



River Basin Management Plans (RBMPs)

Estuarine and Coastal Information Pack

Date: March 2023

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We help people and wildlife adapt to climate change and reduce its impacts, including flooding, drought, sea level rise and coastal erosion.

We improve the quality of our water, land and air by tackling pollution. We work with businesses to help them comply with environmental regulations. A healthy and diverse environment enhances people's lives and contributes to economic growth.

We can't do this alone. We work as part of the Defra group (Department for Environment, Food & Rural Affairs), with the rest of government, local councils, businesses, civil society groups and local communities to create a better place for people and wildlife.

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Contents

Executive summary	4
1. Introduction	5
1.1. River Basin Management Plans.....	5
1.2. RBMP Update.....	5
2. Estuaries and Coasts (E&C)	7
2.1. Current state of E&C waterbodies	7
2.2. Potential PoMs.....	7
2.3. Themes.....	9
Appendix I: Estuarine and Coastal (E&C and Catchment to Coast (C2C) Potential Measures (PoMs)	25
Appendix II: Summary of Recommendations.....	35
References	Error! Bookmark not defined.

Executive summary

The updated River Basin Management Plans (RBMPs) were published in December 2022 under the Water Environment (England and Wales) Regulations 2017, which seeks to establish an integrated approach to the protection and sustainable use of the water environment.

During previous RBMP consultations, stakeholders highlighted an insufficient focus on estuaries and coasts (E&C) within RBMPs generally. This document has therefore been produced to help signpost and provide further guidance to stakeholders with a specific interest in the E&C environment. It focusses on opportunities or suggested mechanisms to support the delivery of the potential measures of relevance to E&C, either through direct actions within the E&C environment, or indirectly, by taking actions upstream and applying a 'catchment to coast' approach.

By using this supporting document, it is hoped that E&C stakeholders will have more clarity as to what the specific E&C measures are and how they can contribute to ensure our water environment, from source to sea, and catchment to coast, is protected, enhanced, and restored.

1. Introduction

1.1. River Basin Management Plans

The Water Environment (England and Wales) Regulations 2017 (WER), previously referred to as the Water Framework Directive (WFD), seek to establish an integrated approach to the protection and sustainable use of the water environment.

Under the WER, a River Basin Management Plan (RBMP) must be developed for each river basin district (RBD). RBMPs describe the framework used to protect and improve the quality of waters in each RBD.

A river basin is the area of land from which all surface water run-off flows through a sequence of streams, rivers, and possibly lakes, into the sea at a single river mouth or estuary. A RBD includes the area of land and sea made up of one or more neighbouring river basins together, with their associated groundwaters and coastal waters. The ecological status of RBDs is measured from source to sea and out to 1 nautical mile (nm) from the coast, and out to 12 nm when considering chemical status.

Combined, RBMPs are the statutory strategic plans for water in England.

The aim of the RBMPs is to enhance nature and the natural water assets that are the foundation of everyone's wealth, health and wellbeing, and the things people value, including culture and wildlife.

1.2. RBMP Update

As per the requirements of the WER, the RBMPs have recently been reviewed and subject to a series of public consultations as part of their 6-year update. The [updated RBMPs](#) were published in December 2022.

As part of the RBMP update, a set of Programme of Measures (PoMs) has been finalised. Through the public consultation, these measures were identified as important actions that will help achieve the aims of the RBMPs.

Planned PoMs are actions that are fully funded and have a mechanism for delivery as part of the next 6-year RBMP cycle (i.e., delivery by 2027). Some PoMs are RBD specific, whilst others are more widely applicable and are to be progressed at a national level.

[Potential PoMs](#) are the additional measures also identified as being of importance, but which do not currently have funding and/or a mechanism for delivery. These are further divided by those that may be delivered "potentially before 2027", or "likely after 2027".

To help navigate the RBMPs (including a national summary of Planned PoMs), please see the [user guide to accessing information in the river basin management plans](#). This helps

different types of users access the RBMP information relevant to them and includes a section on estuaries and coasts (E&C).

During previous RBMP consultations, stakeholders highlighted an insufficient focus on E&C within RBMPs generally. In addition to the outputs of the recently published RBMPs, this document has been produced in an effort to help signpost and provide further guidance to stakeholders with a specific interest in the E&C environment, focussing on opportunities or suggested mechanisms to support the delivery of the potential measures of relevance to E&C, either through direct actions within the E&C environment, or indirectly, by taking actions upstream and applying a 'catchment to coast' approach.

2. Estuaries and Coasts (E&C)

2.1. Current state of E&C waterbodies

A legal target set out in the WER states that all waterbodies should be in Good Ecological and Chemical Status by 2027.

Of all E&C waters assessed in our RBMPs, only 19% estuarine and 45% coastal achieved Good Ecological Status in 2021 (see

Table 1).

Table 1: Ecological status of transitional (estuarine) and coastal waterbodies in England from 2019 WER (WFD) Classifications

Water Bodies	High	Good	Moderate	Poor	Bad	Grand Total
Transitional	0	20	75	4	5	104
Coastal	0	28	33	1	0	62
Grand Total	0	48	108	5	5	166

All waters failed to achieve Good Chemical Status in 2019. This apparent step change in chemical status is primarily due to changes in the methods used since the previous 2015 RBMP assessment, thereby allowing a more accurate measurement of a wider range of persistent and bio-accumulative substances.

