

Discussion Paper



A new approach

Discussion paper: Sustainable Solutions for Water and Nature (SSWAN)

A new approach to water and environmental regulation

The current framework does not work

The water network and the environment are at breaking point and change is needed. We must seize the opportunity to align economic and environmental regulation across sectors and make the biggest structural reform of our water system in a generation. Facing the challenge head on, we can be ambitious and innovative and drive impactful and meaningful change. We need to invest in our future: for the health of our waterways, and the natural environment, and for society.

The current system of water and environmental regulation no longer delivers the outcomes that society expects and needs. Though the original water regulatory model delivered productivity gains of around 70% and improvements to services, it did not give due consideration to the environment and ultimately led to underinvestment in infrastructure which is now unable to keep up with the demands placed on it, including climate change and population growth. There are visible signs of decline: leaks, sewage pollution and water bodies in poor health.

Regulation needs to require companies to step up and invest in the improvements needed, but the regulatory regime must also evolve.

Water regulation has become complex and prescriptive and is divorced from the needs of society and the environment. Different regulators pull the sector in different directions and at huge expense – the current regulatory system costs £25 per customer per year. It also incentivises water companies to spend significant resource on compliance over consumer and nature outcomes.

It does not have to be this way. This paper describes a new regulatory system focused on a clear vision of the outcomes a well-functioning water sector should deliver to improve the natural environment and wider societal benefits. The proposed approach is rooted in the needs and preferences of local areas and aims to create a system of accountability that spans multiple sectors, encourages locally appropriate innovation and limits trade-offs as much as possible.

This paper explains how national targets would be set, apportioned, and incentivised as well as how they could be pulled together, distributed between organisations, and the results monitored to ensure transparency. The proposed regulatory regime would also accelerate delivery of the government's existing national targets established under the Environment Act 2021.

The design and implementation of a new model would need political buy-in and a significant investment of resources from policy makers and regulators. This paper is not intended to be comprehensive or to provide all the answers. Its sole purpose is to illustrate how such a new regulatory model could work.

This proposal builds on a large body of work, including but not limited to Water UK's "Water 2050" Vision, CIWEM's "A Fresh Water Future" project, work by Defra and the Rivers Trust work on catchment governance, and the Rivers Trust-led Ofwat Innovation Fund project on establishing an evidence base for nature based solutions. This is in addition to work by Indepen and Sustainability First's Fair for the Future project, work conducted by Frontier Economics for Wessex Water and independently peer-reviewed research on Outcome-based Environmental Regulation (OBER).

A blueprint for reform

What's proposed in project SSWAN would ensure regulation works across sectors to transform the health of our rivers in a way that considers other environmental and societal outcomes, delivered as efficiently as possible.

There's no doubt our water system needs greater investment. What's up for discussion is how best to do that alongside (among other areas) climate, biodiversity and food production, how best to pay for this, and who should

be responsible. There are too many variables to suggest a specific figure for what customer bills should be, or how much nature-based solutions and catchment partnerships could lower bill increases. However, this regulatory reform is about ensuring society benefits from improved nature health, more cost-effective solutions, and better management and collaboration.

Water quality regulation, environmental protection, conservation and economic regulation are currently split across the Drinking Water Inspectorate (DWI), the Environment Agency (EA), Natural England (NE) and Ofwat. This split pulls the sector in different directions, ultimately failing to enable the water sector and others to deliver the outcomes customers want and our environment needs. The water environment is significantly influenced by policies and practices in other sectors such as farming, planning and development control. Radical improvements can be achieved by aligning these regulatory functions to deliver environmental, social and economic outcomes within a common overall context.

As a starting point, government targets and policy should establish that overall context for the regulators' work by setting top-level national targets. These might include, for example, the following requirements:

- all rivers, lakes and coastal waters achieve Good Ecological Status (or a more appropriate future equivalent metric) or better by 2050 at the latest, with interim five-year intervals to provide confidence that action is progressing
- all waterbodies are sustainably abstracted, with all rivers meeting the 'Environmental Flow Indicator' or better by 2050 at the latest
- total (100%) compliance with drinking water standards at point of use.

