal with the broader issues. They will therefore be a matter for Government to consider in any review of the regulations alongside other relevant factors, including costs and benefits.

We recognise that it will take some time for Government to finalise its plans as regards the future direction of water policy and law. As it does so, we highlight the importance of Government confirming its intentions as regards the WFD Regulations and the Bathing Water Regulations. For reasons identified in our previous report on the WFD Regulations, and in this report on bathing waters, we support the review of both regimes to inform improvements in their implementation and strengthen their underlying legislative and governance provisions. We also highlight a number of possible improvements in implementation under the current regulations.

Our recommendations

We make 12 recommendations to Defra and the EA. These address issues in the implementation of the regulations, their design and their coherence with related law and policy.

Recommendation 1. We recommend that, in applying its duty to review the Bathing Water Regulations, and in considering what is meant by waters 'at which the Secretary of State expects a large number of people to bathe', Defra should consider whether wider categories of water users need now to be taken into account, given the purpose of protecting human health. To this end, we recommend that Defra consider not just those people whose express intention is to swim, but also those who would normally or frequently expect to be immersed (such as surfers) as well as other recreational users who may be exposed to polluted water from 'bathing' from time to time.

Recommendation 2. In any review of the regime, we recommend that Defra consider options to expand the bathing water season to better match the actual usage of bathing waters by significant numbers of people. This could include considering the possible use of different season lengths at different locations.

Recommendation 3. We recommend that Defra revise the current bathing water identification criteria to better reflect the provisions of the regulations and the protection intended to be provided where large numbers of people are expected to bathe. To this end, we recommend that Defra base its identification of bathing waters on a properly representative assessment of current use and necessary protection of human health rather than fixed numbers of bathers or infrastructure. We also recommend reconsidering the current exclusion of higher levels of use of waters during organised events.

Recommendation 4. We recommend that all material proposals for changes to the bathing water identification criteria and process should be subject to public consultation before they are finalised. Where applications are rejected, Defra should provide a statement of the reasons for the rejection as a matter of routine in the interests of transparency and good governance.

Recommendation 5. We recommend that any review of the Bathing Water Regulations by Defra should include further consideration of whether a structured and transparent pre-identification process, such as that operating in Germany, might be beneficial.

Recommendation 6. We recommend that, in any review of the regulations, Defra consider: a) the potential benefits of using 95 percentile evaluation for all classifications as suggested by the WHO; and b) the approach to disregarding samples, to ensure stakeholders understand what is being done and why and to make best use of the data collected. We also recommend that, in any such review, Defra, with input from DHSC and the UKHSA as appropriate, consider further the justification behind the different standards for inland and coastal bathing waters.

Recommendation 7. In any review of the Bathing Water Regulations, we recommend that Defra and the EA consider the scope and options to update the monitoring and sampling regime. We recommend that this should include considering the potential to: a) take a more flexible approach to determining the most representative sampling locations; b) increase the number of sample points on long stretches of identified areas; c) develop proposals for the consistent monitoring of and response to cyanobacteria blooms; and d) provide increased transparency and explanation of monitoring decisions so that people understand what is being done, when, how and why.

Recommendation 8. We recommend that Defra and the EA pursue the further development of short-term pollution risk forecasting systems so health risks can be better understood and communicated to the public with greater speed, including for inland sites. While establishing accurate levels of *E. coli* and IE may for the time being only be possible via laboratory analysis, event duration monitoring data provides a near real-time indication of risk to harm at affected bathing sites. We therefore also recommend that Defra and the EA consider how best to align implementation of the Bathing Water Regulations with that of the Urban Waste Water Treatment Regulations, as well as relevant provisions of the Environment Act 2021, so event duration monitoring data can be fed into pollution risk forecasting systems.

Recommendation 9. We recommend that any review of the regime include consideration of options to improve the quality, clarity, and accessibility of bathing water information. We suggest this could include online resources and improved use of social media and Quick Response (QR) codes as well as physical signs at bathing sites.

Recommendation 10. In their ongoing implementation of the WFD Regulations, including addressing our earlier recommendations on this regime, we recommend that Defra and the EA ensure that: a) the objectives set for bathing waters in RBMPs are sufficiently ambitious and recognise the duty in Regulation 5(1)(b) of the Bathing Water Regulations to aim for 'good' or 'excellent' where appropriate; b) those objectives are backed up by clear, specific and time-bound measures to achieve them at the level of individual water bodies; and c) the identification of those measures considers all relevant pressures, including from agriculture and other sources as well as the water industry, and the impacts for the water environment as a whole.

Recommendation 11. In any review of the Bathing Water Regulations, we recommend that Defra revisit the current approach to the declassification of bathing waters, which can result in successive 'poor' results leading to automatic declassification and loss of bathing water status even where improvements are in progress.

Recommendation 12. In any review of the regime, we recommend that Defra clarify the relationship between provisions under the Bathing Water Regulations for identifying and monitoring bathing waters, and giving advice against bathing, with rights and restrictions in common law and bye-laws. This should consider not just the current practical interpretation of 'bathing' to cover swimmers but also the possible application of the regulations to cover other recreational water users.

As can be seen, some of the above recommendations above are concerned with issues of implementation that can be addressed under the current regulations. They are not dependent on any review of or change to the regulations. These are recommendations 3 and 4 (bathing water identification criteria and process), 8 (pollution risk forecasting) and 10 (improvement of bathing water standards through implementation of the WFD Regulations).

The other recommendations are concerned with areas which we suggest would benefit from consideration under a wider review, as provided for in the regulations, to assess how the regime might be updated to ensure it can achieve the outcomes intended.



1. Introduction

1. Introduction

1.1 About this report

This report looks at the effectiveness of the Bathing Water Regulations 2013²⁸ ('the Bathing Water Regulations') and their implementation. It considers their effectiveness as a legal instrument, their application in practice and their coherence with wider law and policy.

After briefly introducing what is meant by a 'bathing water' (Section 1.2), this introductory chapter explains why we have looked at this subject (Section 1.3), our approach to the work (Section 1.4) and the structure of the report (Section 1.5).

In conducting the project, we have also looked in parallel at the equivalent issues and legislation in Northern Ireland. We are producing separate reports for each jurisdiction. Both reports will be published on the OEP website.

1.2 What is a 'bathing water'?

The term 'bathing water' has a specific legal meaning. Rather than simply referring to any area of water where people bathe, 'bathing waters' are defined areas that are formally identified under the Bathing Water Regulations.

When an area of water is legally designated as a 'bathing water', it becomes subject to specific environmental regulations designed to protect public health. These regulations are intended to ensure that water quality is safe for bathing, to provide warnings where it is not, and to enhance the environmental, societal, and economic benefits associated with clean, accessible bathing areas.

1.3 Why we are looking at the Bathing Water Regulations

In recent years, there has been a significant rise in outdoor water-based activities, including 'wild swimming'. This is representative of a shift in how the public engages with natural waters, moving beyond the patterns of use when the first laws to protect bathing waters were established in the 1970s.

The importance of bathing waters extends beyond recreational enjoyment, encompassing public health and wider benefits. Activities like swimming in natural waters can foster social connections and enhance people's relationship with nature, as well as boosting well-being.

It is regrettable, therefore, that bathing can also carry risks of exposure to pollution that may cause illness. In this regard, the designation and management of bathing waters has been a powerful tool for both human health and environmental restoration. Substantial investments in urban wastewater treatment plants and improvements in wastewater networks since the 1990s have led to a large reduction in organic pollutants and pathogens at most bathing water sites in England. Despite this, there is room for significant further improvement in the quality of England's bathing waters.

There are also questions about how the Bathing Water Regulations are implemented, whom they serve to protect, and their standards of protection. These concerns have been exacerbated by public and political disquiet over the state of the wider water environment,

²⁸ The Bathing Water Regulations 2013, Statutory Instrument 2013 No. 1675.

including regulation of the water industry, storm overflows, and diffuse pollution from agriculture.

1.4 Focus of this report

The Bathing Water Regulations are concerned with identifying and managing bathing waters to protect people against risks of harmful exposure to water pollution. They aim to improve bathing water quality to protect human health and facilitate recreational water use. They also sit within a wider body of water law and policy intended to protect and improve the environment and achieve other outcomes.

In looking at the implementation of the regulations, we have considered the following broad questions:

- What do the Bathing Water Regulations aim to achieve and require and how have they been applied?
- Does their underlying approach offer a good basis to achieve their aims?
- How effective has their implementation been?
- Are they effectively integrated in a coherent, wider body of water law and policy?
- What are the barriers to achieving the regulations' objectives, and how could these be addressed?
- Are there areas of the current regulations, guidance and related law and policy that could be improved?

Overarching issues

This review of the Bathing Water Regulations builds upon earlier work by the OEP on implementation of the Water Framework Directive Regulations 2017 ('the WFD Regulations').²⁹ Our report on that project highlights a failure to effectively apply the WFD Regulations to protect rivers, lakes, coastal and other waters.³⁰ It also identifies several underlying and seemingly endemic issues relating to delivery mechanisms and governance structures intended to protect and improve the water environment.

In addition, the OEP has reported³¹ separately on progress in protecting the natural environment in accordance with England's current statutory Environmental Improvement Plan (EIP).³² That report assesses progress towards the target to ensure that all bathing waters were classified as at least 'sufficient' (the lowest level of quality considered safe for bathing), as 'partially on track'. It also sets out our view that neither that target, nor the Bathing Water Regulations, are comprehensive when assessed against current societal trends.

These findings from our previous work on the WFD Regulations and the EIP provide an important context for this more specific report on the Bathing Water Regulations, which operate within the same wider legal and policy framework.

²⁹ The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017, Statutory Instrument 2017 No. 407.

³⁰ Office for Environmental Protection, 'A Review of Implementation of the Water Framework Directive Regulations and River Basin Management Planning in England' (n 6).

³¹ Office for Environmental Protection, 'Progress in Improving the Natural Environment in England 2022/2023' (n 8).

³² Defra, 'Environmental Improvement Plan 2023' (n 9).

We therefore highlight the opportunity for Government to review the regime with a view to considering the current use of waters for swimming and other recreational activity and the known pollution risks to public health.

Review of the Bathing Water Regulations

Under the administration of the previous Government, the Department for Environment, Food and Rural Affairs (Defra) announced its intention to consult on reforming the Bathing Water Regulations in May 2024.³³ The current Government's stance on this matter has not yet been confirmed. However, our findings, coupled with the growing prominence of health concerns related to water activities and the increasing popularity of 'wild swimming,' suggest that now is an opportune time to revisit and consider the possibility to update the existing framework and its implementation.

The European Commission is currently reviewing the European Union (EU) legislation that originally underpinned the Bathing Water Regulations in England.³⁴ While the UK is no longer bound by EU measures, the Commission's review may provide valuable insights for Defra from the application of similar bathing water legislation across various countries.

1.5 Our approach

The project commenced in 2023 alongside our work on the WFD Regulations. It has encompassed several elements.

Firstly, we have reviewed relevant legislation, guidance documents, implementation reports and literature.

Secondly, we convened a stakeholder group to facilitate broad-based engagement. This group comprised representatives from public authorities, the water and farming sectors, non-governmental organisations and professional associations across England and Northern Ireland. Two virtual meetings were held with this group in 2023, providing a platform for diverse perspectives and insights. Annex 1 outlines the nature and scope of our stakeholder interactions.

Thirdly, we have also engaged with the key public authorities in the implementation of the Bathing Water Regulations. This involved discussions with and review of information from Defra and the Environment Agency (EA).

Fourthly, to support the project, we commissioned independent research from the consultancy Stantec and the Centre for Research into Environment and Health. We have published their report on our website.³⁵ The findings and recommendations of these consultants reflect their independent views and are not necessarily those of the OEP. We cite their work as evidence in this report where relevant and refer to it as the 'Bathing Waters Technical Report'.

This OEP report builds on all of the components above. It has been reviewed and critiqued by external, independent experts, identified in Annex 1, whose contributions we gratefully acknowledge.

³³ Defra, 'Record Number of New Bathing Sites Get the Go Ahead' (n 13).

³⁴ European Commission, 'Bathing Water' (13 June 2024) <<u>https://environment.ec.europa.eu/topics/water/bathing-water_en</u>> accessed 17 June 2024.

³⁵ Stantec and Centre for Research into Environment and Health (n 18).

In formulating our findings and recommendations, we have applied an evidence-based approach, ensuring that our conclusions are rooted in the available data and evidence. We have referenced stakeholder views where relevant to contextualise our analysis. We also identify areas where information is lacking, suggesting these as potential areas for further government review.

The scope of this report is primarily a legal and practical examination of the Bathing Water Regulations and their implementation. Broader scientific inquiries and wider socio-economic implications fall outside of this assessment.

1.6 Structure of this report

After this introduction, the remaining chapters of the report are as follows.

Chapters 2 and 3 are intended to provide relevant facts and context as background for the analytical content in Chapters 4 to 6 that follow.

Chapter 2 outlines the history of the Bathing Water Regulations, including their origins in European law. It also summarises the main components of the regulations and how they are implemented.

Chapter 3 outlines trends in and the present quality of bathing waters. It compares outcomes in England with other UK administrations and EU Member States.

Chapters 4 to 6 are our main analytical chapters. They look at a number of specific issues in turn, setting out the current position, discussing the main issues of note, and then presenting our view and any specific recommendations.

Chapter 4 considers certain guiding principles that underpin the Bathing Water Regulations. It looks at the meaning of 'bathers', the definition of the 'bathing season' and the process of identifying bathing waters. These are foundational elements that effectively define the scope of the regime.

Chapter 5 discusses the regime's technical water quality classification and monitoring processes, including methods and frequency of sampling. It also looks at the effectiveness of public reporting on bathing water quality.

Finally, Chapter 6 examines the interaction of the Bathing Water Regulations with other environmental laws and policies, including the WFD Regulations and the Urban Waste Water Treatment Regulations.³⁶ It also discusses how water industry regulation and investment mechanisms relate to bathing water quality issues.



2. The Bathing Water Regulations

2. The Bathing Water Regulations

This chapter summarises the background to and provisions of the Bathing Water Regulations. The Bathing Waters Technical Report provides additional information.³⁷

2.1 Brief history of the Bathing Water Regulations

The current approach to identifying and regulating bathing waters in England began to take shape in the 1970s. This was driven by the 1976 European Economic Community (EEC) Bathing Water Directive.³⁸ That Directive's aim was to improve bathing water quality to protect human health and facilitate recreational use of natural waters across what was then the EEC and is now the EU.

The 1976 Bathing Water Directive should have been 'transposed' (meaning written into domestic law, to give it effect) within two years of adoption. However, it was not until after the Water Act 1989 was passed that the Bathing Waters (Classification) Regulations 1991 were produced which implemented the Directive in the UK.³⁹

The EU revised the European bathing water regime in 2006, adopting a new Bathing Water Directive⁴⁰ to replace the 1976 law. The objective of the new Bathing Water Directive was 'to protect human health and to preserve, protect and improve the quality of the environment'⁴¹ A key provision in the new Directive was for all bathing waters to achieve at least 'sufficient' status by 2015, coupled with an ongoing requirement to increase the number classified as 'excellent' or 'good'.

The UK Government initially transposed the 2006 Bathing Water Directive into national law through the Bathing Water Regulations 2008.⁴² These regulations were later replaced by the Bathing Water Regulations 2013 (which we refer to in this report as 'the Bathing Water Regulations').

Following the UK's exit from the EU, the Bathing Water Regulations became 'retained EU law' under the European Union (Withdrawal) Act 2018,⁴³ later renamed 'assimilated law' under the Retained EU Law (Revocation and Reform) Act 2023.⁴⁴ This renaming does not change the legal effect of the regulations.

2.2 Summary of the Bathing Water Regulations

The following paragraphs provide a brief summary of some of the main legal provisions of the Bathing Water Regulations and how they are applied in practice.

³⁷ Stantec and Centre for Research into Environment and Health (n 20) s 2.

³⁸ Council Directive 76/160/EEC of 8 December 1975 concerning the quality of bathing water [1976] OJ L31/1.

³⁹ Bathing Waters (Classification) Regulations 1991, Statutory Instrument 1991 No. 1597.

⁴⁰ Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC [2006] OJ L64/37.

⁴¹ Art 1, Bathing Water Directive.

⁴² The Bathing Water Regulations 2008, Statutory Instrument 2008 No. 1097.

⁴³ European Union (Withdrawal) Act 2018, Ss. 2-4.

⁴⁴ Retained EU Law (Revocation and Reform) Act 2023, S. 5.

Implementation responsibilities and interests

Implementation of the Bathing Water Regulations is led by Defra, acting on behalf of the Secretary of State for the Environment, Food and Rural Affairs, and the EA. Local authorities and water companies also have a role under the regulations as outlined below. Though not specifically referenced in the regulations, their focus on public health protection means that other authorities, particularly the Department of Health and Social Care (DHSC) and the UK Health Security Agency (UKHSA), additionally have an interest.

Identification of and reporting on bathing waters

The Secretary of State must identify bathing waters and must maintain and annually publish a list of those bathing waters and their 'classifications'.⁴⁵ The Secretary of State must also publish an annual report on the 'bathing season' in the previous year.⁴⁶ The meaning of the 'bathing season' and the approach to 'classification' are outlined below.

Defra publishes the list of bathing waters⁴⁷ and the annual bathing water reports.⁴⁸ In practice these are referred to as 'designated' bathing waters, although this term is not used in the regulations. We discuss the designation process in Section 4.3. A key issue underpinning this topic is the related issue of the meaning of 'bather' and 'bathing', which we explore in Section 4.1.

The bathing season

The regulations state that the 'bathing season' begins on 15 May and ends on 30 September each year.⁴⁹ Important aspects of the regime are based on this bathing season, which we discuss in Section 4.2.

Classification of bathing waters

The regulations require the EA to classify bathing waters as 'poor', 'sufficient', 'good' or 'excellent'.⁵⁰ These classifications are based on measurements of the presence and levels of the bacteria Intestinal enterococci (IE) and *Escherichia coli (E. coli)*. These two bacteria in this context are referred to commonly as 'faecal indicator organisms' (FIOs). We discuss the state of bathing waters in Chapter 3, and the approach of the classification system in Chapter 5 (Section 5.1).

General duties of the Secretary of State and the Environment Agency to achieve bathing water quality standards

The Secretary of State and the EA must exercise their 'relevant functions' so as to ensure that, from 2015 onwards, all bathing waters are classified as at least 'sufficient'.⁵¹ 'Relevant functions' are defined by reference to a list of functions in the WFD Regulations.⁵²

⁴⁵ Reg 3(1), Bathing Water Regulations.

⁴⁶ Reg 3(4)(a), Bathing Water Regulations.

⁴⁷ Defra, 'Bathing Waters: List of Designated Waters in England' (13 May 2024) <<u>www.gov.uk/government/publications/bathing-waters-list-of-designated-waters-in-england</u>> accessed 17 July 2024.

⁴⁸ Defra, 'Bathing Water Quality Statistics' (6 December 2023) <<u>www.gov.uk/government/statistics/bathing-water-quality-statistics</u>> accessed 17 July 2024.