There is, however, an exemption for a small number of persistent chemicals known as ubiquitous, persistent, bio-accumulative, toxic (uPBT) substances. This exemption is set out in the WER on account of the longevity of these substances in the environment and is fully compliant with the WER.

2.2. Potential PoMs

The Potential PoMs identified through the RBMP consultation process cover the entirety of RBDs from Catchment to Coast (C2C). Consequently, the detail of individual measures and their relevance to E&C is variable.

To provide clearer guidance for E&C stakeholders, a subjective review of the Potential PoMs was used to identify those measures that are considered more likely to influence E&C and were further classified as:

- 'C2C', for actions that could be undertaken throughout a catchment to improve the condition of the associated downstream E&C environment (e.g., improvements to water quality). This may still include actions that are undertaken within the E&C environment itself; or

- 'E&C', for actions that are more focussed toward delivery within an E&C environment (e.g., E&C habitat restoration plans).

A total of 62 specific E&C or C2C Potential PoMs are presented in [Appendix I](#) and represent a subset of the full list of Potential PoMs. Please note that as the review was subjective, the list in Appendix I is not exhaustive of all measures that may influence E&C. For a more complete picture of measures, it is recommended that readers familiarise themselves with the full list of Potential PoMs and other outputs from the RBMP update.

The E&C Potential PoMs have been grouped into themes and where sufficient details were provided through the consultation, these are discussed within Section 2.3. Details or examples of existing or potential actions and relevant funding opportunities that are most relevant to the delivery of each group of E&C Potential PoMs are provided and collated in [Appendix II](#).

The aim of this report is to provide E&C stakeholders with:

- A summary of E&C and C2C measures that may be of interest;
- Examples of future work or work already being carried out to support some of the measures, including useful links to guidance where available;
- Examples of drivers that could be used to seek funding and help embed the potential measures into future planning and policy; and
- Recommendations for stakeholders to take forward if relevant.

With this information, it is hoped that stakeholders will identify opportunities to collaborate, seek funding and help deliver some of the potential measures identified through the RBMP consultation.

It should be noted that for many measures, the lack of current focus means that no clear targets or defined measures of 'success' are currently provided, which can make the identification and evaluation of future actions difficult. Consequently, in some instances, it may be more appropriate if the delivery of Potential PoMs is focussed on the development of well-defined targets to include as Planned PoMs in the 2027 RBMP update.

2.3. Themes

The themes discussed in this section are as follows:

- [Water Quality](#)
- [Restoration](#)
- [Naturalness and Nature-based Solutions \(NbS\)](#)
- [Sediment Management](#)
- [Ecosystem Services](#)
- [Funding](#)
- [Fisheries](#)
- [Citizen Science and Education](#)
- [Strategic Co-ordination](#)

2.3.1. Water Quality

Potential PoMs 1 – 26 ([Appendix I](#)).

Measures relating to water quality were varied and covered many secondary themes, including, but not limited to:

- Working with **shellfish industry and aquaculture** to communicate and manage water quality as part of sustainable development (e.g., develop new methods for improving water quality, such as restoring 'non-food use' filter feeding shellfish);
- Work with ports and harbours to tackle water quality issues within E&C environments, on impacts originating both within E&C and across catchments where impact pathways identify key interventions;
- Monitor, research and manage **plastics** and their impact on the environment across catchments, including the development of methods for plastic capture and removal;
- Identify **pollution** 'hot spots' in aquatic systems to help develop and deliver key interventions, as well as managing new and emergent contaminants;
- Develop and deliver actions to address the impact of **combined sewage overflows (CSO's)** and better understand the potential future impacts of changes in rainfall due to climate change (e.g., actions identified by the Defra Storm Overflows Task Force);
- Develop nutrient trading schemes or similar mechanisms to incentivise the removal of nutrients and reduce levels of **eutrophication** (e.g., restoration of habitats such as reedbeds through 'integrated constructed wetlands at source points');
- Improve our understanding of **sediment quality** and impacts associated with the remobilisation of contaminants into the water column during disturbance (e.g., dredging); and
- Public outreach and engagement to help people better understand water quality issues and how society can help across catchments (e.g., water use, waste management, citizen science, etc.).

Water quality is one of the key underpinning factors influencing the health of aquatic systems such as E&C, actions to improve water quality across catchments are fundamentally required if efforts to support E&C recovery and restoration are to succeed.

Due to the wide variety of issues, there will be a number of potential actions, opportunities and collaborations dependent on the measures of interest or focus. One of the most relevant opportunities for addressing water quality issues across catchments, is considered to be engagement with the water industry via The Water Services Regulation Authority's (Ofwat) 2024 Price Review (PR24) and the associated "Water Industry Natural Environment Programme (WINEP)" (Box 1).

More specifically, but a topic that is frequently raised as a concern, are the increasing issues with water quality associated with storm overflows. To address this, Defra set up the Storm Overflow Task Force, which developed a key [evidence document on storm overflows](#). This was used to inform the storm overflow section of the Environment Act 2021 and from that the [Government Storm Overflow Reduction Plan](#) (August 2022). Chapter 3 of this plan sets out actions that Government needs to take on top of the significant actions already taken to tackle storm overflows. Chapter 4 sets out actions that we can all take, and which may inform actions to address relevant Potential PoMs.