The various regulatory agencies must then be held accountable for the delivery of these high-level outcomes – both through their application of regulation to the water sector and through extension to other sectors. This could be achieved most rapidly through reform of the water Strategic Policy Statement (SPS) into a framework that places obligations on regulators to enable the delivery of the government's national outcomes.

Who can take action and when

A strengthened SPS would contain interim outcome targets as milestones on the route to the long-term targets described above on each area of focus. It would also set out a robust accountability framework that explicitly holds regulators to account for delivering against their targets. The National Audit Office could assess regulators' decisions against the outcomes defined in the SPS, supported by annual parliamentary hearings. These changes could be made at any time and, in any case, should enable changes to be in place for the next water price review.

With this national steer in place, the regulators would shift their focus to regulate outcomes in individual water catchments, rather than prescriptive inputs and outputs delivered by water companies. Granular targets will be tailored to catchments and sub-catchments, ensuring they reflect local needs, preferences and geographies.

There is a range of approaches that could be taken with regard to the institutional arrangements and the roles and responsibilities of the various oversight bodies. In any scenario, government will set the minimum standards for the sector as a whole and the regulators will translate them into local objectives.

To ensure the local objectives reflect local priorities, we propose establishing Catchment Advisory Boards (CABs), empowering local communities to provide tailored guidance to the regulators. The CABs would consider how the national standards should apply in each of the river catchments and sub-catchments in England and Wales¹ and advise the regulators on proposed outcomes for each catchment and the allocation of targets to different types of organisation (eg, water companies, land managers, local authorities and developers).

It may then also be appropriate for the regulators collectively to set up Joint Area Teams, each covering around ten catchments, to translate the advice of the CABs into legally binding targets within each catchment. In this way, the country will work towards a collective ambition for the water environment, but local areas will have the ability to go faster and potentially further if appropriate to reflect local preferences and circumstances.

Ensuring complementary government policies

The proposed model would need policies to recognise that meeting the national environmental targets relies on their integrated delivery on the ground. Policies would also reflect the need for delivery of environmental targets being rewarded alongside other societal goals, including but not limited to food production, reducing flood risk, 30% of land and water designated for nature by 2030, species abundance targets, mitigating climate change and enhancing amenity and recreational value.

In particular, Environmental Land Management Schemes (ELMS) must achieve the right incentives for farmers and land managers by:

- facilitating the transition to agricultural systems that recognise that tackling climate change and restoring nature are essential to underpinning food production in the long term
- providing a system of incentives that rewards delivery of environmental public goods in combination with private benefits delivered through a well-regulated market in environmental services.

By strengthening accountability and establishing mechanisms to develop obligations on the private sector for local delivery, this architecture would accelerate delivery of the national statutory targets under the Environment Act 2021, as already set out by the government in its Environmental Improvement Plan.

By establishing interim milestones and catchment targets, the proposed regulatory regime would create a policy framework that, over time, would harmonise economic and environmental regulation across all sectors of the economy to incentivise more efficient delivery of environmental outcomes.

Delivering results

Outcomes drive flexible delivery

As regulated entities will be held to account for delivering their share of outcomes – such as a healthy, biodiverse rivers, secure supplies of drinking water, net zero carbon – rather than inputs and outputs, they will have significant flexibility in how they operate. They will be able to pursue more innovative and sustainable solutions which are more cost-effective and deliver better environmental outcomes.

The job of the regulators will be to determine the desired outcomes, set cost allowances for achieving them and monitor and enforce their delivery. They will not seek to regulate *how* the outcomes are delivered. Once entities within the catchment have their own targets, they will have the flexibility to innovate as they see fit, taking risks to achieve cost efficiency and better long-term outcomes.