⁴⁹ Reg 4, Bathing Water Regulations.

⁵⁰ Reg 11 and Sched. 5, Bathing Water Regulations.

⁵¹ Reg 5(1)(a), Bathing Water Regulations.

⁵² See Sched. 2, WFD Regulations for the list of 'relevant functions'.

The Secretary of State and the EA must also take such realistic and proportionate measures as they consider appropriate with a view to increasing the number of bathing waters classified as 'good' or 'excellent'.⁵³ We discuss the implementation of these requirements, including the link with the WFD Regulations, in Chapter 6 (Section 6.2).

Sampling, monitoring and investigations

The EA must carry out sampling, monitoring and investigations to assess the condition of bathing waters.⁵⁴ This includes monitoring for the purposes of classifying each bathing water. The regulations set out details of sampling methods, locations, frequency, storage, transport and laboratory parameters to be analysed. We discuss issues concerned with monitoring in Section 5.2.

Bathing water profiles

The EA must prepare a 'bathing water profile' for each bathing water.⁵⁵ This contains information such as a description of the bathing water and the causes of pollution. The EA publishes the profiles on its 'Swimfo' webpages.⁵⁶

Public communication and reporting

The regulations set out a range of provisions for communicating and reporting on the condition of bathing waters. These include obligations on the relevant local authority to disseminate information to the public during the bathing season, and on the EA to provide information on bathing water classifications and profiles.⁵⁷ We discuss issues of reporting and communication under the regulations in Section 5.3.

Management measures

The regulations also require the EA, or the relevant sewerage undertaker or local authority, to take bathing water 'management measures' in specific situations such as 'pollution incidents', 'abnormal situations' and 'short term pollution'.⁵⁸

These management measures are not the main mechanisms through which the requirement to meet the 'sufficient' or better classification of bathing waters is achieved. Rather, these outcomes should be realised through the application of measures under the wider body of water law and policy, of which the Bathing Water Regulations form a part. This is reflected in the obligations on the Secretary of State and the EA concerning the application of their 'relevant functions' as noted above.

Declassification of bathing waters

As a specific element of the management measures, the EA and the relevant local authority are subject to requirements in the regulations concerning the provision of information when a bathing water is classified as 'poor'. This includes an obligation on the EA to issue 'permanent advice against bathing' if it has classified a bathing water as 'poor' in five consecutive years. In these cases, the bathing water is 'declassified' and as such is 'no

⁵³ Reg 5(1)(b), Bathing Water Regulations.

⁵⁴ Regs 8, 10 and 11 and Sched. 4, Bathing Water Regulations.

⁵⁵ Reg 7 and Sched. 3, Bathing Water Regulations.

⁵⁶ Environment Agency, 'Swimfo: Find a Bathing Water' (2024) <<u>environment.data.gov.uk/bwq/profiles/</u>> accessed 17 July 2024.

⁵⁷ Regs 9 and 14, Bathing Water Regulations.

⁵⁸ Regs 12-13, Bathing Water Regulations.

longer a bathing water'.⁵⁹ In practice, the term 'de-designation' is used to describe what the regulations refer to as 'declassification'.⁶⁰

The Secretary of State must publish annually details of the former bathing waters at which permanent advice against bathing is in place.⁶¹ The declassified sites are shown on the EA's 'Swimfo' website.⁶² We discuss issues associated with declassification stemming from failure to achieve the necessary standards in Chapter 6 (Section 6.3).

Guidance and enforcement

The regulations contain provisions for the relevant minister to give guidance to the local authorities or the EA on their implementation.⁶³ They also provide for the minister or the EA to take enforcement action against local authorities or private operators in respect of their duties.⁶⁴

Review

The Secretary of State must review and report on the regulations every five years. The reports must set out the objectives of the regulations and the extent of their achievement. They must also assess whether those objectives remain appropriate and, if so, the extent to which they could be achieved in a less burdensome way.⁶⁵

2.3 Blue Flag Awards

The Blue Flag programme, which is not within the regulatory obligations, is run by the Foundation for Environmental Education located in Denmark.⁶⁶ Within England, the scheme is managed by Keep Britain Tidy.⁶⁷ There are currently 72 English beaches which have been awarded Blue Flag Status for 2024/25.

This programme is world renowned, with a series of strict environmental, educational, safety-related and access-related criteria which must be met and maintained for a beach to be awarded the Blue Flag status. This includes the bathing water being classed as 'excellent' as defined by the regulations.

⁵⁹ Reg 13(2)-(3), Bathing Water Regulations.

⁶⁰ Defra, 'Bathing Waters: Apply to Designate or de-Designate' (13 May 2024) <<u>www.gov.uk/government/publications/bathing-waters-apply-to-designate-or-de-designate</u>> accessed 17 July 2024.

⁶¹ Reg 3(4)(b), Bathing Water Regulations.

⁶² Environment Agency, 'Swimfo: Find a Bathing Water' (n 56).

⁶³ Reg 17, Bathing Water Regulations.

⁶⁴ Reg 16, Bathing Water Regulations.

⁶⁵ Reg 20, Bathing Water Regulations.

⁶⁶ Foundation for Environmental Education, 'Blue Flag' <<u>www.blueflag.global</u>> accessed 11 September 2024.

⁶⁷ Keep Britain Tidy, 'Blue Flag Award | Keep Britain Tidy' <<u>www.keepbritaintidy.org/blue-flag</u>> accessed 11 September 2024.



3. The state of bathing waters

3. The state of bathing waters

This chapter provides a brief overview of the state of bathing waters in England. We highlight current performance and the challenges presented by changing trends in bathing. The Bathing Waters Technical Report gives more detail on these issues.⁶⁸

3.1 Dominance of coastal bathing sites in England

There are 451 bathing waters in England at the time of writing this report.⁶⁹ Of these, 82% (369) are coastal, 11% (50) are 'transitional' sites (such as on estuaries), while the remaining 7% (32) are inland at rivers and lakes. The locations of these bathing water sites are made available by the EA at its 'Swimfo' website.⁷⁰

Bathing waters in England are primarily coastal, reflecting the fact that these sites historically have been the most popular for swimming and recreation. This trend is also observed, though to a lesser extent, across many other countries in Europe, where a significant proportion of bathing sites are coastal.⁷¹

Despite this, the 1976 and 2006 European Directives were always intended to protect the public at both coastal and inland sites.⁷² As set out in the Bathing Waters Technical Report, several EU Member States have very large numbers of inland bathing water sites. For instance, Germany has over two thousand sites on lakes and rivers and France has over a thousand.⁷³ In comparison, the number of inland sites in England is low.

Similarly, the number of coastal sites identified as bathing waters in England is low when considered against other figures. For instance, the independent UK 'Beach Guide' lists 828 beaches in England.⁷⁴ This illustrates the relatively limited focus and application of the current regulations compared to other information that people may consider when deciding which sites to visit for bathing or other recreational activities.

3.2 Changing trends – increasing numbers of inland sites

With the increased popularity of 'wild swimming' and other open water recreational activities across rivers in England,⁷⁵ the number of applications for bathing waters at inland locations has increased. In 2024 alone, twelve new river bathing water sites were designated in England.⁷⁶

A continued increase in applications for inland sites appears likely, although at the time of writing the application process is closed, having been paused under the Sunak Government in May 2024.⁷⁷ An increase in inland bathing sites will present an important point for Defra and the EA to consider, as bathing water sites on rivers may be exposed to sewage (both

- $\,$ 68 $\,$ Stantec and Centre for Research into Environment and Health (n 20) s 3. $\,$
- 69 Defra, 'Record Number of New Bathing Sites Get the Go Ahead' (n 13).
- 70 Environment Agency, 'Swimfo: Find a Bathing Water' (n 56).

74 The Beach Guide (n 19).

⁷¹ The European Environment Agency, 'European Bathing Water Quality in 2023' (28 May 2024) <<u>www.eea.europa.eu/publications/</u> <u>european-bathing-water-quality-in-2023</u>/> accessed 5 July 2024."

⁷² A fact underlined by the many entirely landlocked EU Member States, such as Austria, who have for decades applied the Bathing Water Directives.

⁷³ Stantec and Centre for Research into Environment and Health (n 18) s 5.2.

⁷⁵ Outdoor Swimmer, 'Trends in Outdoor Swimming 2023' (*Outdoor Swimmer Magazine*, 1 February 2023) <<u>outdoorswimmer.com/</u> <u>featured/trends-in-outdoor-swimming-2023/</u>> accessed 25 July 2024.

⁷⁶ Defra, 'Record Number of New Bathing Sites Get the Go Ahead' (n 13).

⁷⁷ Defra, 'Bathing Waters' (n 60).

treated and untreated), agricultural run-off, urban run-off and industrial pollution in ways that may differ from those at coastal sites.

As explained in greater detail in the Bathing Waters Technical Report, coastal bathing water quality based on the FIOs of concern is generally better than that of inland waters because of the greater dispersion and dilution rates and more rapid bacteria decay. Moreover, riverine sites tend to be more susceptible than coastal areas to short-term pollution caused or affected by heavy rains or droughts.⁷⁸

This means that there is the potential for the overall percentages of bathing waters meeting the 'excellent', 'good' and 'sufficient' classifications in England to decrease if the number of inland (in particular, riverine) bathing waters increases.⁷⁹ This should not be taken as an indication that standards of bathing water quality are declining, since it would actually be a reflection of the changing mix and nature of designated bathing waters. Rather, it illustrates the need to use statistics in this area with care. It also highlights the challenges of communicating in a way that is both clear and simple while allowing these important contextual points to be understood.

3.3 Status of bathing waters in England

The most recent bathing water quality figures, from 2023, showed 66.4% of bathing waters (281 sites) in England at 'excellent' status. This is the lowest percentage since 2017.⁸⁰ The 2023 figures also show 4.3% of bathing waters (18 sites) rated as 'poor'. This marks the biggest proportion of failure to meet the minimum legal standards since the four-tier classification system was introduced in 2015. We discuss the classification system further in Chapter 5 (Section 5.1) of this report.

Table 3.1 below shows the trends in the classification of English bathing waters since 2015. There were no classifications in 2020 due to the Covid pandemic.

Year	2015	2016	2017	2018	2019	2021	2022	2023
Number of bathing waters assessed	415	413	413	420	420	417	419	423
Excellent	264	287	271	282	302	295	302	281
	63.6%	69.5%	65.6%	67.1%	71.9%	70.7%	72.1%	66.4%
Good	110	98	109	106	90	100	87	99
	26.5%	23.7%	26.4%	25.2%	21.4%	24.0%	20.8%	23.4%
Sufficient	29	22	26	23	21	18	18	25
	7.0%	5.3%	6.3%	5.5%	5.0%	4.3%	4.3%	5.9%
Poor	12	6	7	9	7	4	12	18
	2.9%	1.5%	1.7%	2.1%	1.7%	1.0%	2.9%	4.3%

Table 3.1. Bathing water classification results in England from 2015 to 2023 (Source: based on data from Defra, 2024)⁸¹

79 ibid.

81 ibid.

⁷⁸ Stantec and Centre for Research into Environment and Health (n 18) s 5.6.

⁸⁰ Defra, '2023 Statistics on English Coastal and Inland Bathing Waters' (n 20).
3.4 England's bathing water quality compared to other UK administrations

Table 3.2 below shows that England has proportionally more bathing water sites (4.3%, 18 out of 423 sites) that do not meet the minimum legal requirements compared to the rest of the UK (3.8% or 1 out of 26 sites in Northern Ireland, 2.3% or 2 out of 89 sites in Scotland and 1.8% or 2 out of 109 sites in Wales).

England also has proportionally fewer bathing waters (66.4%) achieving 'excellent' classification compared to Wales (73.4%) and Northern Ireland (69.2%). Greater population density in England, among other differences, is likely to be a factor here, since it will create generally larger sewage loads. However, it is clearly not the only factor. This is illustrated by the fact that Scotland has a lower proportion of 'excellent' bathing waters despite also having the lowest population density in the UK.

Table 3.2. Bathing water quality across the UK	(Source: based o	on data from	Defra, DAEF	₹A,
SEPA, and NRW)				

	England ⁸²	Northern Ireland ⁸³	Scotland ⁸⁴	Wales ⁸⁵
Number of bathing waters assessed	423	26	89	109
Excellent	281	18	38	80
	66.4%	69.2%	42.7%	73.4%
Good	99	6	37	20
	23.4%	23.1%	41.8%	18.3%
Sufficient	25	1	12	7
	5.9%	3.8%	13.5%	6.4%
Deser	18	1	2	2
Poor	4.3%	3.8%	2.3%	1.8%

3.5 England's bathing water quality compared to EU Member States

In our review of the implementation of the WFD Regulations and River Basin Management Planning in England, the OEP observed that England was among the lower performers in the percentage of surface water bodies achieving good ecological status or potential.⁸⁶ As shown in Figure 3.1 below, this trend appears to be repeated when it comes to the quality of bathing waters. In 2023, 85.4% of bathing waters across the EU as a whole achieved

⁸² Defra, 'Bathing Water Quality Statistics' (n 48).

⁸³ DAERA, 'Northern Ireland Bathing Water Quality 2023' (2023) <<u>www.nidirect.gov.uk/articles/bathing-water-quality</u>> accessed 19 July 2024. Note that Northern Ireland has both 'official' bathing waters and 'candidate' sites. The latter are those identified for inclusion on the statutory list of bathing waters subject to consultation with the bathing water operator. Table 3.2 only reflects the figures for the 'official' bathing waters. See our separate report on the bathing waters in Northern Ireland for more information.

⁸⁴ The Scottish Environment Protection Agency, '98% of Scottish Bathing Waters Continue to Meet Strict Environmental Standards' (21 November 2023) <<u>beta.sepa.scot/news/2023/98-of-scottish-bathing-waters-continue-to-meet-strict-environmental-standards/</u>> accessed 19 July 2024.

⁸⁵ Natural Resources Wales, 'Bathing Water Quality – Wales' (18 June 2024) <<u>naturalresources.wales/evidence-and-data/research-and-reports/water-reports/bathing-water-quality/</u>> accessed 1 September 2024.

⁸⁶ Office for Environmental Protection, 'A Review of Implementation of the Water Framework Directive Regulations and River Basin Management Planning in England' (n 6) 59.

'excellent' status, with only 1.5% of sites failing to achieve the minimum 'sufficient' legal standard.⁸⁷ As detailed above, England's overall performance was significantly lower.

High intensive land-use in England, such as urbanisation and agriculture, combined with variable weather patterns, might partially explain this discrepancy. Nevertheless, it is notable that, at a headline level, England's results in achieving 'excellent' bathing water quality status exceed those of only three EU Member States – Poland, Hungary and Estonia.⁸⁸ This suggests the potential to achieve better outcomes in England with the necessary political will, technical measures and investments.

At the same time, any comparison of bathing water results from one country to another needs to be treated with a degree of caution. As discussed previously, for example, different administrations will face different pressures, land use, weather, climate and other factors. The scope to achieve improvements at bathing waters may therefore vary. There may also be variations in the approach to identification of bathing waters, which may affect the likelihood of them meeting the standards.

Chapter 5 of the Bathing Waters Technical Report further explores the reasons behind the differences in these figures across Europe. Amongst other things, the report highlights the importance of ultraviolet disinfection at wastewater treatment plants to reduce microorganisms and pathogens in untreated or partially treated urban wastewater.⁸⁹



Figure 3.1. Proportion of bathing waters with excellent quality in selected European countries in 2023 (Source: based on data from the European Environment Agency, 2024)⁹⁰

* Northern Ireland, officially identified sites only.

** Northern Ireland, officially identified sites and candidate sites combined.

The European Environment Agency (n 71). 87

88 Stantec and Centre for Research into Environment and Health (n 18) s 5.2.

89 ibid s 5.6.

⁹⁰ The European Environment Agency (n 71).



4. Underlying principles of the Bathing Water Regulations

4. Underlying principles of the Bathing Water Regulations

This chapter looks at selected issues concerned with the current wording and practical implementation of certain guiding principles that underpin the Bathing Water Regulations. It considers, in turn:

- The focus of the regulations on 'bathers' (Section 4.1)
- The operation of the regime around a specified 'bathing season' (Section 4.2)
- How bathing waters are identified (Section 4.3).

4.1 Who the regulations are intended to protect – the meaning of 'bathers'

4.1.1 Introduction

This section looks at who the Bathing Water Regulations are designed to protect through their reference to 'bathers' (the actual term used in the Bathing Water Regulations is... 'surface waters...at which the Secretary of State expects a large number of people to bathe').⁹¹ This is considered in relation to the regime's objective of 'protecting human health and facilitating recreational use of natural waters'.⁹² It also relates to the identification of 'bathing waters' (Section 4.3) and their classification standards (Chapter 5, Section 5.1).

4.1.2 The current position

The regulations are based around the notions of 'bathers', 'bathing' and 'bathing waters'. As noted above, the Secretary of State's duty under the Regulations is to identify and maintain a list of surface waters where the Secretary of State 'expects a large number of people to bathe'. A 'bathing water' is an area of surface water identified under the regulations at which permanent advice against bathing is not in place.⁹³ The terms 'bathers' and 'bathing' are not defined in the regulations, however, or in supporting documents.^{94 95}

In its practical application of the regulations to date, a 'bather' in this context has been considered by Defra to mean a swimmer. This is also supported to some degree by guidance from the European Commission under the Bathing Water Directive, as we discuss below.

This interpretation has the effect of excluding other water users from consideration. This is reflected in Defra's guidance which states that the proponents of applications to identify bathing waters should 'count the number of people bathing' and should 'not include other water users such as paddleboarders or kayakers'.⁹⁶

⁹¹ Reg 3(1), Bathing Water Regulations.

⁹² Defra and Environment Agency, 'Glossary of Bathing Water Quality Terms' (2024) <<u>environment.data.gov.uk/bwq/profiles/help-glossary.html</u>> accessed 2 July 2024.

⁹³ Reg 2(1)(b), Bathing Water Regulations.

⁹⁴ Defra, 'Designate a Bathing Water: Guidance on How to Apply' (n 12).

⁹⁵ Defra and Environment Agency (n 92).

⁹⁶ Defra, 'Designate a Bathing Water: Guidance on How to Apply' (n 12).

4.1.3 Discussion

The exclusion of other water users from the interpretation of 'bather' to date has been a cause of concern and comment, including from stakeholders in this project. This is discussed further in the Bathing Waters Technical Report.⁹⁷

A wide range of other recreational water users, may also be exposed to pathogens in water. They include surfers, windsurfers, paddleboarders, anglers and people who take part in various forms of boating, rowing and sailing. However, they are not currently considered in identifying bathing waters.

Some of these other water users, such as surfers, will be fully immersed at times, with similar exposure to pathogens as swimmers. There is some evidence that immersion from such activities (and particularly 'impact immersion' such as falling off a surfboard) may present higher risk factors for exposure to water-borne pathogens compared with swimming at the surface.⁹⁸ ⁹⁹ Despite this, surfers have always been excluded from consideration in the identification of bathing waters in England.