For further actions, please see the [RBMP topic action plans](#) in relation to water quality issues (namely, chemicals and plastics, sewage discharges and storm overflows, and agriculture).

Box 1: Water Industry Natural Environment Programme (WINEP)

The Price Review is a 5 yearly framework, managed by Ofwat, which sets the price, services, and incentives for the water industry. The [2024 Price Review \(PR24\)](#) is currently in development and will inform delivery by the water industry during the subsequent period 2025 – 2030.

Over the same period, a proportion of the money raised by water companies during that time (set by the Price Review) is used specifically to design, develop and deliver the “[Water Industry Natural Environment Programme \(WINEP\)](#)”. WINEP aims enable better environmental outcomes, whilst planning to meet future water challenges, to achieve the Government’s 25 Year Environment Plan (25YEP) aims of “*clean and plentiful water*”.

In developing business plans and associated projects to be undertaken via WINEP, water companies take into account a series of themed guidance documents, which help them develop actions with a particular focus (e.g., guidance on shellfish waters, designated sites, the 25YEP).

Most guidance developed as part of WINEP has a 3-tiered approach, from the broader Tier 1 Outcomes to Tier 2 Goals, to the more detailed Tier 3 Outputs. Actions developed to contribute towards achieving the aims of each theme are also classified:

- Prevent environmental deterioration (“No Deterioration (ND)”);
- Investigative, research or feasibility type studies (“Investigative (INV)”); and
- Undertake practical actions or measures (“Improvement (IMP)”).

The development of business plans and associated projects is ongoing now, with delivery starting in 2025. This framework therefore provides potential opportunities and funding to strategically develop and deliver E&C Potential PoMs across catchments over this 5-year period, as well as a mechanism to develop an appropriate evidence base and need for further actions of relevance to E&C in both the next RBMP update (2027) and subsequent Price Review (2029) and associated WINEP delivery between 2030 – 2035.

Water Quality: It is recommended that...

E&C stakeholders working in partnership, to engage with water companies through PR24 and associated WINEP delivery period (2025 – 2030), to strategically develop and deliver E&C and C2C Potential PoMs that are of relevance to water quality issues within their respective catchments.

2.3.2. Restoration

Potential PoMs 27 – 29 ([Appendix I](#)).

Measures relating to restoration primarily focussed on:

- Developing E&C restoration plans to support “Good Ecological Status” under the WER. This measure can be further classified as taking actions that support an overall improvement in environmental condition via two pathways:
 1. **Passive Recovery:** the reduction or removal of existing pressures to facilitate the natural recovery of a habitat, species or wider system (e.g., improving water quality, preventing direct disturbance (e.g., bottom trawling and vessel anchoring), etc.); and
 2. **Active Restoration:** where a habitat, species or wider system is unable to naturally recover or where recovery could be enabled or accelerated, active interventions may be necessary or beneficial (e.g., planting of seagrass, managed realignment (MR) or the laying of cultch material for oyster, etc.).

From a global to a local scale, across terrestrial and aquatic systems, there is increasing interest in environmental recovery and restoration and the role it can play in addressing the twin crises of climate change and loss of biodiversity. As well as communications, partnerships and practical delivery, this interest is reflected in changes in policy, the development of restoration targets and financial mechanisms to support delivery.

In the UK for example, the 25YEP aims to protect and recover nature and will “*develop a strategy for nature to tackle biodiversity loss, develop a Nature Recovery Network (NRN) to complement and connect our best wildlife sites, and provide opportunities for species conservation and the reintroduction of native species*”.

Under the subsequent Environment Act (2021), multiple mechanisms will support the delivery of environmental recovery and restoration. For example:

- ‘Responsible Authorities’ (appointed by Defra) will be required to develop Local Nature Recovery Strategies (LNRS), which combined, will form a NRN; and
- Biodiversity Net Gain (BNG) will require all planning permissions granted in England (with a few exemptions) to achieve at least a 10% uplift in biodiversity as part of their permitted development.

Under the Agriculture Act (2020), Environmental Land Management schemes (ELMs) will also provide financial incentives and reward land management practices that deliver the 25YEP goals, namely:

1. Clean and plentiful water;
2. Clean air;
3. Thriving plants and wildlife;
4. Protection from environmental hazards;
5. Reduction of and adaptation to climate change; and
6. Beauty, heritage and engagement with the environment.

The requirements of the Environment Act extend down to Mean Low Water (MLW) and will therefore be of relevance to a number of important E&C habitats, such as sand dunes, vegetated shingle, saline lagoons, saltmarsh and intertidal mudflats and seagrass meadows.

More specific to E&C restoration, including the shallow subtidal, and the delivery of the Potential PoMs is the E&C restoration initiative “[Restoring Meadow, Marsh and Reef \(ReMeMaRe\)](#)” (pronounced “re-memory”). Further details are provided in Box 2.

Box 2: Restoring Meadow, Marsh and Reef (ReMeMaRe)

The ReMeMaRe partnership is comprised of representatives from eNGO, coastal partnership groups, academic, industry and regulatory organisations, each with a statutory remit, interest or focus on habitat creation in the E&C environment.