This will end the era of regulatory micro-management and liberate all those within each catchment area to do what makes sense for them. This could be through use of nature-based solutions, investments in technology, new equipment, or collaborative working with others in the catchment.

As trust builds between entities in a catchment, and as they unlock new ways of doing things collaboratively, individual organisations may decide to deliver their own outcomes through others. This would be a form of trading obligations. For example, a water company may realise that it is more efficient to pay a farmer to change their farming techniques, rather than reduce pollution itself further down the line. Outcome-based delivery would unlock new ways of working that were previously unachievable.

The opportunity to align systems (land management, water, transport etc) to maximise delivery opportunities through developing this locally based, collaborative delivery system is significant. And the potential to further integrate policy development by more effective local delivery is also possible. Alignment of land management/energy/biodiversity and transport policy has been largely constrained through the lack of an effective, local, integrated delivery means. Across future asset investment cycles, it is possible to conceive of more expansive SPSs that integrate delivery planning through the mechanisms this paper proposes.

Transparency and monitoring

This approach can only work if there is widespread trust in the measurement of the required outcomes, grounded in a robust, practical and manageable monitoring framework, recognising that the ability to monitor will improve over time.

- The regulators should set an overall framework for monitoring, with an agreed set of monitoring solutions tailored to each outcome area.
- The responsibility for monitoring will no longer belong to any individual organisation, but will instead be overseen by the regulators' Joint Area Teams, who will decide the specific monitoring solution for an individual catchment (potentially on the advice of Catchment Advisory Boards).
- While widespread use of physical monitors will be necessary, technological solutions (satellite imagery, Al and modelling) should be used to reduce the burden of monitoring.

This approach can work even more effectively if there is widespread understanding of the targets allocated to each entity and the steps needed to achieve those targets – this will enable different organisations to identify options to deliver outcomes through others if it is more efficient to do so.

We would suggest the following information is made public:

- all targets allocated to individual entities within each catchment
- to the extent practical, the specific actions being taken by those entities to deliver their targets over the short (five-year) and long-term (25-year) – while always reflecting the basic principle that each entity is held to account for the outcomes achieved rather than actions taken
- performance against the specific metrics set by the regulators to monitor progress against each outcome.

Incentives and performance

Our proposed approach will also need to be underpinned by significant reputational and financial consequences for non-compliance. Penalties should be set to capture the full impact of missing a target on the wider environment – consistent with the principle that polluters should pay for the pollution they cause. As monitoring capabilities improve and performance can be assessed in real time, there is scope to improve public confidence by applying penalties and driving remedial action more rapidly.

Finally, the model needs to align with the broader principles of incentive-based regulation. The model described builds on the fundamental tenet of the UK's approach to economic regulation – namely that organisations should be incentivised to deliver outcomes in the most efficient and effective way. That means those organisations should benefit when they deliver better outcomes and face commercial consequences when they fail.

Regulators will continue to need to set cost allowances for water companies recognising that the companies continue to operate as licensed monopolies. In determining the level of those allowances, their approach will need to evolve. The solutions for different catchments will vary significantly and the scope for comparative regulation to provide a sound basis for efficient cost levels is likely to diminish. They will instead need to rely more on company-specific information and develop new tools to assess that information – but the basic principle of setting company-specific cost allowances that companies can out-perform is likely to remain.

By establishing interim milestones and catchment targets, the proposed regulatory regime would create a policy framework that, over time, would harmonise economic and environmental regulation across all sectors of the economy to incentivise more efficient delivery of environmental outcomes.

Further detail

The current framework is no longer fit for purpose

The UK's current system of water regulation has to a large extent delivered what it set out to do. The original objectives of privatisation were to drive efficiency and environmental improvements by unlocking a wave of private capital. In the 34 years since privatisation, annual investment has almost doubled in real terms and environmental performance has improved, with reduced sewer flooding, improved beach and river quality, and lower leakage. Customers benefit from some of the highest quality drinking water in the world and pay bills that have remained largely flat in real terms for nearly twenty years.