Other users, such as paddleboarders, may not have an intention to swim, but will necessarily need to do so if they fall in the water. This will not be an unusual occurrence. It is also unclear if paddling in shallow water, for example by small children, should be viewed as 'bathing'. Defra has confirmed to us in this project that paddling is not currently viewed as swimming under its application of the regulations. Again, however, there will be risks of exposure.

As a result, an area with significant recreational use by people who could be harmed by exposure to polluted water may not qualify as a 'bathing water' under the regime. This will depend, among other factors, on whether enough of those people swim (see Section 4.3), regardless of other recreational uses and their risks of exposure.

This issue was also considered by the European Commission in a 2002 Explanatory Memorandum on the Directive.¹⁰⁰ This stated that:

'The 1976 Directive's main aim was improving water quality and thereby protecting the health of citizens who use natural water bodies for bathing. At that time, bathing meant mainly swimming. During the past 25 years, a lot of social and technical changes have occurred. New water activities like surfing, wind-surfing, kayaking, etc. have developed. In all these activities, falling into the water, submerging and swallowing of water is commonplace. This also applies for canoeing and kayaking on fresh waters, especially when the sport is practised in a family context, i.e. by non experienced users, as water contact and immersion are rather likely.'

⁹⁷ Stantec and Centre for Research into Environment and Health (n 18) s 3.8.

⁹⁸ Anne FC Leonard and others, 'Human Recreational Exposure to Antibiotic Resistant Bacteria in Coastal Bathing Waters' (2015) 82 *Environment International* 92.

⁹⁹ Jack Schijven and Ana Maria de Roda Husman, 'A Survey of Diving Behavior and Accidental Water Ingestion among Dutch Occupational and Sport Divers to Assess the Risk of Infection with Waterborne Pathogenic Microorganisms' (2006) 114 Environmental Health Perspectives 712.

¹⁰⁰ European Commission, 'Explanatory Memorandum to COM(2002)581 – Quality of Bathing Water' (2002) <<u>www.eumonitor.</u> <u>eu/9353000/1/j4nvhdfdk3hydzq_j9vvik7m1c3gyxp/vi8rm2zhs5zz</u>> accessed 3 July 2024.

Despite this, the Commission went on to take the view that '*it would not be appropriate* to include the new recreational uses of water in the definition of bathing waters as to do so would oblige Member States to significantly increase the extent, both physically and temporally, of water quality protection, monitoring and management obligations.' It was therefore left as a choice for Member States, rather than an obligation.

Since then, trends in increasing and more diverse recreational water use have continued. This was recognised by Defra when it announced its intention under the previous administration to 'seek public and stakeholder views on extending the definition of 'bathers' to include a wider range of water users in addition to swimmers – such as rowers, kayakers and paddleboarders.'¹⁰¹

A wider interpretation of 'bather' might attempt to cover not just people who go into the water for the express purpose of swimming, but also those whose water sports or use of recreational waters result in their swimming or immersion in the water at least part of the time.

Such a wider interpretation could then reasonably include surfers and paddleboarders, for example. Arguably, this would be a more purposeful interpretation to better reflect the regime's objective of 'protecting human health and facilitating recreational use of natural waters'.¹⁰²

Regardless of how the term 'bather' is interpreted, where an area is identified as a 'bathing water', any action taken to ensure it meets the appropriate standards or to report its water quality will support the protection of all users, and not just swimmers. Indeed, the standards of protection appropriate for swimmers may be higher than those for some others, such as rowers or anglers, who may be subject to less risk under normal conditions.

This highlights the possibility that an area of water might not be suitable for swimming (for example, for safety reasons) but could be suitable for other recreational activities (such as kayaking or rowing) that still carry some risk of exposure to pathogens.

Authorities in other parts of the world approach this issue through setting different water quality standards for the management of 'recreational waters' rather than just a single set of standards for 'bathing waters'.¹⁰³ Examples include different water quality standards for immersive and non-immersive recreational use in the USA, or 'primary contact' (full immersion activities such as bathing) versus 'secondary contact' activities (like paddleboarding or kayaking on the surface) in Japan.

4.1.4 Our view

We recognise that Defra's current interpretation of 'bathing' to mean swimming reflects what it is widely understood to mean in practice. However, we consider this a limited interpretation which overlooks the wider objectives of protecting human health and facilitating the recreational use of natural waters.

It is arguable that a broader interpretation could reasonably cover a wider body of people who may be immersed in water and need to swim from time to time. This is especially the case for individuals who are likely to be subject to full and regular immersion in the water, such as surfers.

¹⁰¹ Defra, 'Record Number of New Bathing Sites Get the Go Ahead' (n 13).

¹⁰² Defra and Environment Agency (n 92).

¹⁰³ Stantec and Centre for Research into Environment and Health (n 18) ch 6.

Our view, therefore, is that the interpretation of 'bather' as applied under the current regulations should include people who will, or reasonably may need to, swim periodically. This would include, for example, surfers and paddleboarders, consistent with the regime's intended objectives. This is not dependent on any change in the regulations but rather is a definitional and interpretative choice for ministers when designating bathing waters.

We note in this regard that an interpretation that is 'mainly' limited to swimmers appears to have been supported by the European Commission.¹⁰⁴ However, this seems to have been based on the procedural and economic consequences for Member States of taking account of others such as surfers, paddleboarders and windsurfers, rather than what the Bathing Water Directive states.

On the other hand, we also recognise that the Bathing Water Regulations (and the Directive from which they were originally derived), are unclear on this point, with no clear definition. This inevitably leaves applicants and decision-makers with some ambiguity or uncertainty as to what constitutes 'bathing'.

More broadly, we consider that the focus of the regulations on 'bathing' reflects a view of the recreational use of waters which was common in the 1970s, when the regime originated, but is now out of date. The legislation has not kept pace with recreational trends such as surfing and paddleboarding. Its provisions therefore now appear out of step with its objectives of protecting human health and facilitating the recreational use of waters. From a practical perspective, for example, it makes little sense that other activities which see people regularly immersed are excluded from consideration when it comes to designating bathing waters.

Our view is that the existence of a wide range of other users being exposed to the same water periodically raises questions for Defra about how to apply the duty to 'maintain' a list of bathing waters where the Secretary of State expects a large number of people to bathe, and for the EA on how to update the profile of each bathing water.

Given the current misalignment between the regulations' objectives and their provisions, we would support a review on the possibility of applying the regime beyond 'bathers'. We suggest that such a review should include consideration not just of rowers, kayakers and paddleboarders (as identified by Defra under the previous administration), but also other recreational water users such as paddlers, anglers, surfers, windsurfers and kite surfers, and people who take part in various other forms of boating and sailing, all of whom may be at some risk from pollution.

We further suggest that any such review should consider not just such different groups of recreational water users, but also their different likelihoods, means and levels of exposure to pathogens and of resulting harm. For instance, some users will face risks of exposure from swallowing water when they are immersed. Others may be exposed via aerosols or water drops while they remain above the water surface.

Government may also wish to consider further the issues and merits of 'recreational water management', as seen in other parts of the world. This could provide a broader approach to protecting and informing different users of water based on their likely exposure to pathogens and risk of illness.

Any such re-appraisal could have the aim of supporting raised standards overall. We also recognise that any extension of the regime beyond 'bathing' could entail additional

¹⁰⁴ European Commission, 'Explanatory Memorandum to COM(2002)581 – Quality of Bathing Water' (n 100).

costs of implementation as well as societal and environmental benefits. These will be for Government to consider as part of any review.

Recommendation 1. We recommend that, in applying its duty to review the Bathing Water Regulations, and in considering what is meant by waters 'at which the Secretary of State expects a large number of people to bathe', Defra should consider whether wider categories of water users need now to be taken into account, given the purpose of protecting human health. To this end, we recommend that Defra consider not just those people whose express intention is to swim, but also those who would normally or frequently expect to be immersed (such as surfers) as well as other recreational users who may be exposed to polluted water from 'bathing' from time to time.

4.2 When the regulations provide protection – the bathing season

4.2.1 Introduction

This section considers when the Bathing Water Regulations serve to protect bathers. It looks at the 'bathing water season' and the resulting impacts on the identification and prevention of pollution instances and provision of information to the public.

4.2.2 The current position

In England, the 'bathing season' is defined in the regulations to begin on 15 May and end on 30 September each year.¹⁰⁵ The dates of the bathing season determine when the public are provided with most protection and information concerning the risks associated with polluted bathing waters. Specifically, the regulations state that the first sample for every bathing water should be taken shortly before the season commences and that monitoring should then continue at intervals not exceeding one month throughout the season.¹⁰⁶ This is discussed further in Chapter 5 (Section 5.2).

During the bathing season, the EA evaluates bathing water quality by measuring levels of *E. coli* and IE. The values recorded inevitably will fluctuate based on a variety of factors, such as the weather, diffuse pollution from agricultural and urban sources, sewage treatment works' discharges and stormwater overflows. The overall classification of a bathing water site is determined by the readings collected over the past four bathing seasons. Again, this is discussed further in Chapter 5 (Section 5.1).

Based on the monitoring outcomes, the regulations state that adequate measures should be taken to prevent bathers' exposure to pollution.¹⁰⁷ This can require that measures be put in place to prevent, reduce, or eliminate the causes of pollution. It can also require the provision of clear guidance advising against bathing at the site at a particular time.

The same provisions for monitoring and reporting on water quality do not exist outside of the bathing season. Consequently, the opportunities to identify and rectify causes of pollution are reduced, and the public does not benefit from the same level of information (if any) if they use those waters outside of the defined season.

¹⁰⁵ Reg 4, Bathing Water Regulations.

¹⁰⁶ Sched. 4, para. 3, Bathing Water Regulations.

¹⁰⁷ Reg 13(1)(a), Bathing Water Regulations.

4.2.3 Discussion

For many years, concerns have persisted that the current bathing water season does not align with modern usage patterns, potentially restricting the public health benefits intended by the Bathing Water Regulations. In 2013, Defra conducted a public consultation on this issue.¹⁰⁸ In response to that consultation, 430 out of 630 respondents (72.4%) supported extending the bathing season. Defra stated that the consultation findings would be 'considered and included in an Impact Assessment concerning any changes to the bathing season', on which the department committed to a further consultation.¹⁰⁹ Despite this, no changes to the length of the bathing water season have been forthcoming in the 11 years that have passed since that time. Defra has confirmed to us that there has also been no further consultation during this period.

4.2.4 Our view

The current 'bathing season' is written into the law. Implementation of this aspect of the regulations appears to be happening in accordance with those provisions.

As with the term 'bathers' discussed in the previous section, the legal specification of a fixed 'bathing season' that is identical for every bathing site across the country seems to originate from the 1970s, when the initial focus of the bathing water regime was on summer bathing. Again, that approach no longer appears to reflect current practices where many people bathe or undertake other recreational activities, such as surfing, over longer periods and sometimes year-round.

We therefore consider that this aspect of the current regulations is inflexible and out of step with how people now use the water environment. It may affect the ability of the regime to achieve its intended objectives by not assessing or reporting on water quality at other times when people continue to bathe.

An approach to bathing seasons that better reflects public usage could therefore better protect public health in accordance with the regime's objectives. We note that this has been stated as an intention under previous administrations for over a decade but has not yet happened.

We recognise that lengthening the bathing season inevitably would raise several related issues. These would need to be considered as part of any review of this matter to ensure the regime's overall effectiveness and coherence.

Firstly, altering the bathing season would affect the cost of monitoring and reporting by the EA and local authorities. As we note elsewhere (see Section 5.2) the EA is already constrained in terms of its available resources for implementing the regime. Any change of approach will need to be adequately resourced to be successful.

Expanding the bathing season into the autumn and winter months would also require assessment of wider issues including associated mitigation and remediation costs, and their affordability. For instance, it would be necessary to consider how best to approach the impact of changes in agricultural and urban run-off and combined sewer overflow activations resulting from different patterns of rainfall during this time.

109 ibid.

¹⁰⁸ Defra, 'Consultation Outcome Length of Bathing Season in England 2013' (2013) <<u>www.gov.uk/government/consultations/length-of-bathing-season-in-england</u>> accessed 9 November 2023.

A further point of consideration would be the effects of changes in daylight length and intensity, as well as water temperature. These will affect the persistence of bacteria and the associated need for wastewater treatment to meet the relevant standards. Climate change will have an impact on these matters, raising the question for Government of how best to make the regime 'future-proofed' to allow for further adjustment as appropriate.

Whether it would be feasible and practical for various bathing water sites, both coastal and inland, to meet the existing water quality standards over an extended period (potentially year-round) would require detailed analysis. There is a risk that extending the bathing season would lead to more bathing waters failing to meet the standards, with little realistic prospect of achieving compliance within the relevant periods, thereby leading to their declassification (see Section 6.3). This would not be desirable.

A 'one-size-fits-all' approach to this challenge is not necessarily required. It is not simply a choice between all bathing waters having a season of 15 May to 30 September, or the whole year, or something else. For example, the current season could be maintained as a minimum, with scope to extend the season where there is sufficient use over a longer period. Defra could therefore consider a range of options if it reviews this aspect of the regulations.

As a point of comparison, the equivalent legislation in Scotland does not operate with a fixed bathing season. Rather, it leaves this as a discretionary matter for ministers to determine the season individually for each bathing water, as 'the period during which large number of bathers are expected there'.¹¹⁰

We suggest, additionally, that it would be sensible for any reconsideration of the 'bathing season' to proceed in alignment with any parallel reconsideration of the current coverage of 'bathers', as discussed in the previous section of this report, and of the criteria for identifying bathing waters as discussed in the next section. Levels of use of water bodies throughout the year may vary considerably between different water bodies and between different activities, such as swimming or paddleboarding at inland or coastal waters or surfing in the sea. The impact on wider related issues such as signage and communication (see Section 5.3) will also need to be assessed.

Recommendation 2. In any review of the regime, we recommend that Defra consider options to expand the bathing water season to better match the actual usage of bathing waters by significant numbers of people. This could include considering the possible use of different season lengths at different locations.

4.3 Identifying bathing waters

4.3.1 Introduction

This section looks at how bathing waters are currently identified or 'designated' in England. We consider Defra's application guidelines in relation to bather numbers and other matters. We also reflect on recent issues of clarity and transparency identified within the bathing water application process. Further, we discuss the annual nature of the bathing water application process with reference to alternative approaches in other jurisdictions that provide for a 'pre-identification' process.

¹¹⁰ Reg 3(3)(b), the Bathing Waters (Scotland) Regulations 2008, Scottish Statutory Instrument 2008 No. 170.

4.3.2 The current position

The Bathing Water Regulations require the Secretary of State to 'identify, and maintain a list of, the surface waters in England [...] at which the Secretary of State expects a large number of people to bathe, having regard in particular to past trends and any infrastructure or facilities provided, or other measures taken, to promote bathing at those waters.¹¹¹

Defra has produced guidance that sets out the approach for the Secretary of State to identify bathing waters and how proponents should make the case for them.¹¹² At the time of this report, however, Defra's website states that: 'The Bathing Water Regulations and application guidance are currently being revised. During this time, Defra is not accepting applications for a bathing water designation'. It adds that: 'We expect to begin accepting applications again in spring 2025.'

This statement from Defra was made on 13 May 2024. The general election was called nine days later. Since then, statements of previous government policy on bathing waters have been amended with the statement that: 'This was published under the 2022 to 2024 Sunak Conservative government'.¹¹³ The intentions of the current Government as regards bathing waters have not yet been confirmed. In the meantime, the process for new bathing water applications remains closed.

Elements of Defra's bathing water application guidance were a source of stakeholder concern following updates made in July 2023. A particular point of contention was that the changes in July 2023 were made without any prior consultation, despite the requirement in the regulations for the Secretary of State to 'encourage public participation' and to ensure that the public has an opportunity 'to submit suggestions, comments or complaints'.¹¹⁴ Stakeholders also queried several technical points in the guidance which we consider in the discussion below.

4.3.3 Discussion

With the 2023 amendments, the guidance specifies that a proposed bathing water must have at least 100 bathers a day during the 'bathing season' (15 May to 30 September – see Section 4.2). The guidance also introduced the requirement for any prospective bathing water to have toilet facilities that bathers can use during the bathing season, within a short distance of 'up to about 500m from the site'. It also states that bathing water application surveys (to count the number of bathers) should not take place on the same day as a festival or other organised event.¹¹⁵

Numbers of bathers

The change in the guidance to mandate that bathing water applications need to evidence 100 bathers per day prompted concern from many stakeholders. Specifically, the guidance states that: 'For a site to be eligible for designation, it must be used by an average of at least 100 bathers a day during the bathing season'.

¹¹¹ Reg 3(1), Bathing Water Regulations.

¹¹² Defra, 'Designate a Bathing Water: Guidance on How to Apply' (n 12).

¹¹³ Defra, 'Record Number of New Bathing Sites Get the Go Ahead' (n 13).

¹¹⁴ Reg 6(1)(a), Bathing Water Regulations.

¹¹⁵ Defra, 'Designate a Bathing Water: Guidance on How to Apply' (n 12).

Some stakeholders have queried why a body of water commonly frequented by, say, 40-50 bathers might no longer warrant bathing water status.¹¹⁶ Others have expressed concern, suggesting that changes were designed to make it harder for groups to apply, given the statutory obligation to monitor and report on pollution issues at bathing sites.¹¹⁷

Requirement for toilet facilities

Defra updated the bathing water application guidelines in July 2023 to include a requirement for toilet facilities up to 500 metres from the proposed site.¹¹⁸ This is not an explicit requirement of the regulations but rather is considered to relate to the provision in the regulations which refers to 'having regard in particular to past trends and any infrastructure or facilities provided' in identifying bathing waters.

While the desirability of such facilities is understandable, some stakeholders have expressed concern that this may result in popular areas for swimming or other recreation not being granted bathing water status on grounds related exclusively to a lack of toilet facilities.¹¹⁹

The current provision for toilet facilities is expressed as a limiting requirement in the Defra guidance. That is to say, it introduces an additional criterion on top of the expectation of a large number of bathers. The guidance is also written in a way that suggests that the toilet facilities must already be there for a proposed bathing water to be considered for designation, rather than potentially being added should the site be designated.

Organised event days

Stakeholders also expressed concern at the decision to prevent applications from including bather number surveys that were conducted during organised events, such as swimming regattas. This is seen as excluding from consideration the participants of such events as people who may be exposed to health risks.¹²⁰

The Bathing Waters Technical report highlights alternative approaches to this issue that are followed in different jurisdictions. For instance, France has adopted a tiered approach that provides for certain bathing sites to be granted status as 'organised bathing waters', allowing them to be recognised for their specific usage patterns while still adhering to water quality standards. The Bathing Waters Technical Report provides more information on this topic.¹²¹ This approach ensures that public health is protected at sites that host organised events.

Clarity of process

The timing of the changes made to the bathing water application process in July 2023 was disappointing to some stakeholders, not least because they were introduced midway into the 2024 bathing water application cycle. This was during the period in which

 ¹¹⁶ Adam Vaughan and Verena Müller, 'Environment Officials "Moved Goalposts" over River Bathing' (15 July 2024) <</td>

 uk/science/article/government-moving-the-goalposts-over-river-bathing-area-rules-clean-it-up-b7kr8gcp2> accessed 15 July 2024.