The shared vision of ReMeMaRe is for “*restored estuarine and coastal (E&C) habitats that benefit people and nature*”.

The ReMeMaRe initiative is currently developing a national E&C restoration strategy that will support seascape-scale restoration, with an initial focus on the three priority habitats that make up the acronym: seagrass meadows, saltmarshes and European native oyster beds and reefs.

The initiative is so called, because it is about remembering how much of these habitats have been lost over the centuries and keeping this in mind when setting restoration targets. In doing so, ReMeMaRe aims to go beyond previous conservation and protection efforts and address what is known as baseline shift, which in this context, are the imperceptible changes in the environmental condition of the baseline that typically occur over multigenerational time frames.

To date, ReMeMaRe:

- Has produced a series of Restoration Handbooks, providing practical guidance on how to restore the priority habitats, as well as an additional handbook on how to restore E&C habitats using dredged sediments (see [Sediment Management](#));
- Is currently developing Restoration Potential Maps, providing guidance on where restoration might be successful; and

- Has and continues to produce maps and data layers that may inform and support the development of E&C restoration plans, such as national seagrass extent, saltmarsh extent and zonation and historic native oyster extent.

Where relevant, ReMeMaRe outputs are intended to help inform and support relevant plans and policies, such as LNRS and Shoreline Management Plans (SMPs), in order to embed E&C restoration more widely.

It is also recognised that to achieve the aims of ReMeMaRe, the local place-based delivery of E&C restoration is required. Accordingly, it is anticipated that coastal partnerships comprised of local E&C stakeholders will provide the best mechanism for delivery, with ReMeMaRe supporting delivery through actions at a national level (e.g., help address barriers to E&C restoration that are common nationally).

Further information can be found on the [ReMeMaRe website](#).

Restoration: It is recommended that...

E&C stakeholders, working in partnership, engage with ReMeMaRe to support the development and delivery of local E&C restoration strategies.

E&C stakeholders, working in partnership with others across their relevant catchments, identify key actions through the catchment that will support the passive recovery of E&C environments and create conditions that are more likely to support successful active E&C restoration.

2.3.3. Naturalness and Nature-based Solutions (NbS)

Potential PoMs 30 – 36 ([Appendix I](#)).

Measures relating to NbS primarily focus on:

- Working with partners to revise policies to improve managing uncertainty to better support implementation of Nature-based Solutions (NbS);
- Addressing physical modification by working with partners to improve planning mechanisms (e.g., Local Nature Recovery Strategies (LNRS), spatial planning, regulation, flood risk planning, water industry plans etc.);
- Developing a comprehensive approach to hydrological management of wetland sites informed by natural ecosystem function, land use constraints, pressures from climate change, etc; and
- Improving our understanding of how ‘working with natural processes’ and Natural Flood Management (NFM) can help restore our catchments and coasts and manage natural hazards including flooding and coastal risks.

The Environment Agency is commencing a new mainstreaming programme to embed NFM into mainstream FCRM delivery, following completion of the Defra funded £15 million programme. The NFM Mainstreaming Programme aims include developing a natural asset database, creating a digital hub, providing training and guidance materials for project teams and streamlining the development of low value NFM investments.

2.3.4. Sediment Management

Potential PoMs 37 – 40 ([Appendix I](#)).

Measures relating to sediment management primarily focus on:

- Recognising sediments as a resource and their fundamental importance to environmental health;
- Managing sediments across catchments (e.g., associated with soil health and reducing riverine inputs and associated impacts on water quality and clarity) and within E&C (e.g., opportunities for the beneficial use of dredged sediments (BUDS)); and
- In relation to dredging activities, identifying areas of contaminated sediment and developing options for managing this sediment.

Although sediments are mentioned, the WER do not specifically address sediment management issues. Recognising this gap, in 2020, guidance was developed to inspire better inclusion of sediment measures in future RBMP updates, titled “[Integrated Sediment Management Guidelines: Good practices in the context of the Water Framework Directive](#)” (Box 3). This guidance supports the delivery of actions that address all aspects of the current Potential PoMs relating to sediment management.

Box 3: Integrated sediment management guidelines and good practices in the context of the Water Framework Directive

The Integrated Sediment Management Guidelines provides details on why and how both sediment quantity and quality should be managed in the context of the WER, in order to help achieve the overall objectives of the WER themselves. These are described under the following chapters:

- 1. Sediment dynamics from the headwaters to the sea:** an introductory chapter, describing the main concepts needed to understand the role of sediments in aquatic ecosystems and to fulfil the objectives of the WER (e.g., processes of sediment transport at the catchment scale and the importance of sediment for aquatic ecosystems);
- 2. Sediment quantity:** information and tools to assess and address potential pressures and impacts of different types of pressures on sediment quantity, (e.g., sediment supply and sediment requirements to support natural processes and characteristic habitats);
- 3. Sediment contamination:** information and tools to assess and address potential pressures related to sediment contamination;
- 4. Integrated sediment management planning:** aims at helping those responsible for water management to develop and implement integrated sediment management planning in view of addressing the pressures on sediment quantity and contamination at the most appropriate scale, in the context of the River Basin Management Plans (RBMP); and
- 5.** Cases studies related to sediment management in Europe are also summarised in the main text and detailed in Annex A.