The water and sewerage sector was set up with each of the privatised companies operating largely as a regional monopoly. Economic regulation of the companies had two main objectives: first to prevent these monopoly businesses from exploiting customers by charging high prices and delivering poor quality; and second to put in place incentives that encouraged companies to operate efficiently, removing the need for regulatory micro-management.

The model has evolved over time for multiple reasons, but it is difficult to argue today that it is achieving the right outcomes for customers and the environment. Rather than enabling companies to find the best solutions, economic regulation has become increasingly intrusive and prescriptive, focusing on the details of what companies do rather than the outcomes they should seek to achieve. For example, Wessex Water's business plan for the next price control period ran to 3,500 pages, with estimated regulation costs around £25 per customer.

The problems are not confined to economic regulation. Environmental regulation is also prescriptive and is not set up to consider value for money and wider trade-offs. Sticking with the Wessex Water example, the vast majority of their PR24 enhancement expenditure is allocated to mandatory environmental programmes. These are of course important but may not always be the best use of money, resources and delivery capabilities.

Increasing prescriptiveness is a common response to perceptions of regulatory failure but it comes at a cost: and can prevent companies from identifying the best solution to deliver desired outcomes in their local area.

Between 2025 and 2030, water and sewerage companies in England and Wales are proposing to spend \pounds 96bn – an increase of 65% on the amounts spent in the previous five years. Support payments to farmers, if maintained at current levels, will amount to c. \pounds 15bn over this period. This represents a huge investment in our future and, if aligned to the outcomes identified for each catchment, could create great benefits for every catchment in the country. There are also opportunities to take advantage of advances in technology, such as improved remote monitoring, satellite imagery and AI. This would enable recognition that every catchment faces its own unique challenges, and that local preferences and objectives differ.

A blueprint for reform

This paper sets out a vision for a new regulatory approach: one that provides a joined-up approach to the management of water catchments, drives environmental improvement at a national level, takes account of local preferences, circumstances and objectives, and enables all of the entities affecting and managing catchments to innovate and accelerate environmental improvement in a cost-effective way.

Stronger accountability

The foundation of this new, more joined-up regulatory model is stronger accountability. This starts at a national level with government imposing accountability on the regulators to deliver better outcomes and extending the debate to other sectors. This could be achieved most rapidly through reform of the water Strategic Policy Statement (SPS) into a framework that places obligations on regulators to support, incentivise and enable the delivery of the government's national outcomes. The SPS would also set out a robust accountability framework that holds regulators to account for delivering the SPS targets. The National Audit Office will assess the regulators' decisions against the outcomes defined in the SPS, supported by annual parliamentary hearings.

A strengthened SPS would contain interim outcome targets to set milestones on the route to the long-term targets. These should provide an ambitious and affordable pathway to achieving the national targets set in the Environmental

Improvement Plan. Specifically, the SPS must be explicit around the requirement for the regulators to enable, support, and incentivise delivery of these societal and environmental outcomes in the most efficient way.

National targets tailored to local circumstances

The government, taking account of the advice of the regulators, would set top level, binding national targets for environmental outcomes. At a minimum, these might include the requirements that:

- all rivers, lakes and coastal waters achieve Good Ecological Status (or better) by 2050 at the latest
- all waterbodies are sustainably abstracted, with all rivers meeting the Environmental Flow Indicator (or better) by 2050 at the latest
- there is total (100%) compliance with drinking water standards (at point of use).

The regulators will define interim outcome targets and will act as the overall regulators for water companies and other entities that have an impact on outcomes – most obviously but not only water and sewerage companies, farmers and developers. They will be responsible for enforcement to ensure compliance with target outcomes and for monitoring. They will have a strong transparency duty and make sure that all data is publicly available.