¹¹⁷ Charlie Jones, 'River Stour Swimmers Criticise Bathing Water Rule Changes' (*BBC News*, 4 August 2023) <<u>www.bbc.com/news/uk-england-essex-66395219</u>> accessed 16 July 2024.

¹¹⁸ Defra, 'Designate a Bathing Water: Guidance on How to Apply' (n 12).

¹¹⁹ Stantec and Centre for Research into Environment and Health (n 18) 45.

¹²⁰ See for example: Thames21, 'Defra Rejects Henley-on-Thames' Mill Meadows Application for Bathing Water Status' (27 February 2024) <<u>www.thames21.org.uk/2024/02/defra-rejects-henley-on-thames-mill-meadows-application-for-bathing-water-status/</u>> accessed 15 July 2024.

¹²¹ Stantec and Centre for Research into Environment and Health (n 18) 107.

some applications were in preparation. It meant, for example, that user counts had to be repeated against the new criteria, and that some prospective sites with applications in progress ceased to be eligible.¹²² ¹²³ ¹²⁴ This speaks to a broader issue identified by some stakeholders of a perceived lack of clarity and transparency in the bathing water designation process as it operated prior to its suspension in May 2024.

The issue of clarity is discussed further in the Bathing Waters Technical Report. It includes the specific point of how Defra might calculate the 'average number of bathers' at a site despite having specified that surveys should be conducted 'during weekends, bank holidays, and school holidays, when the site is at its busiest.¹²⁵

A further issue concerning clarity of process relates to the presentation of reasons when applications for designation of bathing waters are unsuccessful. In previous designation cycles, some applications have been rejected with Defra not stating the reasons for those decisions. This has led to frustration on the part of applicants for these sites as well legal commentary suggesting that Defra's failure to provide reasons for the dismissed applications could be vulnerable to legal challenge.^{126 127}

Annual cycle of applications

In England, bathing water applications are normally considered on an annual basis, although as noted above the process is currently paused. This can mean that potentially suitable bathing sites are identified at a time that is not aligned well with the corresponding scope for measures to improve water quality, including through water industry investments. This can lead to newly designated bathing waters initially being classed as 'poor', with the risk that a continuing classification at this level will lead to their declassification. We discuss this further in Chapter 6 (Section 6.3).

The Bathing Waters Technical Report considers a number of differing approaches to identifying and designating bathing waters in different jurisdictions.¹²⁸ Aspects of these have the potential to alleviate some of the issues highlighted above. One such approach is the 'pre-application process' followed in Germany.¹²⁹

By way of explanation, the 'pre-identification' process in Germany ensures that issues related to access, planning and facilities, as well as investigations and works to maintain or improve water quality, are addressed before formal identification. These steps can lead to the early identification and mitigation of potential pollution sources, better management of surrounding land use, and enhanced public amenities. This helps to ensure that once a site is designated, it already meets high standards of water quality.

By 'investigating first, then deciding on status', the approach in Germany has been praised for enabling authorities to proactively address water quality, planning, and access issues

¹²² Vaughan and Müller (n 116).

¹²³ Kate Rew, 'Bathing Water Designation for Local Swim Spots?' (Outdoor Swimming Society, 8 February 2021) <<u>www.</u> outdoorswimmingsociety.com/should-swimmers-seek-bathing-water-designation-for-local-swim-spots/> accessed 12 August 2024.

 ¹²⁴ Lucie Heath, 'Cumbria and Cornwall to Miss out on Clean River Bathing Spaces Following New Defra Rules' (*inews.co.uk*, 23 October 2023) <<u>inews.co.uk/news/cumbria-and-cornwall-to-miss-out-on-clean-river-bathing-spaces-following-new-defra-rules-2705184</u>> accessed 12 August 2024.

¹²⁵ Defra, 'Designate a Bathing Water: Guidance on How to Apply' (n 12).

¹²⁶ Sarah Knox-Brown, 'Dismissed Bathing Water Applications "Lacked Reasons" (23 March 2023) <<u>www.richardbuxton.co.uk/news/</u> <u>dismissed-bathing-water-applications-lacked-reasons/</u>> accessed 17 July 2024.

¹²⁷ Sandra Laville, 'Local Groups Denied Access to Reasons for Refusal of English River Bathing Areas' *The Guardian* (6 April 2023) https://www.theguardian.com/environment/2023/apr/06/england-river-bathing-area-applications-foi-requests> accessed 15 July 2024.

¹²⁸ Stantec and Centre for Research into Environment and Health (n 20) s 5, 6.

¹²⁹ ibid 5.3.

for potential bathing waters.¹³⁰ Germany also has both larger numbers of bathing waters and better levels of water quality than England. In 2023, Germany had 2,291 bathing waters (of which 1,929 were inland). Across all of these bathing waters, 90.3% were 'excellent', 5.9% were 'good', 1.6% were 'sufficient' and 0.3% were 'poor' (with the remaining 1.8% unclassified).¹³¹

In England, on the other hand, designation is often viewed as a means to strengthen authorities' obligations to improve water quality. Additional steps prior to designation could be of concern to some stakeholders who may fear that potential bathing sites will be dismissed before achieving bathing water status, or that a pre-identification process could be unnecessarily prolonged or create further barriers to designation.

4.3.4 Our view

We note that the determination of what constitutes a 'large number of bathers', as provided for in the regulations, is a subjective matter to be determined by ministers at their discretion. However, the current requirement of the guidance in England for an average of at least 100 bathers a day across the entire bathing season appears to be relatively restrictive and rigid when compared against the criteria applied elsewhere, as outlined in the paragraphs below.

We note that this reflects a relatively recent change in guidance. Its full effects on the number of applications submitted or sites designated may not yet be known. There is a risk, however, that it will create a barrier to submitting applications compared to the practice that preceded it.

In contrast, Northern Ireland asks for evidence of at least 45 bathers on one occasion or 100 'beach users' on two occasions.¹³² Wales does not set a minimum threshold but rather asks applicants to provide information on the numbers of swimmers, paddlers and other beach users.¹³³

Scotland, in contrast, applies a higher figure of 150 bathers.¹³⁴ However, this is expressed in more general and flexible terms than the English threshold. The Scottish criteria state that: 'Generally around 150 people per day using the water for bathing regularly throughout the season would likely be considered a 'large' number of bathers; however Scottish Ministers have discretion as to what would be a large number and could in some circumstances designate a bathing water where fewer than 150 bathers are expected per day.' This replaced a previous requirement for 150 bathers without such flexibility, following a request for this change by Environmental Standards Scotland.¹³⁵

We also consider that a flexible approach may be more appropriate than using a single numerical minimum threshold on bather numbers, which may unnecessarily constrain the discretion of decision-makers when designating bathing waters. We suggest that this should be revisited alongside any parallel assessments of applying the regime beyond 'bathers' and extending the 'bathing season'.

¹³⁰ ibid 5.2.

¹³¹ The European Environment Agency (n 71).

¹³² DAERA, 'About Bathing Water Quality' (9 September 2015) <<u>www.daera-ni.gov.uk/articles/bathing-water-quality</u>> accessed 4 July 2024.

¹³³ Welsh Government, 'Designation and De-Designation of Bathing Waters: Application Form' (15 February 2023) <<u>www.gov.wales/</u> <u>designation-and-de-designation-bathing-waters-application-form</u>> accessed 2 August 2024.

¹³⁴ SEPA, 'Bathing Waters | Designation' (2024) <<u>https://bathingwaters.sepa.scot/designation/</u>> accessed 1 August 2024.

¹³⁵ Environmental Standards Scotland, 'Designation of Bathing Water Sites in Scotland Summary Report' (4 December 2023) <<u>https://</u> environmentalstandards.scot/our-work/our-investigation-reports/designation-of-bathing-water-sites-in-scotland/> accessed 1 August 2024.

In broad terms, the question of whether it is appropriate to identify a bathing water should reflect consideration of who the regime is trying to protect and over what period. This will also give rise to consideration of issues of cost and practicality.

We also question the current approach which excludes consideration of the number of bathers when waters are used for organised events. From a human health perspective and to facilitate recreational use, the logic of such an approach is questionable.

We recognise that some events may be 'one-offs', and that it could be unhelpful to use them to identify regular or average levels of water use if they are not expected to happen again, or have been established purely as a mechanism to meet the criteria for the number of bathers. However, apart from such cases, our view is that regularly scheduled event days should not be excluded in their entirety from bathing water applications. Disregarding instances where levels of exposure via bathing may be highest, and which are reasonably expected to recur as legitimate, organised events, does not seem an effective way to protect people as intended. It also arguably operates counter to the requirement in the regulations for the Secretary of State to have regard to 'measures taken, to promote bathing at those waters'.

We understand that the requirement for toilet facilities in the guidance relates to the provision in the regulations for the Secretary of State to identify areas where a large number of people are expected to bathe 'having regard in particular to past trends and any infrastructure or facilities provided'.

In our view, this wording in the regulations can be read as suggesting that the presence of toilet facilities or other infrastructure (such as changing rooms, pontoons, etc.) can be used to help establish whether large numbers of people can be expected to bathe. However, we consider it questionable whether the absence of such infrastructure automatically can or should be said to create the opposite expectation. This is especially so if, as a matter of demonstrable fact, large numbers of people clearly do bathe in practice. We therefore suggest that Defra may wish to reconsider this aspect of the guidance.

The principal test is whether large numbers of people are expected to (or in fact do) bathe, which should be informed rather than constrained by infrastructure considerations. We also highlight the possibility for any necessary infrastructure to be put in place if a bathing water is designated, rather than always having to be in place beforehand.

Further, the OEP considers that transparency surrounding the outcome of bathing water applications could be improved. There is evidence¹³⁶ that proponents of unsuccessful bathing water applications have not been given information to explain the rationale for denied applications in recent years. This seems to work against the basic principles of good governance, transparency and authorities setting out the reasons for their decisions. It could frustrate the objectives of the regime to protect human health, if decisions and the justifications for them are not open to scrutiny. It also denies people the information that might help them consider whether to re-apply, or that might inform applications in other areas.

A 'pre-identification' process, along the lines of that applied in Germany, could be worthy of further exploration as part of any review of the bathing water identification process in England. This might provide for improved understanding of poor water quality, and the possibilities and means to address it, prior to designation. Such an approach could also reduce the risk of sites being declassified owing to underlying sources of pollution that may

¹³⁶ Laville (n 127).

take several years to rectify. To be effective in supporting the regime's objectives, any such process should create, and be seen to provide, effective means to work towards bathing water status and standards rather than creating new barriers to these outcomes.

Recommendation 3. We recommend that Defra revise the current bathing water identification criteria to better reflect the provisions of the regulations and the protection intended to be provided where large numbers of people are expected to bathe. To this end, we recommend that Defra base its identification of bathing waters on a properly representative assessment of current use and necessary protection of human health rather than fixed numbers of bathers or infrastructure. We also recommend reconsidering the current exclusion of higher levels of use of waters during organised events.

Recommendation 4. We recommend that all material proposals for changes to the bathing water identification criteria and process should be subject to public consultation before they are finalised. Where applications are rejected, Defra should provide a statement of the reasons for the rejection as a matter of routine in the interests of transparency and good governance.

Recommendation 5. We recommend that any review of the Bathing Water Regulations by Defra should include further consideration of whether a structured and transparent pre-identification process, such as that operating in Germany, might be beneficial.

Classification, monitoring and reporting of bathing water quality

5. Classification, monitoring and reporting of bathing water quality

This chapter looks at selected issues concerned with technical elements of the Bathing Water Regulations. It considers, in turn:

- The classification system for bathing waters (Section 5.1)
- Monitoring practices for bathing waters (Section 5.2)
- How bathing water quality information is provided to the public (Section 5.3).

5.1 Classification of bathing waters

This section discusses the method used to classify bathing areas, including differences between coastal waters and inland sites.

5.1.1 Current position

As outlined in Chapter 2, the Bathing Water Regulations provide for bathing waters to be classified as 'poor', 'sufficient', 'good' or 'excellent'. The classification system is based on measurements of FIO concentrations, namely those of IE and *E. coli*.

Samples are collected and collated across each bathing season. This provides a basis to classify the bathing water for the results over the whole of that season. The EA publishes the results of the annual classifications, as well as individual monitoring samples that contribute to them, on its 'Swimfo' website.¹³⁷

The overall, longer-term classification for each bathing water, as published by Defra, works on a rolling, four-year period. It is therefore based on the combination of the results for the most recent season and the previous three seasons.¹³⁸

Classification standards

Table 5.1 shows the classification standards in the regulations. They vary according to whether the site is inland or coastal (including 'transitional' waters, such as in estuaries). A bathing water is classified as 'poor' if it fails to meet the standards specified for 'sufficient'.

¹³⁷ Environment Agency, 'Swimfo: Find a Bathing Water' (n 56).

¹³⁸ Defra, 'Bathing Water Quality Statistics' (n 48).

Table 5.1. Classification standards for bathing waters (colony forming units in 100ml water)

Parameter	Excellent	Good	Sufficient		
Inland Waters					
Intestinal enterococci	200(*)	400(*)	330(**)		
Escherichia coli	500(*)	1000(*)	900(**)		
Coastal Waters					
Intestinal enterococci	100(*)	200(*)	185(**)		
Escherichia coli	250(*)	500(*)	500(**)		
Note that the standards for 'excellent' and 'good' marked with (*) are based on a					

Note that the standards for 'excellent' and 'good' marked with (*) are based on a 95-percentile evaluation. Those for 'sufficient' (**) are based on a 90-percentile evaluation. As explained further below, this is why the numerical figures for 'sufficient' are higher than those for 'good'.

The classification system is based on '95-percentile' and '90-percentile' evaluations as shown in the table. In simple terms, a 'percentile' can be thought of as a value that 'X%' of measured values (in these cases 95% or 90%) must fall below for the standard to be met. This is calculated based on the overall distribution of the data rather than the simple number of samples that fall above or below the specified figure. This means, for instance, that one or two significantly high values out of 20 could preclude a bathing water from achieving one of the 95- or 90-percentile classification standards respectively.

As a specific example, in order to be classed as 'excellent' the results of samples at an inland site must be such that their overall distribution will have 95% of values with no more than 200 'colony forming units' of IE and 500 colony forming units of *E. coli* in 100 millilitres of water. A 'colony forming unit' is a unit of measurement for the bacteria IE and *E. coli*.

The 'excellent' and 'good' classifications are based on 95 percentile evaluations, whereas 'sufficient' reflects a 90-percentile evaluation. This explains why the figures for 'sufficient' look, at first sight and in purely numerical terms, to be more stringent than those for 'good'. This is because a bathing water could be classified as 'sufficient' when a larger number of samples exceed the standard for that classification, compared to the number of exceedances that would enable a site to be classified as 'good' or 'excellent'.

It is also notable that the specified levels of bacteria for the different classifications at inland sites are greater than those for coastal waters. For example, levels of bacteria that would lead to an inland bathing water being judged as 'excellent' would only lead to a classification of 'good' on the coast. The levels for an inland site to be 'good', meanwhile, might lead a coastal water to be 'poor'.

Predicting water quality and disregarding samples

Bathing waters are affected by natural factors such as rain, tides, wind and sunlight. The EA has told us that where it can find a meaningful relationship between these factors and FIOs, it seeks to make a daily forecast of their effects and issue advice against bathing as appropriate.

When there is heavy rain, for example, reduced water quality is more likely for certain bathing waters. This is because heavy rain can wash pollutants from agricultural land

and urban areas into designated bathing areas, as well as sewage being spilled by the operation of sewer overflows.¹³⁹

The EA has a prediction model and will issue these predictions of likely poor water quality using the online 'Swimfo' service so that bathers can see the pollution risk forecasts. This practice of issuing these alerts associated with poor weather or other factors is set out in the regulations and followed in similar ways across Europe.

Such a modelled forecast is not the same as an actual pollution incident that has been confirmed by sample analysis. As set out in the Bathing Water Regulations,¹⁴⁰ when the EA has issued an alert and declared a 'short term pollution' event, providing systems are in place to warn the public, samples taken during this period can be discounted from the classification process outlined above.

These situations are defined in the regulations as 'short term pollution' events. Up to 15% of such samples used in the classification data may be removed over the four-year period (but not more than one per season).¹⁴¹ This is the maximum level of discounting allowed under the regulations. The EA has told us that this amount of discounting is rarely reached in practice, however, and that just over 1% of samples were discounted in 2023 due to short term pollution. This discounting assessment is made at the end of each monitoring season.

The EA has also explained the practice of discounting, stating that 'this is because a warning against swimming has been issued in advance and the conditions are not considered to be reflective of the actual water quality most people bathe in.' It also says that 'disregarding samples in this way means the classification assessment will be representative of normal conditions that bathers are likely to encounter.'¹⁴² If these samples were included, the overall classification would likely be lower.

5.1.2 Discussion

With the exception of 2020 during the Covid pandemic, our assessment is that the EA has undertaken the monitoring required under the Bathing Water Regulations and produced a classification for each identified bathing water.

As noted above, the current classification system uses both 95 and 90 percentile evaluations. During discussion with stakeholders, it was evident that this system can be confusing and difficult to understand. It was suggested by some stakeholders that, in order to make the system clearer, it would be beneficial to use just one approach, with the preference being 95-percentile evaluation. This has also been recommended by the World Health Organization (WHO).¹⁴³

A further point of discussion is the apparently less stringent classification values for freshwater sites compared to coastal sites. The science here is complex, and the evidence limited. In addition, the origins of the different standards in the EU Bathing Water Directive are difficult to trace. The EA has suggested that they reflect an effort that was made at EU level to reconcile different epidemiological studies carried out at coastal sites in the UK and lakes in Germany.

¹³⁹ Stantec and Centre for Research into Environment and Health (n 17) s 3.8

¹⁴⁰ Reg 14(5), Bathing Water Regulations.

¹⁴¹ Reg 14(6), Bathing Water Regulations.

¹⁴² Environment Agency, 'Bathing Water Classifications and Short-Term Pollution' (23 February 2024) <<u>https://environmentagency.blog.</u> gov.uk/2024/02/23/bathing-water-classifications-and-short-term-pollution/> accessed 18 July 2024.

¹⁴³ World Health Organization, 'WHO Recommendations on Scientific, Analytical and Epidemiological Developments Relevant to the Parameters for Bathing Water Quality in the Bathing Water Directive (2006/7/EC)' (n 21) 43.

The WHO refers to evidence that gastrointestinal illness occurs at a higher rate in seawater swimmers than in freshwater swimmers at a given level of FIOs.¹⁴⁴ However, the WHO also suggests that this difference in gastrointestinal illness rates may be due to the more rapid rate of FIO die-off than that of actual pathogens in seawater compared to freshwater.¹⁴⁵ This could mean that there are more pathogens in marine waters than in fresh waters at the same FIO bacterial levels.

Overall, the WHO recommends that freshwater values should be the same as those for coastal sites and that the classification values are changed to reflect a more health-based outcome.¹⁴⁶

On the matter of excluding samples, some stakeholders have expressed the view that this relates to a lack of transparency and even 'massaging' the classification figures. It is, however, provided for in the regulations and appears to be applied in accordance with them.