Across the above chapters, guidance on the development of targeted measures, monitoring and assessment techniques, useful information and imagery to support communications and other recommendations for sediment management in the context of WER are provided.

More specifically, “*Sediment Resource Management Plans*” are referenced in the context of the management and beneficial use of dredged sediment (BUDS). BUDS is defined as “*using dredged material in a manner that will benefit society and the natural environment*” (Manning et al., 2021). More details in the context of E&C restoration are provided in the “[Restoring Estuarine and Coastal Habitats with Dredged Sediment](#)”. A known barrier to the delivery of BUDS, is the current lack of strategic co-ordination of dredged sediment (i.e., those dredging) (supply) and those that could benefit from additional sediment (e.g., habitat restoration) (demand). To address this barrier, a UK Sediment Resource Database (SRD) is under development (Box 4).

Box 4: Sediment Resource Database (SRD)

A collaboration between the Beneficial Use Working Group (BUWG)¹, the UK Central Dredging Association (CEDA) and others, representing environmental Non-Governmental Organisations (eNGOs), coastal partnerships, industry and regulatory organisations, are developing a UK Sediment Resource Database (SRD).

The SRD will form a central online and publicly accessible forum, that will provide guidance and supporting information for BUDS at a national level, as well as hosting regional specific BUDS strategies, such as that developed by the [Solent BUDS Forum](#).

In doing so, the SRD aims to support the future co-ordination of dredged sediment supply and demand, enabling the development and subsequent delivery of a pipeline of beneficial use projects to support E&C restoration and other beneficial use and sediment management opportunities.

The SRD is currently scheduled for publication by 31/03/2023 and will be routinely updated thereafter. It will provide details on how regional strategies have been developed, which may be replicated by similar stakeholder groups and regions in order to achieve the aims of the Potential PoMs, RBMPs and wider WER objectives.

Sediment Management: It is recommended that...

E&C stakeholders, working in partnership with others across their relevant catchments, use this guidance to develop specific targets and/or actions for inclusion as Planned PoMs in the 2027 RBMP updates. These may be RBD specific, or relevant at a national level.

E&C stakeholders interested in developing BUDS strategies, engage with the SRD once published (a dedicated contact point will be provided on the website).

¹ The BUWG is currently chaired under the “Restoring Meadow, Marsh and Reef (ReMeMaRe)” initiative (pronounced “Re-memory”) (see [Restoration](#) for more details). Accordingly, the SRD will aim to directly support E&C habitat restoration and any SRD queries can be sent via the ReMeMaRe email address.

2.3.5. Ecosystem Services

Potential PoMs 41 – 42 ([Appendix I](#)).

Measures relating to ecosystem services primarily focus on:

- Mapping the distribution of carbon stocks from C2C, including the identification of carbon sink ‘hotspots’ may particularly benefit from protection or support future strategic planning; and
- Reviewing and improving approaches to assessing the benefits of measures to protect and enhance the water environment. This includes exploring ways to include additional wider benefits such as improved health and wellbeing.

The Environment Agency maps saltmarsh and seagrass extent and condition as part of its statutory monitoring programme and is working with partners such as the UK Centre for Ecology and Hydrology (UKCEH) to improve the evidence base for key ecosystem services such as carbon sequestration. The EA is also working to fill gaps in our knowledge around nutrient removal by coastal habitats, to better inform our management of water quality in estuaries and coasts.

Broader work on natural capital metrics and strategic monitoring, which can provide the evidence required for natural capital approaches, is being undertaken through the Natural Capital Ecosystem Assessment Programme (NCEAP) (Box 5).

Natural capital approaches are being used to support delivery of NCEAP projects, but are also being used to inform other functions, such as Flood and Coastal Risk Management (FCRM) strategies and the effectiveness of natural flood management. Incorporating natural capital will facilitate *“prioritising measures and directing resources from catchment to coast to maximise the benefits”*.

Box 5: Natural Capital Ecosystem Assessment Programme (NCEAP)

There are big gaps in our marine evidence base which do not match our ambitions. We know that our ocean and coastal communities are busy interconnected spaces, and yet we traditionally haven't managed these in a holistic way. We need the right information to consider connections, dependencies, and trade-offs in the marine environment. A natural capital approach helps describe what we have in the marine environment (our assets) and their condition. It can also tell us what services our assets provide, how much our marine environment is worth to different stakeholders and what additional services and benefits can be provided when appropriately managed.

We are currently working on a [Natural Capital Ecosystem Assessment Programme](#) (NCEAP) that aims to gather evidence on our natural assets across England's terrestrial and marine environment and how that evidence can be used to inform decisions. The programme will run over the next 2 years and outputs will help support estuarine and coastal measures within the next round of RBMPs. This approach will also help us to prioritise investment for enhancing our natural environment, balancing economic growth with nature's recovery.

We want our E&C stakeholders to understand the benefits their local E&C environment provides for people and nature, and explore ways to help us identify, quantify, and evaluate the benefits of these natural assets.



2.3.6. Funding

Potential PoMs 43 – 44 ([Appendix I](#)).