In some catchments it will be possible and desirable to go further and faster than the national baseline. The national targets should therefore represent the minimum that must be achieved. In each of the 100 catchments across England and Wales, the regulators will be able to set tougher targets that reflect local considerations, preferences and circumstances.

We suggest that the regulators do so by establishing Joint Area Teams, each responsible for around ten catchments. The Joint Area Teams will determine catchment-specific short and long-term outcomes. They will set legally binding targets for all of the entities affecting the environmental health of each catchment. They will also define the monitoring requirements for each catchment and determine responsibilities for carrying out the monitoring.

The Joint Area Teams will have a duty to take account of the advice of Catchment Advisory Boards. There will be a Board for each catchment representing local stakeholders – including, for example, environmental groups, the local water and sewerage company/companies, local authorities, farmers, developers and residents. The Catchment Advisory Boards will provide advice to the regulators on desired outcomes based on local priorities, taking account of what is achievable and at what cost. They will also provide an ongoing monitoring role, reviewing data on outcomes to update their advice over time.

A flexible approach to deliver results

Today's regulatory model was not intended to be overly prescriptive. Ofwat strives to set incentives on companies that will drive the right behaviours and efficient delivery of the services customers care about while at the same time protecting the environment.

However, in the 34 years since privatisation, the original vision of incentive regulation has to some extent been lost. Ofwat inevitably has imperfect information about company behaviour and what companies can achieve. Understandably, it has sought to correct for the information asymmetry by asking for more information and by setting increasingly prescriptive targets for companies. In the 2019 price controls, it set around 50 different detailed targets for companies to achieve. Companies submitted thousands of pages of evidence to support their business plans, but even then Ofwat found many of the business plans to be insufficient. Four companies appealed Ofwat's decisions.

The model is burdensome and bureaucratic. Companies spend much of their time thinking about regulation rather than operational performance. And regulation focuses on what companies do rather than what they achieve. It is ill-suited to addressing the environmental challenges facing the UK's waterways and coastal areas.

The new model will reverse this trend. Rather than focusing on inputs and outputs, it will hold regulated entities to account for the outcomes – with an appropriately focused outcome target such as a percentage reduction in nutrients in a particular water body to deliver good status. This will enable those entities to operate in a fundamentally different

way and has the potential to unlock two important types of action which will in turn drive improved environmental and operating performance.

First, each entity will be able to pursue more innovative solutions if those are better at delivering the outcomes it is required to achieve. Water and sewerage companies for example often have alternatives to expensive end-of-pipe solutions, including nature-based solutions, that may have lower lifetime costs and deliver better environmental outcomes. By taking advantage of these alternative opportunities, they can achieve more for less cost, benefitting both customers and the environment. Even where the current regulatory model has sought to enable this sort of flexibility it has a poor track record of driving innovation.

Second, in many cases the best way for one organisation to meet its target outcomes may be through coordinated action with others. It may be considerably cheaper and more carbon efficient for a group of farmers to reduce nutrient loading in a river than for a water company to do so. A commonly defined set of outcomes would unlock the opportunity for a water company to work with those farmers to reduce overall nutrient loading in way that was consistent with the targets for the catchment at lower cost.

This sort of coordination might well start as a series of bilateral agreements between organisations. Over time, it could evolve into something more sophisticated with more extensive trading between multiple entities and the emergence of platforms and counterparties to facilitate that trading. But that is not essential – the basic principle is that the regulatory model should unlock rather than hinder opportunities for coordination. The potential benefits are substantial.

Transparency and monitoring

For those benefits to be achievable, the regulators will need to ensure that there is a common set of outcome metrics across sectors. For different entities to coordinate effectively, they need to be able to work towards commonly understood and defined outcomes. The actual targets for outcomes such as those relating to abstraction and different types of pollution will of course be different for different entities, but they should be defined in the same way.