5.1.3 Our View

Our assessment is that it would be beneficial for the public to understand why values in freshwater locations can have higher concentrations of FIOs than saline waters. There are also questions over the extent to which such different standards can be justified, with only limited information currently available in this area. We do not have a specific view or expertise on this technical issue but simply note that the current position is difficult to understand, with the current standards in the Bathing Water Regulations and the EU Directive from which they originate being at odds with the approach recommended by the WHO.

In any review of the current regulations and standards, therefore, it may be beneficial to revisit this topic. We note in this regard that the standards are set for the purposes of protecting human health. This suggests that any such review should be undertaken not just by Defra, but also with the appropriate involvement of DHSC and the UKHSA, for example through incorporating insights from ongoing and future research.

Further to this, a single method of evaluation would provide a more consistent and understandable classification system. We consider that using only 95 percentile values, as recommended by the WHO, would allow for a simpler system of bathing water data analysis and greater transparency. We note that if the standards for 'sufficient' were to be based on 95-percentile evaluation, the corresponding IE and *E. coli* values would need to be adjusted accordingly.

As regards the approach of disregarding samples, this is provided for in the regulations and has some basis in logic, as explained by the EA. At the same time, it is misunderstood or mistrusted by some stakeholders. Discounting up to 15% of samples, although provided for in the regulations, also allows for a relatively large proportion of the samples measured to be disapplied (although in practice this does not usually happen). In addition, it means that annual and overall bathing water assessments may only provide a picture of when the 'best' (or at least not the 'worst') water quality is expected.

146 ibid.

¹⁴⁴ World Health Organization, 'Guidelines for Safe Recreational Environments Addendum to Volume 1 – List of Agreed Updates' <<u>www.</u> who.int/publications/i/item/WHO-HSE-WSH-10.04> accessed 1 August 2024.

¹⁴⁵ World Health Organization, 'Guidelines on Recreational Water Quality: Volume 1 Coastal and Fresh Waters' 15 <<u>www.who.int/</u> publications/i/item/9789240031302> accessed 1 August 2024.

There would be nothing to stop, for example, the EA and Defra from assessing and presenting the bathing water classifications for a site in two ways, both including and excluding these data associated with short term pollution.

On the one hand, this would provide greater information on the extent to which the exclusion of data affects the results. It would also provide a comparison between the assessed state of the bathing water including versus excluding those conditions when there is advice against bathing in place.

On the other hand, we recognise that it could be confusing to have two different classifications for the same bathing water. This appears largely to be a communications issue for Defra and the EA to consider, in order to achieve the best balance between providing information that is clear and useful to bathers and stakeholders and avoiding misunderstandings and mistrust.

Recommendation 6. We recommend that, in any review of the regulations, Defra consider: a) the potential benefits of using 95 percentile evaluation for all classifications as suggested by the WHO; and b) the approach to disregarding samples, to ensure stakeholders understand what is being done and why and to make best use of the data collected. We also recommend that, in any such review, Defra, with input from DHSC and the UKHSA as appropriate, consider further the justification behind the different standards for inland and coastal bathing waters.

5.2 Monitoring of bathing waters

This section looks at the monitoring programme currently used to evaluate bathing waters. It considers the parameters used in this assessment, sample numbers and sample locations.

5.2.1 Current position

Sampling point location

The Bathing Water Directive states that sampling should be undertaken at one single defined location within the bathing water area.¹⁴⁷ This should be at a location within the bathing water area where most bathers are expected, or the greatest risk of pollution is expected, according to the bathing water profile.

The Bathing Water Regulations reflect one of these options, stating that a single monitoring point should be located where most bathers are expected.¹⁴⁸ They do not require or provide for the sampling location to be placed in the area which has the greatest risk of pollution. They also do not have provision for more than one sampling point at a designated area.

Sample numbers

There are variations in the number of bathing water samples to be taken across the different UK administrations. Table 5.2 below illustrates these.

¹⁴⁷ Art 3, Bathing Water Directive.

¹⁴⁸ Sched. 4, para 1(a), Bathing Water Regulations.

	England	Northern Ireland	Scotland	Wales
Bathing Water Season	15 May – 30 September	1 June – 15 September	Defined per bathing water. Typically, 1 June – 15 September	15 May – 30 September
Bacterial Sampling Programme (Statutory)	Minimum of 1 pre-season, with bathing season samples taken at intervals not exceeding one month (total 5). ¹⁵⁰	Minimum of 1 pre-season, with 4 bathing season samples taken at intervals not exceeding one month (total 5). ¹⁵¹	Minimum of 1 pre-season, with 4 bathing season samples taken at intervals not exceeding one month (total 5) Where bathing season does not exceed 8 weeks a minimum of 3 bathing season samples must be taken (total 4). ¹⁵²	Minimum of 1 pre-season, with bathing season samples taken at intervals not exceeding one month (total 5). ¹⁵³
Bacterial Sampling Programme (Normal Practice)	Minimum of 10 samples per bathing season (including pre-season sample) depending on the consistency of the classification. ¹⁵⁴	16 to 20 bathing season samples plus one pre- season sample. ¹⁵⁵	Most bathing waters are sampled 18 times including pre-season sample. Some geographically remote sites are sampled 10 times. Sites which have consistently demonstrated 'excellent' water quality are sampled five times. ¹⁵⁶	Between 10 and 16 samples per bathing season (including pre-season sample). ¹⁵⁷

Table 5.2. Differences in bathing water sampling frequency in the UK¹⁴⁹

149 Stantec and Centre for Research into Environment and Health (n 18) s 4.4.

150 Sched. 4 para 2. Bathing Water Regulations.

151 Sched. 3 para 2. Quality of Bathing Water (Northern Ireland) Regulations 2008.

152 Sched. 2 para 2. Bathing Water (Scotland) Regulations 2008.

153 Sched. 4 para 2. Bathing Water Regulations.

154 Done at the discretion of the Environment Agency. For more information refer to Chapter 3.5.

155 20 samples were collected at each site in 2022 – DAERA, 'Northern Ireland's Bathing Waters Show Overall Improvement in 2022' (DAERA, 8 December 2022) <<u>www.daera-ni.gov.uk/news/northern-irelands-bathing-waters-show-overall-improvement-2022</u>> accessed 1 September 2024.

156 SEPA, 'Scotland's Bathing Waters' (2024) <<u>https://bathingwaters.sepa.scot/</u>> accessed 4 July 2024.

157 Natural Resources Wales (n 85)

Prior to 2017, all designated bathing waters in England were monitored on 20 occasions during the bathing season. From 2017 until 2022, if an area was found to attain a 'good' or 'excellent' classification it was judged by the EA as low risk and therefore the sampling regime was altered, such that the site might only have been sampled five times during the season.¹⁵⁸

The EA has told us that this minimum figure of five samples was increased in 2022, leading to the present levels of 10-20 samples for each site. The current minimum sampling rate in England is therefore lower than the normal sampling levels in Northern Ireland and Scotland, and the same as the normal minimum in Wales.

Assessment of bacterial parameters

All samples collected under the Bathing Water Regulations must be analysed for levels of *E. coli* and IE. These tests are carried out in accordance with protocols defined within the regulations.¹⁵⁹

Methods used in analysing bathing water samples are traditionally culture-based. Due to this, bacterial growth is required for measurement, and it can take up to 24 hours of incubation to get an *E. coli* result and up to 72 hours for a confirmed IE result. These time periods, required for analysis, can delay alerting the public to pollution incidents. At present, no reliable real-time analysis is available for this type of test¹⁶⁰ although there are pilot programmes underway.¹⁶¹

Additional parameters

In addition to sampling for FIOs, the EA must carry out visual inspections for waste, including tarry residues, glass, plastic or rubber. These must be carried out at a frequency which will allow adequate management measures to be put in place.¹⁶²

The presence or absence of macro-algae or marine phytoplankton is considered under the regulations during the creation of the bathing water profile. This information is not used within the annual classification. However, if there is the potential for a large accumulation of macro-algae or marine phytoplankton, investigations and monitoring must be carried out.¹⁶³

At present there are no standard limits for macro-algae or marine phytoplankton in bathing water. However, the WFD Regulations do consider them to an extent through a eutrophication assessment.

Cyanobacteria (sometimes referred to as 'blue-green algae') is not currently included as part of the bathing water classification calculations. However, there is a requirement within the Bathing Water Regulations to include management measures when blooms are considered unacceptable or pose a risk to public health.¹⁶⁴

¹⁵⁸ Stantec and Centre for Research into Environment and Health (n 20) s 3.3.

¹⁵⁹ Sched. 4, Bathing Water Regulations.

¹⁶⁰ Stantec and Centre for Research into Environment and Health (n 18) s 2.5.

¹⁶¹ The Environment Agency, 'Review: Approaches to Monitoring and Surveillance of Antimicrobial Resistance in Bathing Waters' <<u>www.</u> <u>gov.uk/government/publications/review-approaches-to-monitoring-and-surveillance-of-antimicrobial-resistance-in-bathing-waters</u>> accessed 27 August 2024.

¹⁶² Sched. 4, Bathing Water Regulations.

¹⁶³ Sched. 4, part 3, Bathing Water Regulations.

¹⁶⁴ Sched. 4, part 5 (12)(3), Bathing Water Regulations.

Currently in England, the presence of cyanobacteria has been deemed low risk at coastal bathing waters. It is assessed at all inland sites and signs advising against bathing are put in place if a bloom is visible and suspected or found to be toxic.¹⁶⁵

Emerging monitoring opportunities

With a changing environment, pressures, societal expectations and activities, and developments in scientific knowledge, the need to keep regulatory requirements and practices under review is ever-present. The following paragraphs present a brief discussion on three further monitoring topics, which are also discussed in more detail in the Bathing Waters Technical Report.¹⁶⁶

Microbial source tracking (MST) is an approach that can be used to ascertain the origin of faecal contamination, for example if the original source is human or from livestock. The EA has no legal obligation to carry out MST analysis but is using it as an investigative tool. We support this activity. The further development of MST, and possibly its use in routine testing, could improve the ability to provide greater certainty within source apportionment studies.

Antimicrobial resistance (AMR) is the ability of microorganisms to become increasingly resistant to antimicrobial agents, such as medical antibiotics. AMR testing is not a requirement of the Bathing Water Regulations. However, it has been highlighted elsewhere as an emerging issue.¹⁶⁷

There are mixed views on this topic. The European Commission stated in 2017 that: 'The development and spread of AMR in the environment is also a growing concern, requiring further research.'¹⁶⁸ Conversely, the WHO in 2018 advised that 'bathing waters are not thought to be a major route of transmission for antimicrobial resistant microorganisms and environmental surveillance techniques are not currently sufficiently advanced for obligatory monitoring.'¹⁶⁹

Testing for viruses within bathing water samples was a requirement of the original Bathing Water Regulations.¹⁷⁰ However, the requirement to test was removed when these regulations were repealed and replaced. The analysis of viruses in environmental waters is particularly difficult, which is why microbial indicators are used due their relative ease of analysis.¹⁷¹

With recent breakthroughs in laboratory methods, viruses have been suggested as an alternative indicator of faecal contamination, as discussed in the Bathing Waters Technical Report.¹⁷² However, the WHO has stated 'that there is currently insufficient evidence to support a regulatory role'.¹⁷³

¹⁶⁵ Stantec and Centre for Research into Environment and Health (n 20) s 3.3.

¹⁶⁶ ibid 3.

¹⁶⁷ See for example: The Royal Academy of Engineering, 'Testing the Waters: Priorities for Mitigating Health Risks from Wastewater Pollution' (2024) <<u>https://nepc.raeng.org.uk/media/qi2eyivp/testing-the-waters-priorities-for-mitigating-health-risks-from-wastewater-pollution.pdf</u>> accessed 9 July 2024.

¹⁶⁸ European Commission, 'EU Action on Antimicrobial Resistance' (28 May 2024) <<u>https://health.ec.europa.eu/antimicrobial-resistance/</u> eu-action-antimicrobial-resistance_en> accessed 11 September 2024.

¹⁶⁹ World Health Organization, 'WHO Recommendations on Scientific, Analytical and Epidemiological Developments Relevant to the Parameters for Bathing Water Quality in the Bathing Water Directive (2006/7/EC)' (n 21).

¹⁷⁰ Bathing Waters (Classification) Regulations 1991, Statutory Instrument 1991 No. 1597.

¹⁷¹ Stantec and Centre for Research into Environment and Health (n 18) s 2.1.

¹⁷² ibid 3.

¹⁷³ World Health Organization, 'WHO Recommendations on Scientific, Analytical and Epidemiological Developments Relevant to the Parameters for Bathing Water Quality in the Bathing Water Directive (2006/7/EC)' (n 21).

5.2.2 Discussion

The location and number of sample points has been raised as a point of concern by stakeholders in this project. Sample points are chosen by the EA in accordance with the regulations, which state that the sampling location is to be where most bathers are expected. Stakeholder concerns were primarily focused on the fact that this provision of the regulations, does not necessarily reflect the area of greatest potential risk of pollution.¹⁷⁴ This could be, for example, downstream of a source of pollution or close to the mouth of a river where there may still be significant numbers of bathers (or other recreational water users).

With regard to freshwater sites, some stakeholders raised concerns that sampling points are being placed at the outer end of the designated area, and so possibly the furthest point from a potential pollution source. This has included concerns that sample points may not be representative of the entire area due to the dynamic nature of river pollution. Local hydrological conditions are important in considering the appropriate location of a monitoring site.

The EA has confirmed to us that sampling points on rivers are located downstream of the designated bathing water area. It has said that this means the sample taken will be representative of water that has passed through the entire bathing water area and by all bathers there, and will not miss any pollution inputs.

Currently, bathing waters have only one sampling location, in accordance with the regulations. In some cases, the bathing area identified may be up to two kilometres long. Taking into account the dynamic nature of water flows and the possible presence of multiple sources of pollution along a stretch of river or coast, a single point is unlikely to be representative of conditions across the entire designated area.

The number of samples used for a classification can have an important impact on the confidence of that classification. The WHO in 2018 suggested that using only 16 samples would lead to the wrong classification in 12-20% of cases, which would reduce to a 5% chance of misclassification with 80 samples.¹⁷⁵ It recommends a minimum of 20 samples per site per season, with the overall classification over the four years being based on at least 80 samples per site. Extending the bathing water season further may require additional sampling.

The current FIOs measured (*E. coli* and IE), are supported by epidemiological studies for their inclusion as water quality parameters.¹⁷⁶ However, both tests are based on the traditional culture methods and therefore are subject to a time delay for assessment purposes. This approach can therefore only offer retrospective assessment of the water quality at the time and point the sample was collected, with an inevitable time lag.

The Bathing Waters Technical Report considers this issue further. It suggests that, until near real time monitoring becomes available and reliable, predictive water quality modelling offers the only option for effective real time risk predictions allowing for mitigation measures to be put in place in a timely manner.¹⁷⁷

¹⁷⁴ Sched. 4 (1), Bathing Water Regulations.

¹⁷⁵ World Health Organization, 'WHO Recommendations on Scientific, Analytical and Epidemiological Developments Relevant to the Parameters for Bathing Water Quality in the Bathing Water Directive (2006/7/EC)' (n 21).

¹⁷⁶ Stantec and Centre for Research into Environment and Health (n 17) s 2.1.

¹⁷⁷ ibid s 3.6.

We also discuss this issue further in Chapter 6 (Section 6.3), in relation to the possibility of improving alignment in implementing the Bathing Water Regulations and the Urban Waste Water Treatment Regulations. This may allow storm overflow event duration monitoring data to be better used in bathing water pollution prediction and forecasting tools.

5.2.3 Our View

Our assessment is that the authorities in England are performing what is required of them by the current regulations in respect of monitoring. However, if Defra decides to review the current regime, we suggest it would be beneficial to revisit the monitoring provisions to ensure the appropriate protection of health and public awareness.

As regards the location and number of sampling points, our view is that the currently fixed, 'one-size fits-all' approach in the regulations appears inflexible and may not provide for a representative assessment of water quality or health risks, especially at larger sites over their entire length. The equivalent legislation in Northern Ireland, in contrast, allows a choice between the location where most people are expected to bathe and the point where the greatest risk of pollution is expected.¹⁷⁸

Defra and the EA may wish to reconsider the location and number of sampling points alongside related questions concerning the number of samples to be taken and how information on these matters is communicated to the public. As highlighted by the WHO, we have some concern that the current approach involves a risk of misclassification by taking numbers of samples below those recommended by the WHO.

On the other hand, we recognise that there is a cost to monitoring and support the application of risk-based sampling. This means decisions on what is to be monitored, where and how will need to take account of resources as well as practical issues.

We note in this context that the EA has previously identified resource constraints affecting its bathing water sampling as well as wider water quality monitoring. The EA has also stated that the resources needed for taking and assessing bathing water quality samples are relatively larger than those for some other water quality parameters due to the processes involved.¹⁷⁹ It is therefore important that EA has the resources needed to undertake the required level of monitoring for the regime.

Our assessment also highlights the need for further research into new and emerging techniques to assess FIOs with nearer real-time applications. We note, additionally, that the rise in applications for inland bathing waters and the increased popularity of swimming in freshwater environments suggests a need to increase attention on the presence of cyanobacteria blooms. Monitoring and warnings do happen in practice, as has been illustrated in specific instances.¹⁸⁰ The EA has also told us that if a visual presence of cyanobacteria is observed then local authorities are notified to take appropriate actions. At present, however, there is no consistent approach to monitoring of this issue for England, which we consider would be desirable.

¹⁷⁸ Sched. 3, The Quality of Bathing Water Regulations (Northern Ireland) 2008, Statutory Rule 2008 No. 231.

^{179 &#}x27;Oral Evidence: The Environmental Protection Work of the Environment Agency, HC 702' <<u>https://committees.parliament.uk/</u> <u>oralevidence/14718/pdf/</u>>.

¹⁸⁰ See for example: Vicky Castle and Chris Caulfield, 'Surrey Swimmers Warned after Suspected Blue-Green Algae Outbreak' (BBC News, 18 July 2024) www.bbc.com/news/articles/c98qepw8qrno accessed 19 July 2024.

Recommendation 7. In any review of the Bathing Water Regulations, we recommend that Defra and the EA consider the scope and options to update the monitoring and sampling regime. We recommend that this should include considering the potential to: a) take a more flexible approach to determining the most representative sampling locations; b) increase the number of sample points on long stretches of identified areas; c) develop proposals for the consistent monitoring of and response to cyanobacteria blooms; and d) provide increased transparency and explanation of monitoring decisions so that people understand what is being done, when, how and why.

5.3 Reporting and communication issues

In this section we consider how effectively the status of bathing water quality is conveyed to the public in accordance with the regulations and whether improvements might be made to enable the public to make more informed decisions about when and where to bathe.