Measures relating to funding primarily focus on:

- Exploring the development of an E&C ecosystem resilience fund; and
- Better alignment of funding at the appropriate spatial scale, including support for scaling up investment for nature-based solutions.

We have secured funding for the Championing Coastal Coordination (3Cs) Initiative (described further in Section 2.3.9). We are also undertaking a strategic review of the funding landscape – through our EA Funding and Investment Plan – which will help consider new, more timely funding, finance, and blended investment options to deliver river basin management plan actions over the long-term.

In the recently published [Environmental Improvement Plan 2023](#), the Government has set a target to raise at least £500 million in private finance to support nature's recovery every year by 2027 in England, rising to more than £1 billion by 2030. Government will set out more detail on how they will support a step-change in investment from the private sector in the forthcoming update to the Green Finance Strategy. It is possible that funding raised through this channel could be used to support RBMP measures going forward.

2.3.7. Fisheries

Potential PoMs 45 – 50 ([Appendix I](#)).

Measures relating to fisheries primarily focus on:

- Migratory fish, improving connectivity of migratory routes and strengthening protection and monitoring, particularly in relation to climate change;
- Expansion of sustainable aquaculture (e.g., shellfish and seaweed cultivation, to improve water quality, provide food or support restoration); and
- Good practice use of fishing gear.

To support the measure around migratory fish, we are working collaboratively with The Rivers Trust to pilot the use of their fish monitoring surveys on several of the key salmon rivers in England, including incorporation of this data into our fish monitoring database. This additional data will complement our own fish monitoring programme, increasing the number of sites and range of year classes monitored within a catchment. This will help us to better identify pressures affecting salmon stocks, the actions needed to address these pressures and where improvements in salmon numbers are being seen as a result of actions being taken.

Regarding the expansion of sustainable aquaculture, responses were primarily associated with expanding shellfisheries to provide food and to restore ecosystem services relating to improvements in water quality. The latter is also linked to restoration and existing work looking to identify opportunities to expand and support the upscaling of restoration around the English coastline. Due to historic losses, particularly for seagrass and native oyster, there is limited 'stock' available (e.g., seed and seedlings, spat and cultch) to restore larger areas, so aquaculture facilities are needed to support active restoration. Accordingly, this work will provide a better understanding of existing facilities and opportunities for 'best practice' and/or developing a co-ordinated approach to managing such facilities moving forward. As well as supporting restoration, such facilities may create opportunities to support job creation, research and community outreach and engagement. The outputs from this work may be used to inform local actions that support PoMs of relevance to both fisheries and other themes.

2.3.8. Citizen Science and Education

Potential PoMs 51 – 55 ([Appendix I](#)).

Measures relating to citizen science and education are primarily focussed on:

- Development of citizen science opportunities, including access to and use of information and data collected;
- Education and environmental literacy campaigns to help raise awareness of the benefits of and pressures on our E&C habitats, including actions individuals, organisations or sectors can take to protect them; and
- Working with the industries and private companies (e.g., golf courses) to highlight the benefits of coastal habitat management for wildlife.

The Environment Agency have recently launched an innovation project- Supporting Citizen Science, which will run until March 2025. We know that citizen Science initiatives provide invaluable data, which complements our own Environment Agency monitoring and assessment work and enables us to develop a greater level of engagement with our external partners.

This innovation project will be a learning exercise to explore, assess, and work with established and emerging citizen science initiatives across the country, prioritising the water environment. This project will in part also support the Ofwat-funded three-year project, [CaSTCo](#), which is administered by United Utilities and the Rivers Trust. Although we are not a financial partner in CaSTCo we are providing advice and guidance and will benefit from cross-project learning.

The ambition of this project is to create a coherent and consistent approach to citizen science across the Environment Agency, providing internal and external guidance. This will support further collaboration with our external partners and enthusiastic citizen scientists to expand the available data and evidence used to inform decisions, ensuring consistency and quality across the board.

As estuarine and coastal stakeholders, you may be partnered to some of the citizen science initiatives reviewed within the project or be interested in contributing. Each Environment Agency operational area will have a citizen science lead in post who will be working through our catchment partnerships and stakeholder networks to support joint monitoring plans and share guidance as it is produced.

Box 6 provides one example of how we have worked in partnership to produce educational and awareness resources to support improvements across aquatic environments. This is a great example of what can be achieved through collaboration, and we would welcome future opportunities to work with partners and provide information that can empower communities.

Acknowledging the role that citizen science could play in helping to monitor the state of our E&C environment and fill evidence gaps, we are looking to develop future opportunities. For example, assessing natural capital assets in England as part of the Natural Capital and Ecosystem Assessment Programme (NCEAP) (details provided under Ecosystem Services, in Section 2.3.5).

Box 6: Education and Awareness: Marine Waste Guidance

The EA Plastics and Sustainability team's new advice leaflet sets out how port and harbour managers can protect marine life by responsibly [managing resources and waste from fishing vessels](#). The guidance aims to help improve plastic and hazardous waste management and reduce plastic entering the marine environment.

It provides information on waste storage and disposal with a specific focus on fishing nets, pots, oils and anti-foul products. There is also a printable hazardous waste guide and a poster inviting fishing community members to pledge their support through actions to protect the ocean. This includes keeping on-board equipment to collect lost gear.