The metrics should also relate directly to the top level national outcomes of good ecological health, delivered through means such as sustainable abstraction, with a series of metrics below each top level outcome.

The approach to monitoring will need to recognise that:

- different types of organisation have different monitoring capabilities and types of monitoring requirement
- monitoring technology is improving and the deployment of monitors will increase significantly over time
- monitoring can draw on and analyse multiple sources of data including real-time monitors in water courses and on specific assets, randomised spot checks and satellite imagery. Modelling is already an important component of today's monitoring but, over time, it should be possible to deploy artificial intelligence to improve understanding of the data
- monitoring will need to adjust to local circumstances, albeit within a common overall framework.

The regulatory arrangements described above will provide the foundation for a robust monitoring regime – one that enables effective outcome-based regulation and that also builds trust in the steps that are being taken to improve environmental outcomes.

The regulators will set the common overall framework for monitoring. They will define the relevant metrics for each outcome and provide guidance on best practice approaches to monitoring. In this way, the regulators will establish an agreed set of monitoring solutions that can then be tailored to each local area. They will do so in accordance with two overarching principles:

• the monitoring solutions should be robust but proportionate. They should be aligned directly with the outcomes that need to be measured to drive the government's top level objectives

 monitoring will develop over time and the range of measured outcomes is likely to increase. Nevertheless, the trajectory of measurement should be as predictable as possible, and where new outcomes are measured there should be a smooth and achievable glide-path to the associated targets.

Today's approach to monitoring places a significant onus on water and sewerage companies to monitor their own activities. With a broader range of outcomes to monitor, it is likely to be appropriate for the regulators' Joint Area Teams to carry out many monitoring activities themselves, and over time this role may increase. In any event, the Area Teams will decide the monitoring solution for each individual catchment drawing on the advice of the Catchment Advisory Boards.

Monitoring of outcomes is clearly essential to ensure compliance with targets. However, it is also essential to enabling coordination between different organisations within a catchment. Transparency is particularly important. For an outcome-based approach to catchment management to work effectively, the regulators should publish at catchment level:

- all targets allocated to individual entities within each catchment
- to the extent practical, the specific actions being taken by those entities to deliver their targets over the short (five-year) and long-term (25-year)
- performance against the specific metrics to monitor progress against each outcome.

Publication of this data will enable each organisation to identify potential counterparties and improve the prospects for effective coordination. A water company will be able to identify outcomes that can more efficiently be delivered by farmers or developers and vice versa.

Full transparency has a further critical benefit in that it provides a basis to rebuild trust: trust in water and sewerage companies as they improve their performance; trust in the state of rivers, inland waters and coastal areas; and trust in the steps that are being taken to improve the natural environment. This in turn can underpin the transformation of both the operation and the reputation of the water sector.

Incentives and performance

Trust in the new approach requires not just effective monitoring but significant reputational and financial consequences for non-compliance.

In principle, penalties should be set to capture the full impact of missing a target on the wider environment – consistent with the principle that polluters should pay for the pollution they cause. In practice, simpler penalties may be necessary, at least in the short-term, but the basic premise should be that companies are strongly incentivised to achieve the outcomes they have been set.

Targets and penalties also need to reflect the fact that some solutions – especially nature-based solutions – may not enable a precise target to be hit with 100% certainty. Where there is a choice between hitting a moderate target with close to 100% certainty and a much more stretching target with 95% certainty, the more stretching target may be more appropriate but more difficult to enforce against. As the regulators develop the details of the targets and penalties, they will need to consider how to take account of these sorts of issue, wherever possible allocating risks to those best placed to manage them and encouraging rapid remedial action in the event that targets are missed.