5.3.1 The current position

During the bathing season, every local authority controlling a bathing water site must actively disseminate: the bathing water's current classification; any advice against bathing; a general description of the bathing water in non-technical language; information on the nature and expected duration of abnormal situations (such as heavy rainfall or pollution events); and an indication of the sources of more complete information.¹⁸¹ The regulations establish that the appropriate media and technologies must be used when disseminating this information.¹⁸²

In practice, information on the quality of bathing waters is made available online via the EA's 'Swimfo' website,¹⁸³ with local councils providing signs at bathing water locations with information on water quality issues for bathers during the bathing season.¹⁸⁴ If a bathing water is classified as 'poor', then a sign advising against bathing should be displayed. However, this does not amount to prohibition and individuals may still bathe if they wish. Moreover, the Secretary of State must publish annually details of the former bathing waters at which permanent advice against bathing is in place.¹⁸⁵

5.3.2 Discussion

Balancing long and short-term needs

There is a need to balance the long-term classification of bathing sites with the requirement to provide accurate, up-to-date information to bathers. The bathing water classification scheme provides a view of average bathing water quality over the long term, which may be different from actual water quality at any particular point in time. As outlined in Section 5.1, the overall classification for each bathing water works on a rolling, four-year period by combining the results for the most recent season and the previous three seasons. Within this period, of course, there may be considerable variability in the results from one sample to another.

¹⁸¹ Reg 9(1), Bathing Water Regulations.

¹⁸² Reg 9(2), Bathing Water Regulations.

¹⁸³ Environment Agency, 'Swimfo: Find a Bathing Water' (n 56).

¹⁸⁴ Defra, 'Bathing Water Information and Signage Rules for Local Councils' <<u>www.gov.uk/guidance/bathing-water-information-and-signage-rules-for-local-councils</u>> accessed 22 July 2024.

¹⁸⁵ Reg 3(4)(b), Bathing Water Regulations.

This approach stems from the EU Bathing Water Directive and was intended to 'provide a meaningful picture of bathing water quality over the long term' and to 'properly assess the progress achieved through the implementation of certain management measures set out in the Bathing Water Directive'.¹⁸⁶ It therefore supports the assessment of progress made through management measures in the Bathing Water Regulations and other legislation, including the Urban Waste Water Treatment Regulations and the WFD Regulations.

While this process is valuable for assessing general water management trends, the focus of the information is inherently retrospective. It is therefore of less use to bathers who are actively trying to determine when and where it is safe to bathe and need the most recent information to do so.

Event duration monitoring and the provision of real time risk information

The physical collection of samples and laboratory analysis are currently the only accurate ways of assessing *E. coli* and IE.¹⁸⁷ Despite this, predictive models and the use of artificial intelligence allowing for the identification of short-term pollution risk do exist and are improving.¹⁸⁸ While the consistency and accuracy of such modelling can be problematic and expensive, the Bathing Waters Technical Report describes how pollution risk forecasting systems only need to predict the high values and periods of poor water quality.¹⁸⁹

In this regard, the Bathing Waters Technical Report makes a case for improving the alignment of implementation of the Bathing Water Regulations with that of the Urban Waste Water Treatment Regulations, so that storm overflow event duration monitoring data can be better used in bathing water pollution prediction and forecasting tools.¹⁹⁰ While this might not provide accurate real-time analysis of *E. coli* and IE levels, and will not capture urban and rural diffuse pollution impacts that can be major sources of pollution at some sites, it nevertheless could improve the reliability of real-time risk forecasting, which could be of value to bathers. We further discuss issues concerning urban wastewater treatment, including actions introduced under the Environment Act 2021 in relation to storm overflows and event duration monitoring, in Chapter 6 (Section 6.3) of this report.

To date, pollution risk forecasting has only been undertaken for coastal bathing water sites in England. The EA has explained to us that this is because it has based its warning standards on the WHO model which only defines risk with levels of IE in seawater. It said that, with relatively few inland sites until recent years, all of high quality, this was not really an issue.

However, the EA has also told us that it recognises that things have changed with the designation of river bathing waters, and recently commissioned a study to scope out what the equivalent standards should be for freshwaters. This concluded that there were no ready-made equivalent standards for risk in freshwaters that the EA could use for pollution risk forecasting. The EA has said that it will now review this in combination with work on the practical aspects of modelling inland water quality variations to determine how to proceed.

¹⁸⁶ The European Environment Agency (n 71).

¹⁸⁷ Stantec and Centre for Research into Environment and Health (n 18) s 3.6.

¹⁸⁸ Linda Geddes, 'Real-Time Water Quality Monitors Installed at Wild Swimming Spots in Southern England' *The Guardian* (21 July 2024) <<u>www.theguardian.com/environment/article/2024/jul/21/real-time-water-quality-monitors-installed-at-wild-swimming-spots-insouthern-england</u>> accessed 21 July 2024.

¹⁸⁹ Stantec and Centre for Research into Environment and Health (n 18) s 3.6.

¹⁹⁰ ibid.

Availability of signage

Stakeholders voiced concern to the OEP that a 'poor' rating for bathing waters only requires a notice on the standard fixed sign. This is despite many bathing waters having multiple access points.

The provision of multiple signs covering all key access points to bathing waters is considered in the Bathing Waters Technical Report.¹⁹¹ The report also indicates that electronic bathing water signage systems, like those being tested in Northern Ireland, would be preferable to standard fixed signs as they can be updated remotely and provide real-time and auditable records.¹⁹²

Quick response (QR) codes might offer a practical solution to some of the issues described in the Bathing Waters Technical Report. Placing QR codes at all key access points would allow visitors with mobile devices to access the most up-to-date water quality information. For this to be most effective, it will be necessary to ensure that the linked information is regularly updated and maintained. Additionally, options for offline access will still need to be considered to account for areas with poor mobile network coverage, or people who do not have the necessary mobile devices.

5.3.3 Our view

Communicating the risk of harm to the public from entering bathing waters is a key component of the Bathing Water Regulations.

We recognise the importance of the current classification system and the function it serves as an indicator of effectiveness of the implementation of broader water legislation, as outlined above. However, we consider that improvements can be made to better ensure the public are aware of their more immediate risks from bathing. We therefore suggest that any review should consider how to improve this element of the regime. We also consider there are opportunities to provide better information under the current regulations.

There is currently a gap in pollution risk forecasting in relation to inland sites. This will become more significant if increased numbers of such sites are newly designated as anticipated. It is therefore important that the EA continues to seek solutions to address this issue.

We consider the information on the EA's 'Swimfo' website to be helpful. However, we have observed that some information on the website is not always provided in an accessible form. For example, charts detailing recent *E. coli* and IE samples are of limited value to a non-scientist without a clear explanation as to the risk they represent. As such, we are pleased to have been informed by the EA during this project that continued improvements are to be made in that area.

We have observed that some non-governmental organisations, such as Surfers Against Sewage¹⁹³ and The Rivers Trust¹⁹⁴ provide online data for bathers on matters such as tide times, surf reports, water temperatures and river levels. Such platforms can also identify storm overflow locations, offering guidance to the public to inform their decisions on when and where to bathe. Defra and the EA may therefore wish to consider how such

¹⁹¹ ibid.

¹⁹² ibid 61.

¹⁹³ Surfers Against Sewage, 'Sewage Pollution Alerts' <<u>www.sas.org.uk/water-quality/sewage-pollution-alerts/</u>> accessed 14 August 2024.

¹⁹⁴ The Rivers Trust, 'Sewage Map' <<u>https://theriverstrust.org/sewage-map</u>> accessed 11 September 2024.

organisations might be consulted on the subject of effectively communicating information that is of importance to bathers.

Recommendation 8. We recommend that Defra and the EA pursue the further development of short-term pollution risk forecasting systems so health risks can be better understood and communicated to the public with greater speed, including for inland sites. While establishing accurate levels of *E. coli* and IE may for the time being only be possible via laboratory analysis, event duration monitoring data offers a near real-time indication of risk to harm at affected bathing sites. We therefore also recommend that Defra and the EA consider how best to align implementation of the Bathing Water Regulations with that of the Urban Waste Water Treatment Regulations, as well as the relevant provisions of the Environment Act 2021, so that event duration monitoring data can be fed into pollution risk forecasting systems.

Recommendation 9. We recommend that any review of the regime include consideration of options to improve the quality, clarity, and accessibility of bathing water information. We suggest this could include online resources and improved use of social media and QR codes as well as physical signs at bathing sites.



Interaction of the Bathing Water Regulations with other law and policy

6. Interaction of the Bathing Water Regulations with other law and policy

This chapter looks at the application of the Bathing Water Regulations within a wider legal and policy framework. It considers, in turn:

- The interaction of the Bathing Water Regulations with other water management policies, including England's current 'Environmental Improvement Plan'¹⁹⁵ and Defra's 'Plan for Water'¹⁹⁶ (Section 6.1)
- How implementation issues in the WFD Regulations affect bathing water objectives (Section 6.2)
- How water industry regulation and investment mechanisms affect bathing water objectives (Section 6.3)
- How the Bathing Water Regulations interact with regulations concerned with protecting the marine environment (Section 6.4)
- How certain local bye-laws can restrict bathing and other water activities, affecting implementation of the regulations (Section 6.5).

6.1 The wider legal and policy framework

The regulations do not operate in isolation. They are part of a wider body of laws and policies for the management, protection and improvement of the water environment. Many elements of the current framework may be subject to review following the change of government in July 2024.

The Environmental Improvement Plan

The Environment Act 2021 requires the Secretary of State to prepare an 'Environmental Improvement Plan' (EIP). This is a plan for significantly improving the natural environment in the period to which the plan relates.¹⁹⁷

At the time of this report, the current statutory EIP is that adopted by the previous Government in 2023 ('EIP23').¹⁹⁸ This set out that administration's goal of 'clean and plentiful water', highlighting public expectations for better bathing waters and noting various measures expected to support this outcome.¹⁹⁹ These include action to reduce harm from storm overflows, which we discuss further below (Section 6.3).

On 30 July 2024, the current Government announced its intention to undertake a review of the EIP, to be completed by the end of the year.²⁰⁰ This is to develop a new, statutory plan to protect and restore England's natural environment, with delivery plans to meet each of the Environment Act targets which we discuss below.

¹⁹⁵ Defra, 'Environmental Improvement Plan 2023' (n 9).

¹⁹⁶ Defra, 'Plan for Water: Our Integrated Plan for Delivering Clean and Plentiful Water' (4 April 2023) <<u>www.gov.uk/government/</u> <u>publications/plan-for-water-our-integrated-plan-for-delivering-clean-and-plentiful-water/plan-for-water-our-integrated-plan-for-</u> <u>delivering-clean-and-plentiful-water</u>> accessed 9 November 2023.

¹⁹⁷ S. 8, Environment Act 2021.

¹⁹⁸ Defra, 'Environmental Improvement Plan 2023' (n 9).

¹⁹⁹ ibid 11, 111.

²⁰⁰ Defra, 'Government Launches Rapid Review to Meet Environment Act Targets' (n 22).

The Environment Act targets

The previous Government set four legally binding water targets in 2023, under the Environment Act 2021.²⁰¹ These are to be met by 31 December 2038.²⁰² They include the target to reduce nitrogen, phosphorus and sediment from agricultural land by 40%.

Also in 2023, the previous Government set a legally binding marine target under the Environment Act 2021 for the condition of protected features in relevant Marine Protected Areas (MPAs). This target is that 70% of designated features in MPAs are in favourable condition by 31 December 2042, with the remainder in recovering condition.²⁰³ MPAs overlap significantly with bathing waters, as we discuss further in Section 6.3 below.

These targets are not specifically concerned with bathing waters and FIOs. However, the measures needed to realise the targets may also contribute to improving the condition of bathing waters.

The 'Plan for Water'

Further to the EIP23, the previous Government additionally produced a non-statutory policy paper, the 'Plan for Water'.²⁰⁴ This plan outlines further actions to support the EIP23's 'clean and plentiful water' goal and the statutory targets set under Environment Act 2021.

As a non-statutory policy paper produced under a previous government administration, the ongoing status of the Plan for Water is unclear. At the time of writing it remains on Defra's website, under the statement that 'This was published under the 2022 to 2024 Sunak Conservative government.'

The current Government has not explicitly commented on the Plan for Water but has begun to set its own priorities, including a commitment to review the EIP as noted above. The Secretary of State also announced a series of initial steps towards reforming the water sector on 11 July 2024. He said: '*That change will take time. Over the coming weeks and months, this Government will outline further steps to reform the water sector and restore our rivers, lakes and seas to good health.*' ²⁰⁵

Among other points, the Plan for Water highlights the status of bathing waters as 'protected areas' under the WFD Regulations.²⁰⁶ This is a matter of law rather than policy and is not affected by the change of administration. As noted in a separate recent OEP report, the implementation of these regulations also underpins the implementation of the EIP23 'clean and plentiful water' goal as well other objectives and commitments.²⁰⁷ We discuss the relationship between the Bathing Water Regulations and the WFD Regulations in this chapter.

²⁰¹ S.1, Environment Act 2021.

²⁰² The Environmental Targets (Water) (England) Regulations 2022.

²⁰³ The Environmental Targets (Marine Protected Areas) Regulations 2023.

²⁰⁴ Defra, 'Plan for Water' (n 196).

²⁰⁵ Defra, 'Government Announces First Steps to Reform Water Sector' (11 July 2024) <<u>www.gov.uk/government/news/government-announces-first-steps-to-reform-water-sector</u>> accessed 11 July 2024.

²⁰⁶ Defra, 'Plan for Water' (n 196) 12-13.

²⁰⁷ Office for Environmental Protection, 'A Review of Implementation of the Water Framework Directive Regulations and River Basin Management Planning in England' (n 6).
Climate change

The issues surrounding climate change and bathing waters are extensively discussed by the European Environment Agency in a 2020 report.²⁰⁸ In England, the third National Adaptation Programme (NAP3),²⁰⁹ produced under the Climate Change Act 2008, identifies meeting the objectives of the Bathing Water Regulations as a key action for meeting the climate risk reduction goal to mitigate the impacts from a changing climate on water quality and supplies to protect public health.

Interaction of the Bathing Water Regulations with other measures

The Bathing Waters Technical Report discusses issues of interaction with a broad range of other laws and policies.²¹⁰ We focus on four specific areas in more detail below: firstly, the WFD Regulations; secondly, water industry regulation and investment mechanisms; thirdly, the Marine Strategy Regulations;²¹¹ and fourthly, bye-laws that may restrict swimming or other recreational activities.

6.2 The Water Framework Directive Regulations

6.2.1 The current position

The Bathing Water Regulations require the Secretary of State and the EA to exercise their 'relevant functions' to ensure that, from the end of 2015, all bathing waters are classified as, at least, 'sufficient'.²¹² 'Relevant functions' is defined to mean functions under other legislation listed in a schedule to the WFD Regulations.²¹³ This includes laws that apply to drainage, waste management, sewage treatment and agriculture.

As a further and separate requirement, the Secretary of State and the EA must also exercise their relevant functions 'so as to take such realistic and proportionate measures as they each consider appropriate with a view to increasing the number of bathing waters classified [...] as "good" or "excellent"²¹⁴

Further, bathing waters have the status of 'protected areas' under the WFD Regulations.²¹⁵ Protected areas must meet standards in the WFD Regulations and the law under which the area is protected. These standards should be reflected in specific 'Environmental Objectives' set for individual water bodies under the WFD Regulations, and then achieved through 'Programmes of Measures'. This also applies to other protected areas such as 'shellfish waters'.

The EA has produced and the Secretary of State (under a previous administration) has approved 'River Basin Management Plans' (RBMPs) under the WFD Regulations.²¹⁶ These set out the objectives for all water bodies and summarise measures to achieve them.

²⁰⁸ European Environment Agency, 'Bathing Water Management in Europe: Successes and Challenges' (2020) <<u>www.eea.europa.eu/</u> publications/bathing-water-quality-2020> accessed 9 July 2024.

²⁰⁹ DEFRA, 'Third National Adaptation Programme (NAP3)' (July 2023) <<u>www.gov.uk/government/publications/third-national-adaptation-programme-nap3</u>> accessed 1 September 2024.

²¹⁰ Stantec and Centre for Research into Environment and Health (n 18) s 2.4, 3.7.

²¹¹ The Marine Strategy Regulations 2010, Statutory Instrument 2010 No. 1627.

²¹² Reg 5(1)(a), Bathing Water Regulations.

²¹³ Reg 5(2), Bathing Water Regulations and Sched. 2, WFD Regulations.

²¹⁴ Reg 5(1)(b), Bathing Water Regulations.

²¹⁵ Reg 10(2)(b) WFD Regulations.

²¹⁶ Environment Agency, 'River Basin Management Plans: Updated 2022' (22 December 2022) <<u>www.gov.uk/guidance/river-basin-management-plans-updated-2022</u>> accessed 13 November 2023.

A further, specific provision of the WFD Regulations addresses the situation where monitoring or other data indicates that the Environmental Objectives for a water body are unlikely to be met. In this case, the Secretary of State and the EA must ensure that such additional measures as may be necessary to achieve those objectives are included in the programme of measures applying to that water body.²¹⁷ This would be applicable where, for example, information suggests that the minimum 'sufficient' standard or any higher classification set as an objective for an individual bathing water is unlikely to be met.

6.2.2 Discussion

The OEP has recently reported separately and in detail on implementation of the WFD Regulations. Our overall findings include that progress is not on track to meet the Environmental Objectives set in the RBMPs, due to a range of factors including a lack of specific and certain measures to achieve those objectives.²¹⁸

The Secretary of State responded to our report on the WFD Regulations in September 2023.²¹⁹ That response accepts the report's key conclusions that not enough progress has been made in improving the water environment due to a lack of investment and action. The response also states that the Government will be carrying out a review of the water sector regulatory system, with further details to be set out in the Autumn. It indicates that recommendations on specific points in the OEP's report on the WFD Regulations will be considered in that review.

From our assessment, we judge that many of the issues that concern how the WFD Regulations have been implemented will also apply specifically to bathing waters. For example, while the RBMPs identify bathing waters as protected areas, they do not set out site-specific information on measures to meet the applicable standards. Rather, information regarding pollution sources and measures taken for individual bathing waters can be found on the EA's 'Swimfo' website²²⁰

During our engagement in this project, the EA has told us that Government policy is to seek to bring bathing waters to a standard beyond 'sufficient' where possible. The EA illustrated this by reference to water industry investments supported through the 'Price Review' process (see Section 6.3). The EA also told us that each bathing water has an objective to prevent deterioration through the assessment against its baseline class. The EA said that this allows sites where improvements have been made to maintain this as a new quality objective.

Despite this, for all bathing waters the RBMPs only appear to state the Environmental Objective to achieve 'at least sufficient classification'.²²¹ There are no instances that we can see where the RBMPs set objectives to achieve better bathing water quality, despite the duty in the Bathing Water Regulations to increase the number of 'good' or 'excellent' sites.

²¹⁷ Reg 25, WFD Regulations.

²¹⁸ Office for Environmental Protection, 'A Review of Implementation of the Water Framework Directive Regulations and River Basin Management Planning in England' (n 6).

²¹⁹ Defra, 'Government Response to OEP's Report on the Implementation of the Water Framework Directive Regulations and River Basin Management Planning' (11 September 2024) <<u>www.gov.uk/government/publications/government-response-to-oeps-report-on-the-implementation-of-the-water-framework-directive-regulations-and-river-basin-management-planning</u>> accessed 11 September 2024.