The materials were funded by the [Interreg Preventing Plastic Pollution](#) project, a partnership of 18 organisations across England and France. The partnership aims to reduce the impact of plastic pollution in river and marine environments.

As E&C stakeholders, if you are aware of environmental topics from C2C that need to be highlighted through educational campaigns or citizen science, then please get in touch (see recommendation below).

Citizen Science: It is recommended that...

If you are interested in developing your own citizen science project to monitor your local E&C environment, we recommend using online documents available that provide guidance on how to establish projects (e.g., [Citizen Science Best Practice Guide](#)). To ensure that the project and associated data being collected can be used in the most impactful way, we also recommend discussing your ideas with relevant organisations. Accordingly, if your project relates to the RBMP potential PoMs in the E&C context, please contact the rbmpprogramme@environment-agency.gov.uk. (please reference “FAO Estuarine and Coastal Planning (ECP) team: RBMP Citizen Science” in the subject line).

2.3.9. Strategic Co-ordination

Potential PoMs 56 – 63 ([Appendix I](#)).

Measures relating to Strategic Coordination primarily focus on:

- Working with partners to increase participation from across catchment communities from C2C;
- Strengthening the C2C approach and scaling up implementation of NbS;
- Improved co-ordination of agricultural regulation, advice and incentives to support land managers across catchments; and
- Developing ways of working with communities and partners that provides a shared evidence base suitable for supporting decision making.

A national framework for E&C partnerships to support delivery and management at the local and area level was requested previously through the challenges and choices consultation. We have secured funding for the Championing Coastal Coordination (3Cs) initiative (Box 7) and are working with E&C partners to explore how we can prioritise the funding. This includes developing a national framework for coastal coordination.

Box 7: Championing Coastal Coordination



To help support our partners to facilitate E&C restoration and recovery for resilience, we are investing £1.8m in 3Cs initiative from the Water Environment Improvement Fund (WEIF) over the next 3 years, with 20 projects receiving funding in 2022/23. These projects include an innovative mix of local citizen science projects, on the ground restoration and wider strategic work, all aimed at bringing a more co-ordinated approach to coastal management.

We are also seeking match funding from other partners with an interest in the 3Cs programme to help us build greater ambition and empower coastal communities. Matched funding will bring more locally owned plans to life through local empowerment and capacity building with a focus on restoration and regeneration of estuarine and coastal areas for a more resilient future. Please contact us if you would like to match our funding.

Appendix I: Estuarine and Coastal (E&C and Catchment to Coast (C2C) Potential Measures (PoMs)

Theme	PoM Number	Category	Potential Measure (or Mechanism)
Water Quality	1	Additional measures potentially before 2027	Develop effective engagement route with shellfish industry and aquaculture sector to collaborate on innovative solutions to manage water quality and increase sustainable production. Improved collaboration with shellfish industry, water companies and other relevant stakeholders.
	2	Additional measures potentially before 2027	Urban drainage. Work with National Highways and catchment partnerships to investigate use of Nature-based Solutions (NbS) including artificial wetlands to intercept and settle urban drainage to reduce plastic pollution.
	3	Additional measures potentially before 2027	More public engagement is needed so people are better aware of the impact of chemicals on the environment. Action from catchment to coast on how society can help manage these impacts by more targeted use and better disposal. Build on and promote successful engagement strategies, such as the 'yellow fish scheme'. This is where yellow fish are painted next to drains which lead directly to rivers without sewage treatment. Expand public awareness of chemical and plastics environmental impacts through an Integrated Chemical strategy - emphasising what is flushed down the toilet today is affecting our seas in the days, weeks and years in the future.
	4	Potential additional measures likely after 2027	Improved plastic capture and collection with Ports sector, water industry and catchment partnership members using filtering and other collection devices.
	5	Potential additional measures likely after 2027	Marine litter monitoring and assessments. Influence marine litter and plastics in the Marine Programme of Measures (PoMs) national strategy and catchment actions.

Theme	PoM Number	Category	Potential Measure (or Mechanism)
Water Quality	6	Potential additional measures likely after 2027	Understanding sources, pathways and impacts of plastics in environment by working with funding bodies and leading academics and influencing research spend.
	7	Potential additional measures likely after 2027	Work with partners to explore how to improve surveillance monitoring for micro-plastics.
	8	Additional measures potentially before 2027	Education campaign - targeting shipping, ports, harbours and fishing industry including plastic waste and nets etc. To relay concerns and explore solutions around shipping/fishing industry and their fuel, chemical and sewage management, and ghost net issue.
	9	Additional measures potentially before 2028	Work with the Marine Coastguard Agency (who lead on engagement of this issue with the International Marine Organization) and Government partners to explore the emerging issue of discharges from open loop scrubbers (exhaust systems fitted to shipping to remove sulphur dioxide) being released to water, and the potential legislative or voluntary control options.
	10	Potential additional measures likely after 2027	Work with the Ports Sector, Harbour Authorities and Maritime Coastguard Agency to explore what enforcement or voluntary measures could be put in place to tackle increasing issues of pollution in harbours and ports from diesel spills, including from fuel barges and bunkering, and plastic pollution.
	11	Potential additional measures likely after 2027	Explore mechanisms to create water quality habitat buffer zones needed around sewage treatment works upstream of sensitive features (e.g., oysters and freshwater pearl mussels).
	12	Additional measures potentially before 2027	Explore how to close the knowledge gap in relation to sediment pathway for persistent organic pollutants, mercury and ubiquitous persistent, bio accumulative and toxic chemicals.
	13	Additional measures potentially before 2027	Defra Storm Overflows Task Force to inform Price Review 2019 and Price Review 2024 schemes.