A longer-term objective of the new regime would be to align farming subsidies under the Environmental Land Management Schemes (ELMS) with the outcome-based approach described here. The long-term goal would be to develop multi-functional landscapes that ensure that agricultural food production is delivered alongside nature recovery and action on climate change

ELMS is a critical element of the post-Brexit architecture for agriculture and the natural environment. However, to achieve the right incentives for farmers and land managers, the role of ELMS would need to be refocused over time to:

- facilitate transition to agricultural systems that integrate food production with action on climate change and delivery of environmental goods and services
- provide a system of incentives that rewards delivery of environmental public goods in combination with private benefits delivered through a well-regulated market in environmental services.

To enable this transition, ideally many of the metrics underpinning the ELMS should be the same as those that apply to other entities in a catchment. That would give farmers incentives to deliver outcomes through others where it would be more cost-effective to do so.

The economic cost of delivering the national environment targets varies significantly, both across England and between individual farmers and land managers within a local area, because each has a different opportunity cost of taking land out of food production. Farmers and land managers will have a greater incentive to deliver environmental goals alongside food production if the price they are paid reflects the value of all the environmental services supplied (including but not limited to the carbon sequestered, the biodiversity gain, the amenity and recreational value, the reduced flood risk – and not just nutrient reduction). With higher incentives, supply of land for nature recovery will increase, facilitating competition between projects and lowering the costs of delivery. This requires policies that consider how to integrate the on-ground delivery of environmental targets and their wider socio-economic implications. Well-designed incentives to realise multi-functional land use would minimise the land taken out of agricultural production as they would target less productive land and maximise the economic return to the farmer.

As with the current approach to economic regulation of the water sector, Ofwat will also need to set cost allowances for water and sewerage companies. This may become more challenging as there will be multiple ways of achieving specified outcomes, and circumstances may differ materially from one catchment to another.

At present, Ofwat sets cost allowances with reference to econometric models. These models give it a view of efficient cost levels based on what water companies can achieve. It combines the econometric results with its own assessment of company business plans. This approach has some attractions, in particular, it is evidence-based and it injects a degree of competitive pressure as companies strive to perform better than their peers.

However, it also has some significant drawbacks. Data sets are limited and it is difficult to take full account of local conditions. The need for comparability creates a risk that Ofwat regulates inputs rather than outcomes and thereby unduly restricts company decisions. Ofwat understandably wants to constrain expenditure to efficient levels, but if it fails to take account of what companies can reasonably achieve, there is a risk that some will be forced to cut expenditure below sustainable levels leading to a gradual decline in asset health.

The challenge of setting cost allowances will not disappear under an outcome-based approach. The answer is likely to be an evolution and simplification of the current regulatory model, but with a probable shift away from extensive comparative regulation. Comparative regulation may provide a backstop view of efficient costs using more traditional approaches, but as companies adopt more innovative solutions, Ofwat is likely to need to use those companies' actual costs as the best predictor of future costs. Retaining the original objectives of incentive-based regulation, cost allowances would be set so that companies could benefit from more efficient delivery in the short-term and pass on an increasing share of the benefits to customers in the medium-term.

Concluding remarks

The new model described here is a radical departure from today's narrow and fragmented regulatory model. It would refocus the regulation of the water and sewerage sector on transforming the condition of the UK's waterways and coastal areas. It would shift regulation towards catchment-based approaches to support cheaper, more innovative, more collaborative projects that more accurately reflect local priorities. It would also enable all entities that contribute to river, lake and sea health to adopt innovative approaches and cooperate effectively with the shared goal of delivering positive environmental outcomes.

Working in partnership, we have a real opportunity to make transformational change to ensure the future health and biodiversity of water and nature: change that will reap rewards for generations.

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Advisory Panel: Chair - Shaun Spiers (Green Alliance), Alastair Chisholm (CIWEM), Martin Hurst (Sustainability First), Joanna Lewis (Wiltshire Wildlife Trust), Mark Lloyd (Rivers Trust) Ali Morse (The Wildlife Trusts), Nik Perepelov (RSPB), Guy Thompson and Matt Greenfield (Wessex Water).

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