²²⁰ Environment Agency, 'Swimfo: Find a Bathing Water' (n 56).

²²¹ See for example: Environment Agency, 'England | Catchment Data Explorer' <<u>https://environment.data.gov.uk/catchment-planning/v/</u> <u>c3-plan</u>> accessed 5 December 2023.

The EA has produced a 'Topic Action Plan' alongside the RBMPs which discusses challenges and actions associated with improving bathing water quality.²²² However, this is only concerned with inland bathing sites and discusses actions in general terms rather than by reference to specific areas. From the information in the RBMPs and related documents, therefore, it is not possible to know what particular action will be taken when or where to meet or improve bathing water quality standards.

6.2.3 Our view

The WFD Regulations create a central, integrated framework to protect and improve the water environment, including bathing waters among other protected areas. Our report on the WFD Regulations identifies several areas where we consider their implementation needs to be improved.²²³ We do not repeat all of our findings and recommendations here but rather make the additional observation that they will apply to bathing waters and other protected areas as much as to other water bodies.

This means that the development of the Programmes of Measures to achieve Environmental Objectives ought to include measures that will achieve the applicable objectives for all bathing waters on a site-specific basis. This is not clear in the current Programmes of Measures.

It is also not clear how including only the minimum, 'at least sufficient' objectives for bathing waters in the RBMPs complies with the specific provisions in the Bathing Water Regulations to increase the number of 'good' and 'excellent' sites. The RBMPs appear to overlook this aspect of the Bathing Water Regulations, or at least do not clearly reflect it. This means they do not currently provide a clear basis to deliver any such better standards, since it is the RBMPs that set the objectives to be achieved for all water bodies and summarise the Programmes of Measures that have been developed and should drive action to meet them.

Our view is that RBMPs should set objectives for bathing waters that are more ambitious than 'sufficient' where appropriate. This should reflect a balanced assessment of the practicality and realism (including consideration of the proportionality of costs) of achieving those outcomes in accordance with the Bathing Water Regulations. In addition, Programmes of Measures should contain specific, certain and time-bound measures that demonstrate with sufficient certainty how and by when the appropriate standards (whether 'sufficient', 'good' or 'excellent' as the case may be) will be met at the individual bathing water body level.

In view of the integrated nature of the WFD Regulations, the assessment of actions for Programmes of Measures should consider their overall impacts. For example, measures to protect and improve bathing waters could benefit water quality more generally or other protected areas. There may be particular opportunities to link measures to protect bathing and shellfish waters due to their geographical overlap in many cases,²²⁴ and shared vulnerability to pollution.

This will therefore include measures to be applied in the water industry sector, which we discuss further in Section 6.3 below. However, we have also noted in our report on the

²²² Environment Agency, 'River Basin Management Plans, Updated 2022: Summary Programmes of Measures – 5. Topic Action Plans' s 5.8 <<u>www.gov.uk/guidance/river-basin-management-plans-updated-2022-summary-programmes-of-measures/5-topic-action-plans</u>> accessed 16 November 2023.

²²³ Office for Environmental Protection, 'A Review of Implementation of the Water Framework Directive Regulations and River Basin Management Planning in England' (n 6).

²²⁴ Locations of bathing waters and shellfish waters can be seen on Defra's 'MAGIC' mapping platform: <u>https://magic.defra.gov.uk/home.</u> <u>htm</u>.

WFD Regulations that other major sources of pressure on the water environment, such as agriculture and transport, are not currently receiving the same resources or attention as the water industry sector. This means that overall, we do not yet see a picture of the necessary resources being directed to all major pressures to meet the Environmental Objectives under the WFD Regulations, which will include those applying to bathing waters.²²⁵

The Bathing Waters Technical Report similarly notes that, while agricultural run-off and wastewater are the primary causes of bathing water pollution, other factors also need to be addressed. These include urban run-off, foul-to-storm sewerage misconnections, and waste from dogs, birds and other wildlife.²²⁶

Agriculture, in particular, is a further, significant source of pathogens and pollution that can affect bathing waters and other protected areas and water bodies. For example, the EA has undertaken testing and monitoring to help identify factors affecting the quality of England's first designated river bathing water, a stretch of the Wharfe at Cromwheel, Ilkley, in Yorkshire.²²⁷ The EA has found that, while sewage inputs close to the site have a short-lived impact on bathing water quality, the catchment-wide agricultural input from further upstream leads to longer term high bacterial levels in the river.

The list of 'relevant functions' to be applied to meet Environmental Objectives for bathing waters and other water bodies under the WFD Regulations does not include the so-called 'Farming Rules for Water'.²²⁸ This is one of the main tools available to the EA to improve the environmental performance of the agricultural sector. Although primarily focused on nutrient management, if applied effectively some of the measures it provides for may also reduce faecal pollution. The OEP has previously expressed concerns about how these rules are being implemented and enforced.²²⁹

Recommendation 10. In their ongoing implementation of the WFD Regulations, including addressing our earlier recommendations on this regime, we recommend that Defra and the EA ensure that: a) the objectives set for bathing waters in RBMPs are sufficiently ambitious and recognise the duty in Regulation 5(1)(b) of the Bathing Water Regulations to aim for 'good' or 'excellent' where appropriate; b) those objectives are backed up by clear, specific and time-bound measures to achieve them at the level of individual water bodies; and c) the identification of those measures considers all relevant pressures, including from agriculture and other sources as well as the water industry, and the impacts for the water environment as a whole.

²²⁵ Office for Environmental Protection, 'A Review of Implementation of the Water Framework Directive Regulations and River Basin Management Planning in England' (n 6) 11.

²²⁶ Stantec and Centre for Research into Environment and Health (n 18) 23.

²²⁷ Environment Agency, 'Working towards a Cleaner Wharfe – a Closer Look at Water Quality Testing at Ilkley's Bathing Water' (4 April 2024) <<u>https://environmentagency.blog.gov.uk/2024/04/04/working-towards-a-cleaner-wharfe-a-closer-look-at-water-quality-testing-at-ilkleys-bathing-water/</u>> accessed 11 July 2024.

²²⁸ The Reduction and Prevention of Agricultural Diffuse Pollution (England) Regulations 2018, Statutory Instrument 2018 No. 151.

²²⁹ Pippa Neil, 'Government May Have Broken the Law over River Pollution, Says OEP' (*ENDS Report*, 24 January 2024) <<u>www.</u> <u>endsreport.com/article/1858649/government-may-broken-law-river-pollution-says-oep</u>> accessed 16 July 2024.

6.3 Water industry regulation and investment mechanisms

6.3.1 The current position

Many of the 'relevant functions' in the Bathing Water Regulations apply to the water industry. These include the Water Industry Act 1991, the Urban Waste Water Treatment Regulations and the Environmental Permitting Regulations.²³⁰

As further detailed in the Bathing Waters Technical Report, the Urban Waste Water Treatment Regulations include two key aspects in relation to bathing waters.²³¹ Firstly, many of the measures required to meet the prescribed discharge limits for wastewater treatment works will also reduce bacterial loads on the environment. Secondly, the regulations require advanced treatment of wastewater, for example through ultraviolet disinfection, in places with a population equivalent of 10,000 people in 'sensitive areas', which will include bathing water sites.

The Bathing Waters Technical Report also discusses the Environmental Permitting Regulations 2016.²³² These provide a consolidated environmental permitting system across the wastewater and other sectors (including intensive pig and poultry farming, for example). They also make it a strict liability offence to misconnect foul sewerage into storm water sewerage systems, a common source of pollution of bathing waters.

More broadly, major new environmental requirements for water companies are specified in the 'Water Industry National Environment Programme' (WINEP) which is developed by water companies in conjunction with the EA. This is a programme of actions that water companies undertake to improve the environment, reflecting obligations arising from environmental legislation including the WFD, Urban Waste Water Treatment and Bathing Water Regulations. It is also an important input to the five-year water industry 'Asset Management Period' cycle and 'Price Review' led by Ofwat. This is the process through which Ofwat determines the funding that water companies will have to complete the agreed WINEP, and the impact on water customer prices. The Bathing Waters Technical Report provides further discussion of the role of WINEP in relation to bathing waters.²³³

As a specific requirement of the Water Industry Act 1991 as amended by the Environment Act 2021, the previous Government published a 'Storm Overflows Discharge Reduction Plan' in 2023, in response to widespread concerns about pollution from combined sewer overflows.²³⁴ As with the EIP23 and the Plan for Water, the intentions of the current Government as regards the Storm Overflows Discharge Reduction Plan have yet to be confirmed. It remains on Defra's website with the statement that: 'This was published under the 2019 to 2022 Johnson Conservative government' (although the current plan was updated in 2023).

The Storm Overflows Discharge Reduction Plan notes that: 'Bathers and other water users are impacted by the 8% of storm overflows that discharge near a designated bathing water.'²³⁵ It also sets out the intention that: 'By 2035, water companies will have improved all storm overflows discharging near every designated bathing water'.²³⁶ The specific target is

233 ibid 20.

- 235 ibid 8.
- 236 ibid 11.

²³⁰ The Environmental Permitting (England and Wales) Regulations 2016, Statutory Instrument 2016 No. 1154.

²³¹ Stantec and Centre for Research into Environment and Health (n 18) 15.

²³² ibid 15-16, 65.

²³⁴ Defra, 'Storm Overflows Discharge Reduction Plan' (n 26).

for all such overflows to either apply disinfection, or reduce the frequency of discharges to three or fewer per bathing season.²³⁷

The Storm Overflows Discharge Reduction Plan states the commitment of the previous Government to ensure bathing water users are informed in near real-time of any storm overflow activity or impacts on bathing water quality. This is supported by the commitment in the plan for the sewerage network to have 'event duration monitors' on all storm overflows from the end of 2023, to provide a complete picture of when, and for how long, all individual overflows operate. Defra has told us that this commitment was met by the end of 2023.

A further commitment in the Storm Overflows Discharge Reduction Plan is for all water companies to make near real-time data about the frequency and duration of all storm overflow discharges available to the public no later than 2025 (by the start of the 2024 Price Review).²³⁸

Under the Water Industry Act 1991, as amended by the Environment Act 2021, water companies are now also required to provide continuous monitoring of certain water quality parameters in discharges from storm overflows.²³⁹ These are dissolved oxygen, temperature, pH, turbidity, ammonia and anything else specified in regulations made by the Secretary of State, upstream and downstream of storm overflows and sewerage assets. Although these requirements do not cover levels of bacteria, they may provide an indication of water quality in watercourses.

When it was published in 2023, the Storm Overflows Discharge Reduction Plan additionally stated that the previous Government was reviewing the Bathing Water Regulations, intending to 'consult on policy options in 2023 with the aim to complete the review by the end of 2024.' This commitment to consult recognised the necessity of further improvements to protect bathers and other recreational water users, to ensure the regulations reflect changes in how and where people use bathing waters, and the desire to see more bathing waters, including rivers, designated.²⁴⁰

Defra also previously committed in 2013 to prepare and consult on an Impact Assessment for a possible change to the definition of the 'bathing season' in the Bathing Water Regulations.²⁴¹ However, neither of these bathing water consultations that had been anticipated in 2013 and 2023 happened prior to the change of Government in July 2024.

6.3.2 Discussion

The effective application and regulation of measures in the water industry to limit sewage discharges and ensure appropriate treatment are critical to meeting and raising bathing water standards. As previously noted, however, they are not the only source of pressure on bathing waters, with agriculture in particular also being significant.

Our report on the implementation of the WFD Regulations discusses several issues regarding their interaction with mechanisms for water industry improvements and

²³⁷ ibid 13.

²³⁸ ibid 13, 24–25.

²³⁹ S. 141DB, Water Industry Act 1991.

²⁴⁰ Defra, 'Storm Overflows Discharge Reduction Plan' (n 26) s 3.4.

²⁴¹ Defra, 'Survey on the Length of the Bathing Season in England: Summary of Responses and Way Forward' (2013) <<u>https://assets.publishing.service.gov.uk/media/5a7cc06a40f0b6629523b975/bathing-season-sum-resp-20131114.pdf</u>> accessed 10 July 2024.

investments.²⁴² These cover the WINEP and the Price Review process, as well as specific water company measures such as Drainage and Wastewater Management Plans developed within these wider frameworks. We highlight a risk of conflicting objectives when considering water company plans and RBMPs, including an uncertain carry-through from Programmes of Measures into specific water industry commitments. Again, these issues will also apply specifically when it comes to application of the WFD Regulations to protect and improve bathing waters.

A further, more particular issue concerns the timing of the implementation of improvement measures in the water industry sector which may be important for bathing waters. As outlined above and discussed further in the Bathing Waters Technical Report,²⁴³ major water industry investments, including those to protect the environment, are identified through the five-yearly WINEP and Price Review processes. Our report on the WFD Regulations notes that this does not align with the six-year cycle for updating RBMPs.²⁴⁴ Nor is it clear how it meets the requirement in the WFD Regulations for new actions to be implemented within three years of their approval in Programmes of Measures.²⁴⁵

This cyclical timing of major water industry improvements creates a particular issue in respect of bathing waters and the current provisions of the Bathing Water Regulations. The regulations provide that a bathing water that is 'poor' for five consecutive years is automatically declassified.²⁴⁶ Allowing up to five years to bring a site out of 'poor' status should not be used as a basis to delay improvements that could be applied over a shorter timescale. In the absence of a possible change of approach (see Section 6.3.3. below), however, in some cases this may be too short a period to identify, plan for and implement measures in the water industry sector, or elsewhere, to achieve the necessary improvement.

This is not just a theoretical issue. The Bathing Waters Technical Report discusses three real cases in England where coastal bathing waters have been declassified in this way.²⁴⁷ The box below gives a further example of a recently designated inland site which appears to be at risk of declassification.

Water quality at Cromwheel

The Cromwheel river bathing water site referred to above (Section 6.2.3) has been assessed as 'poor' in its first three bathing seasons, 2021, 2022 and 2023.²⁴⁸ This creates a risk of it being automatically declassified before there is time for measures to be implemented to achieve 'sufficient' status.

Cromwheel was designated as a bathing water in December 2020. This was one year after Ofwat's determination of the Price Review for 2019 to 2024. Testing and analysis then took three years to help identify factors influencing water quality at the site.²⁴⁹

²⁴² Office for Environmental Protection, 'A Review of Implementation of the Water Framework Directive Regulations and River Basin Management Planning in England' (n 6). See for example Ss. 4.3.1 and 5.4.1.

²⁴³ Stantec and Centre for Research into Environment and Health (n 18) 20–21, 65–66.

²⁴⁴ Office for Environmental Protection, 'A Review of Implementation of the Water Framework Directive Regulations and River Basin Management Planning in England' (n 6) s 5.4.1.

²⁴⁵ ibid 4.3.3.

²⁴⁶ Reg 13(2)(a), Bathing Water Regulations. Bathing waters may also be declassified before five successive 'poor classifications' if the EA advises and the minister accepts that it would be infeasible or disproportionately expensive for the bathing water to achieve 'sufficient'.

²⁴⁷ Stantec and Centre for Research into Environment and Health (n 18) 27.

²⁴⁸ Environment Agency, 'Working towards a Cleaner Wharfe – a Closer Look at Water Quality Testing at Ilkley's Bathing Water' (n 227). 249 ibid.

Some additional investment has been directed towards improvements in this area through Ofwat's 'Accelerated Infrastructure Delivery Project' over the period 2023 to 2025,²⁵⁰ although it is not yet clear if this will be sufficient to meet the required standards. Any significant further water industry investment will be subject to the Price Review determination for 2024 to 2029.

The 2024 bathing water classification for Cromwheel is not yet published. From the available data in the season to date at the time of this research²⁵¹ it is not yet clear if it will be 'poor' again, but this is clearly a possibility. If so, this would leave just one more year for additional measures to achieve a status of at least 'sufficient' in 2025 if the bathing water is not to face automatic declassification and the issue of 'permanent advice against bathing' under the current regulations.

6.3.3 Our view

The change of Government following the election in July 2024 gives rise to possible changes of direction or policy in this area. As we have noted earlier in this chapter, the new Government has begun to set its own priorities, including a commitment to review the EIP and reform the water sector.

We recognise that it will take some time for Government to finalise its plans as regards the future direction of water policy and law. As it does so, we highlight the importance of confirming Government's intentions as regards the WFD Regulations and the Bathing Water Regulations. For reasons identified in our previous report on the WFD Regulations, and in this report on bathing waters, we would support the review of both regimes to inform improvements in their implementation and strengthen their underlying legislative and governance provisions.

In relation to the Bathing Water Regulations specifically, it would be helpful for Government to confirm if it plans to undertake a consultation, as had been anticipated under previous administrations. We believe such a consultation would be appropriate in view of the possibilities to update the regime and improve its alignment with other measures.

It would equally be helpful for Government to confirm its intentions as regards the previous administration's commitments in the Storm Overflows Discharge Reduction Plan. These have important implications for bathing waters and wider water quality. We note that such commitments will need to be implemented effectively in practice, and subject to appropriate compliance assessment and, where necessary, enforcement. This will need to be appropriately resourced.

Finally, we highlight the importance of alignment and coherence as Government determines how to proceed in respect of the WFD Regulations, the Bathing Water Regulations, the Storm Overflows Discharge Reduction Plan and wider matters such as the Agricultural Transition Plan.²⁵² For example, whether Government decides to retain or amend commitments in the Storm Overflows Discharge Reduction Plan, it should do so in a way that aligns with its thinking on the future approach to bathing waters.

²⁵⁰ Ofwat, 'Accelerated Infrastructure Delivery Project' <<u>www.ofwat.gov.uk/regulated-companies/price-review/2024-price-review/</u> <u>accelerated-investment-delivery-project/</u>> accessed 16 July 2024.

²⁵¹ Defra and Environment Agency, 'Water Samples History: Wharfe at Cromwheel, Ilkley' <<u>https://environment.data.gov.uk/bwq/profiles/</u> <u>data-samples.html?_search=cromwheel&bw=uke4100-08901#current</u>> accessed 11 July 2024.

²⁵² Defra, 'Agricultural Transition Plan Update January 2024' (19 March 2024) <<u>www.gov.uk/government/publications/agricultural-</u> <u>transition-plan-2021-to-2024/agricultural-transition-plan-update-january-2024</u>> accessed 28 July 2024.

Increasing the number of bathing waters or applying the regime to other recreational water users, as discussed previously, would lead to correspondingly increased requirements for storm overflow management, monitoring and widespread effluent disinfection. Government will therefore need to assess these matters in the round.

We also consider that the current approach in the regulations, for declassification of bathing waters after five years of 'poor' water quality, is inflexible and may be counter-productive. It appears appropriate that there are provisions in law to declassify bathing waters where necessary, and to provide short- or long-term advice against bathing where needed. However, the current requirement for automatic declassification leading to what is said to be 'permanent advice against bathing', such that the standards and the drive to achieve them no longer apply, appears to run counter to the overall purposes of the Bathing Water Regulations and the WFD Regulations to maintain and improve water quality and to protect human health. This is especially the case where works are underway or planned with the intention of achieving the standards soon thereafter.

More generally, the timings and processes for water industry investments and improvements need to be aligned with the objectives they are intended to meet. This should ensure legal obligations, under the Bathing Water Regulations or elsewhere, are achieved by their due dates.

Recommendation 11. In any review of the Bathing Water Regulations, we recommend that Defra revisit the current approach to the declassification of bathing waters, which can result in successive 'poor' results leading to automatic declassification and loss of bathing water status even where improvements are in progress.

6.4 The Marine Strategy Regulations

6.4.1 The current position

In 2010, the Marine Strategy Regulations came into force. These regulations transposed the EU Marine Strategy Framework Directive²⁵³ and set out the UK's vision for clean, healthy, safe, productive, and biologically diverse oceans and seas. The regulations require the UK to take necessary measures to achieve or maintain 'Good Environmental Status' in the marine environment by 31 December 2020.²⁵⁴

The marine environment in England is in a highly depleted state. The last assessment (in 2019) of progress towards achieving Good Environmental Status showed that the UK was failing to achieve this outcome for the majority of indicators of marine health.²⁵⁵

6.4.2 Discussion

Bathing was identified as a social value and benefit of the marine environment in the last assessment under the Marine Strategy Regulations. The next assessment is due in 2024 and should confirm whether or not the 2020 marine Good Environmental Status target has been met.

254 The Marine Strategy Regulations 2010.

²⁵³ Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive) [2008] OJ L164/19.

²⁵⁵ Defra, 'Marine Strategy Part One: UK Updated Assessment and Good Environmental Status' (2019) <<u>www.gov.uk/government/</u> publications/marine-strategy-part-one-uk-updated-assessment-and-good-environmental-status>.

However, recent data emerging under the implementation of the OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic²⁵⁶ suggests this target will be missed. The OSPAR 2023 Quality Status Reports²⁵⁷ provide the most comprehensive and up-to-date assessment of the status of marine strategy indicators in the North-East Atlantic for the period 2009-2021. This supports our last EIP progress assessment for England where we identified that the prospects of meeting marine Good Environmental Status by 2020 are largely off-track.²⁵⁸

Two marine indicators for Good Environmental Status of particular relevance here are eutrophication and marine litter indicators. The former is principally concerned with the main pressures affecting the pollution of bathing waters, including agriculture, wastewater treatment and run-off from urban areas. The eutrophication indicator was met in the 2019 assessment and will likely also be met in the 2024 update. The latter overlaps strongly with the Bathing Water Regulations' visual monitoring inspection provisions.

The UK Marine Strategy programme of measures to deliver Good Environmental Status only mentions the Bathing Water Regulations twice.²⁵⁹ These references relate to measures to address litter from wastewater treatment works and urban drainage, and to remove litter from the marine environment.

6.4.3 Our View

This discussion of the Marine Strategy Regulations raises similar issues of coherence as those discussed in Sections 6.2 and 6.3 above in relation to the WFD Regulations and the Urban Waste Water Treatment Regulations. Given the structure and provisions of the legislation, it is the implementation of the WFD Regulations, in particular, that should help in setting and achieving bathing and other water quality standards. But clearly there is also an important overlap and connection with measures to protect and improve the marine environment.

Our view, therefore, is that ongoing implementation of the Bathing Water Regulations, and any review of them by Defra, should also take account of this interaction with the Marine Strategy Regulations. It should address, for instance, the implications for the pursuit of Good Environmental Status under the Marine Strategy Regulations of only setting the minimum objective of 'sufficient' for bathing waters under the WFD Regulations.

More broadly, we highlight the benefits of a coherent approach to applying the UK Marine Strategy and Bathing Water Regulations. The Marine Strategy Regulations' current consideration of bathing waters only extends to some pressures relevant to bathing waters, with wastewater treatment being the primary one. However, achieving the outcomes of the Bathing Water Regulations, the Marine Strategy Regulations and the WFD Regulations will require attention to all pressures. This will therefore benefit from a joined-up strategy for implementation.

²⁵⁶ The Convention for the Protection of the Marine Environment of the North-East Atlantic or OSPAR Convention is the current legislative instrument regulating international cooperation on environmental protection in the North-East Atlantic. Work carried out under the convention is managed by the OSPAR Commission, which is made up of representatives of the Governments of the 15 signatory nations, and representatives of the European Commission, representing the European Union.

 ²⁵⁷ OSPAR, 'OSPAR 2023 Quality Status Reports' <<u>www.ospar.org/work-areas/cross-cutting-issues/qsr2023</u>> accessed 14 August 2024.
258 Office for Environmental Protection, 'Government Remains Largely off Track to Meet Its Environmental Ambitions, Finds OEP in

Annual Progress Report | Office for Environmental Protection' (18 January 2024) <<u>www.theoep.org.uk/report/government-remains-</u> largely-track-meet-its-environmental-ambitions-finds-oep-annual-progress> accessed 27 August 2024.

²⁵⁹ DEFRA, 'Marine Strategy Part Three: UK Programme of Measures December 2015' <<u>https://assets.publishing.service.gov.uk/</u> government/uploads/system/uploads/attachment_data/file/486623/marine-strategy-part3-programme-of-measures.pdf>.

6.5 Bye-laws that may restrict bathing or other recreational water use

6.5.1 The current position

Under the Bathing Water Regulations, a bathing water is an identified area of surface water 'at which permanent advice against bathing is not currently in place'. The Secretary of State must identify and maintain a list of bathing waters.²⁶⁰

Accordingly, Defra's criteria for identifying bathing waters state that people cannot apply 'where there is permanent advice against bathing'.²⁶¹ Technically this restriction only concerns instances where such advice has been issued under the Bathing Water Regulations.²⁶² In practice, it is also taken to cover circumstances where bathing is not recommended or has been prohibited for other reasons, as we illustrate in Section 6.5.2 below.

As has been discussed elsewhere, however, the question over whether swimming is allowed in a particular area can be complex:

'In some other European countries, including Scotland and most of Scandinavia, there is an explicit (statutory) legal right to swim or navigate in all water bodies, related to the public rights to roam. These do not yet exist in England and Wales, however many larger rivers have a statutory public right of navigation created from acts of parliament [...]. This right of navigation is generally interpreted to extend to swimming, although bylaws may restrict swimming on some stretches (e.g. near locks) on safety grounds due to the chance of a collision with a boat.'²⁶³

Similar restrictions may apply to other recreational uses of water which have been discussed for possible inclusion under the Bathing Water Regulations, as noted in Chapter 4 (Section 4.1) of this report.

6.5.2 Discussion

The interaction between the Bathing Water Regulations and other restrictions on swimming, for example in bye-laws, is complex.

There appear to be some cases, however, where such restrictions imposed on the basis (in whole or in part) on the grounds of protecting human health against protection could have the effect of preventing designation of a bathing water. This in turn could create the circularity that there is then little or no incentive or legal basis to improve the water quality for the purposes of protecting human health. This is illustrated in the case study below.

²⁶⁰ Reg 3, Bathing Water Regulations.

²⁶¹ Defra, 'Designate a Bathing Water: Guidance on How to Apply' (n 12).

²⁶² Reg 13, WFD Regulations.

²⁶³ Wild Swimming, 'Wild Swimming Access, Legal and Law – Am I Allowed to Wild Swim in Rivers and Lakes?' <<u>www.wildswimming.</u> <u>co.uk/access-and-law/</u>> accessed 15 July 2024.

Case Study – Conham River Park

Conham River Park is a stretch of the River Avon in Bristol, used frequently by swimmers and other recreational users including paddleboarders and kayakers. It is about five kilometres upstream of the Bristol city centre harbour area, and is defined as being part of the 'Bristol City Docks' under the city bye-laws.²⁶⁴

In 2021, the local 'Conham Bathers' group began to prepare an application for designation of the area as a bathing water.²⁶⁵ In the event, however, the application could not be progressed due to a city bye-law adopted in 2009. This prohibits swimming without the consent of the Harbour Master. In contrast, other leisure activities generally are permitted under the bye-laws as long as they do not impede the passage of vessels.²⁶⁶

The bye-laws simply state the fact of the prohibition on swimming, rather than the basis for it. In response to a petition calling for the bye-law to be amended to enable the bathing water application to proceed, however, the Council cited a number of underlying reasons for the prohibition: ²⁶⁷

'To allow swimming [...], the Harbour Master would have to give his express consent and, without investing in significant safety measures, we would find ourselves liable should anyone come to harm.

Swimming in open water can present risks including cold water shock, boat strike, hazardous objects under the water, strong currents, and illness and infection. This is why many open water areas in Bristol have by-laws which prohibit swimming.

In light of the above, we have been asked to review and remove the 2009 Byelaws that prohibit swimming. This cannot be done in isolation, however the legislation relating to our harbour estate will be reviewed in the next couple of years and I have asked that this be considered as part of that process.'

The Council's response to the petition also noted its intention to introduce a pilot swimming space in the city harbour. This was first introduced in 2023 and repeated in 2024. It allows people to book and pay to swim at a specific location, with restrictions on matters such as swimming times, ability and use of equipment.²⁶⁸ It is therefore somewhat different to the approach that will apply elsewhere where people generally may access bathing waters free of charge, at the time and manner of their choosing and at their own risk.

In the meantime, the prohibition on swimming at Conham River Park and elsewhere remains in place, pending the Council's anticipated review of the bye-laws. This has been described by the Conham Bathers as 'an absurd situation where the Mayor is blocking our attempt to improve the water quality because of concerns about the water quality.²⁶⁹

²⁶⁴ Bristol City Council, 'City Docks Byelaws' (2016) <<u>www.bristol.gov.uk/files/documents/874-city-docks-byelaws/file</u>> accessed 1 August 2024.

²⁶⁵ Conham Bathing, 'Conham Bathing' <<u>https://www.conhambathing.co.uk</u>> accessed 15 July 2024.

²⁶⁶ Bristol City Docks Bye-Laws 2009. See in particular bye-laws 48 and 49.

²⁶⁷ Bristol City Council, 'Summons to Attend Meeting of Full Council' (2022) <<u>https://democracy.bristol.gov.uk/documents/b31137/</u> <u>Responses%20to%20Petitions%20Statements%20and%20Questions%2018th-Oct-2022%2017.00%20Full%20Council.pdf?T=9</u>> accessed 1 August 2024.

²⁶⁸ Great West Way, 'Bristol Harbour Swimming' <<u>www.greatwestway.co.uk/see-and-do/festivals-and-events/bristol-harbour-</u> <u>swimming-p4748371</u>> accessed 1 August 2024.

²⁶⁹ Patrick Naylor, 'Bacteria and Bureaucrats' (*Outdoor Swimming Society*, 30 May 2024) <<u>www.outdoorswimmingsociety.com/bacteria-and-bureaucrats</u>/> accessed 1 August 2024.

6.5.3 Our view

The consideration of whether an area of water is safe for swimming will depend on a variety of factors. We therefore do not question the need for particular authorities to prohibit or restrict swimming, or other recreational activities, in certain circumstances. Given common law rights, and to support the objectives of the Bathing Water Regulations, any such prohibitions or restrictions should be limited, proportionate and justified.

In this context, however, we consider that there is the potential for the interaction of different measures to act as a barrier to improving water quality under the Bathing Water Regulations and, by extension, the WFD Regulations.

There is also a risk of incoherence or confusion between different measures where prohibitions or restrictions on swimming are based, in whole or in part, on the grounds of preventing illness and infection outside of a process specified under the Bathing Water Regulations, or in a way that is not clearly connected with those regulations and the standards that they set for the protection of health.

In the example of the Conham River Park noted above, for instance, as this is not a designated bathing water there is no formal historical record of bathing water quality sampling. In addition, the reasons cited for prohibiting swimming there, such as the risk of cold-water shock and boat strike, equally could apply at other locations including many designated bathing waters.

Moreover, the Cromwheel site referred to earlier in this chapter (Section 6.3.2) illustrates a case where a stretch of river has been designated as a bathing water despite it having 'poor quality'. This has provided a basis to investigate the causes and take measures to improve the river's water quality.

Additionally, as noted above bye-laws may cover not just swimming but also other recreational uses, sometimes with different restrictions. There is therefore a link here with the issue we discuss in Chapter 4 (Section 4.1), namely that the distinction between swimming and some other recreational water uses is not always clear cut. For example, some people paddleboarding in an area where such activity is permitted will inevitably need to swim, even if just briefly, if they fall into the water. As a result, they may be exposed to the risks that underpinned a prohibition on swimming. We therefore suggest that Government should consider such matters as it decides whether and how to proceed with a possible review of the Bathing Water Regulations.

Recommendation 12. In any review of the regime, we recommend that Defra clarify the relationship between provisions under the Bathing Water Regulations for identifying and monitoring bathing waters, and giving advice against bathing, with rights and restrictions in common law and bye-laws. This should consider not just the current practical interpretation of 'bathing' to cover swimmers but also the possible application of the regulations to cover other recreational water users.



Glossary

AMR	Anti-Microbial Resistance
AMP	Asset Management Plan
DAERA	Department of Agriculture, Environment and Rural Affairs
Defra	Department for Environment, Food and Rural Affairs
DHSC	Department of Health and Social Care
EA	Environment Agency
E. coli	Escherichia coli
EIP	Environmental Improvement Plan
EPR	Environmental Permitting Regulations
EU	European Union
FIO	Faecal Indicator Organism
IE	Intestinal Enterococci
MPA	Marine Protected Area
MST	Microbial Source Tracking
OEP	Office for Environmental Protection
OFWAT	Water Services Regulation Authority
QR	Quick response
RBMP	River Basin Management Plan
UKHSA	United Kingdom Health Security Agency
WFD	Water Framework Directive
WINEP	Water Industry National Environment Plan
WHO	World Health Organization

Annex 1. Stakeholder engagement and expert review

Annex 1. Stakeholder engagement and expert review

This annex outlines the approach that the project has taken to stakeholder engagement and expert review. We gratefully acknowledge the support and input of the many people and organisations who have contributed to this work.

Project stakeholder group

In carrying out this project, the OEP established a stakeholder group to engage with parties interested in the Bathing Water Regulations and their implementation. Participants were drawn from public authorities, industry bodies, environmental NGOs and professional bodies across England and Northern Ireland.

The group held two online meetings in 2023. To ensure manageability, the group was necessarily of limited size. However, the group members were able (and encouraged) to exchange views with, and to collate and put forward information from, their wider communities of interest. Group attendees were as follows:

- British Canoeing
- Department of Agriculture, Environment and Rural Affairs (Northern Ireland)
- Department for Environment, Food and Rural Affairs
- Environment Agency
- Environmental Standards Scotland
- Green Alliance
- Ilkley Clean River Campaign
- Keep Northern Ireland Beautiful
- Marine Conservation Society
- National Farmers Union
- Northern Ireland Environment Agency
- Northern Ireland Water
- Outdoor Swimming Society
- Rivers Trust
- Stormwater Shepherds
- Surfers against Sewage
- Ulster Farmers Union
- Water UK

• Wildlife Trusts

This was not intended to be a decision-making or steering body. Nor was the OEP looking to agree on all issues with all stakeholders. There is a diversity of opinions in many areas concerned with the Bathing Water Regulations and related matters. As such, the findings and recommendations presented in this report are those of the OEP and do not necessarily reflect the views of the stakeholders.

Rather, the group was convened with terms of reference as a forum for updating, discussion and information-sharing. It also enabled the OEP to gather views, information and evidence from stakeholders in the project.

Workshop

In addition, the OEP held an online workshop in September 2023 where the consultants presented their initial findings, as subsequently set out in the Bathing Waters Technical Report.

The following table presents a brief summary of stakeholder concerns and views expressed during the project, some of which are expanded on in this report.

Main topic	Stakeholder views
	Suggested taking a tiered approach with the level of designation being dependent on the number of criteria met by that site.
Designation of bathing water sites	Concern over the number of water users needed to trigger designation.
	Suggested that it would be beneficial and more efficient for groups to have initial discussions with Defra regarding applications prior to submission.
	Access and facilities were of significant discussion including the need for toilet facilities.
Sample point location	A view that a single point of testing for bathing water quality in rivers is insufficient.
	Concerns raised regarding signs placed at freshwater sites and the inconsistency between signage at saline and freshwater sites.
Signage	There was a concern raised that provisions for bathing water signage are inadequate. For example, a bathing water deemed 'poor' or unsafe for bathing only requires a notice to be placed upon the standard fixed bathing water sign. At many locations bathing waters can be accessed from numerous locations and a single sign will not be visible to many of the beach users.

Main topic	Stakeholder views
Length of bathing season	A view that there is a demand on bathing areas all year round, and that an extension of the season length would be beneficial.
Other water users	A view that a water user should include paddle boarding, surfing, canoeing and other water sports.
Riverine bathing sites	Stakeholders expressed the opinion that river swimming has become more popular and the protocols developed for coastal bathing may need to be reviewed.
Real time information	In a Northern Ireland context, regarding the transparency of water quality monitoring and the length of time taken to issue water quality data, the EA's 'Swimfo' website was recognised as broadly positive and potentially easy to replicate.
	There was a perception raised that 'poor' bathing waters are predominantly caused by discharges from storm overflows. This can lead to measures such as those required under the Environment Act 2021 for all storm overflows within 5 km upstream of an inland bathing water to discharge less than twice per bathing season.
Storm overflows	There were different views on the extent to which storm overflow discharges affect bathing water quality and classifications.
	There was some disagreement that this potentially takes investment or focus away from agricultural pollution sources and continuous water company and private sewerage discharges such as sewage treatment works, which may have a greater impact for longer periods.
	There was a view that there is a need to develop pollution risk forecasting at bathing water sites, to better inform bathing water users.
Other public health concerns	The bathing water classification only relates to bacterial water quality and does not include any provision for other public health considerations from bathing.
	'Physical factors' such as cold-water shock, strong tidal currents or rip tides, hidden underwater obstacles and safe access / egress to and from the bathing site are not considered by the regulations, including during the identification process.

Main topic	Stakeholder views
Bathing water management	There were suggestions for better dissemination and regular updates to information within England and Northern Ireland around the works being done to improve 'poor' bathing waters.
	There was a desire for more and regular information to be published describing the steps the authorities are taking when a bathing water is classified as 'poor'.
	There were views expressed that the regulations need to be more robust in this area.
De-designation of bathing waters	There were also views expressed that regulators should be made more accountable for their reasoning behind de-designation.
Regulator accountability	There were views expressed concerning the need for improved communication regarding action plans for failing bathing waters.
Discounting of samples	There were concerns around the transparency of discounting of samples.

Expert review

Prior to its completion, we sent a draft copy of chapters of this report to external experts for independent review. These were drawn from the OEP's College of Experts and other individuals outside the OEP based on their subject matter expertise and availability to undertake the review.

The individual reviewers from the OEP's College of Experts were Howard Brett and Liz Buchanan. We also invited and received comment from reviewers in Environmental Standards Scotland, the Interim Environmental Protection Assessor for Wales and the Royal Academy of Engineering.

All the reviewers returned comments which we have considered in finalising the report. The report remains the work and presents the conclusions of the OEP. It does not necessarily reflect the views of the reviewers.

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