Theme	PoM Number	Category	Potential Measure (or Mechanism)
<u>Water Quality</u>	14	Additional measures potentially before 2027	Explore equivalent of Pollution Risk Forecasting, discounting and warning for Shellfish Waters. Information to the public, particularly harvesters on a daily basis to advise of periods of lower water quality.
	15	Additional measures potentially before 2027	Map sections of river from source to sea where pollution 'hot spots' could be made worse by further increases in climate change (e.g., temperature rise, lack of dilution and low oxygen).
	16	Additional measures potentially before 2027	Nitrogen Trading Voluntary. Develop guidance to increase voluntary roll-out of working collaboratively in catchments with farmers to reduce nitrate by trading what their land doesn't need to another farmer who needs it (e.g., Poole Harbour, Hampshire).
	17	Additional measures potentially before 2027	Nutrient neutrality (i.e., investigate options and effectiveness of green infrastructure, alternative, novel solutions to additional nutrients from development). Build on existing trials (e.g., algal trial at Weston-Super-Mare).
	18	Additional measures potentially before 2027	Permitting approach to control diversion of surface water away from sewers and surface waters known to contain high faecal contamination load. Applies to bathing and shellfish waters.
	19	Additional measures potentially before 2027	Prioritise actions to enhance, protect and restore lakes and other still waters through Water Industry Price Review 2024 and 2029. Include a review of legislative and policy drivers. Maximise use of Price Review 2019 investigations. Explore opportunities to use Environment Agency proposed guidance to Areas on Price Review 2024 and nutrients. This will specifically include new Water Environment Regulations lake Nitrate Standards and how to use them alongside the Phosphate standards.
	20	Additional measures potentially before 2027	Research and explore alternative approaches to disinfection. Applies to bathing and shellfish waters. Ultraviolet is energy intensive. Trials to explore effectiveness of alternative approaches to disinfection are required. This should include non-traditional solutions such as using non-food use shellfish to polish effluents. Based on outcomes of research, permit different types of disinfection and vary permits accordingly.

Theme	PoM Number	Category	Potential Measure (or Mechanism)
Water Quality	21	Additional measures potentially before 2027	Review and explore improvement of approaches to liaison/feedback mechanisms between Local Authorities and Water Industry on proposed development to ensure sewerage capacity is fit for future needs.
	22	Additional measures potentially before 2027	Review approach to water body and element classifications. Water body scale classifications provide locally relevant information, and development will ensure greater flexibility in producing them, to tailor assessments and evidence to local needs. This will be done in tandem with the development and introduction of a robust new national indicator of the state of the water environment, based upon new surveillance monitoring programmes.
	23	Additional measures potentially before 2027	The policy for wider environmental net gain is to be developed, but likely to contribute to improvements in the water environment. Work with partners to develop clear shared policies and guidance on environmental net gain to ensure it meets Water Environment Regulations objectives.
	24	Additional measures potentially before 2027	Use a catchment scheme/approach to target individual problem pesticides with specific measures (e.g., product restriction/substitution or indirectly change crop type requiring problem chemical). Building on the Voluntary Initiative, Strategic Farming Initiative and Defra Integrated Pest Management strategy.
	25	Potential additional measures likely after 2027	Consider water dependent Sites of Special Scientific Interest (SSSI) in same way as water-dependent European sites for river basin planning and focus on measures to achieve favourable condition. In particular, the specific targets for water quality and flow in SSSI river waterbodies and water quality in Sites of Special Scientific Interest lake waterbodies.
	26	Potential additional measures likely after 2027	Rainfall related intermittent impacts on faecal contamination especially norovirus from water industry. Improved, different mechanism/measure needed to deal with impact e.g. Combined Sewer Overflows close to shellfish beds. Likely to be a range of innovative solutions.

Theme	PoM Number	Category	Potential Measure (or Mechanism)
<u>Restoration</u>	27	Additional measures potentially before 2027	Establish local estuarine and coastal habitat restoration action plans to inform River Basin Management Plans (RBMPs), Shoreline Management Plans (SMPs) and other local area plans (e.g., Local Nature Recovery Strategies (LNRS)) working with partners. Plans to help focus restoration activity and support to achieve Good Ecological Status and wider benefits, including catchment/coastal resilience.
	28	Additional measures potentially before 2029	Work with partners to implement a policy on boats anchoring up in sensitive/protected areas (like seagrass beds) that all vessels must use eco-moorings to prevent further abrasion, scouring and habitat loss.
	29	Potential additional measures likely after 2027	National estuarine and coastal habitat restoration targets for saltmarsh, seagrass, oyster and kelp. Targets would include a value assessment of multiple benefits, including the 'blue carbon' value they can provide for climate mitigation.
<u>Naturalness and Nature-based Solutions (NbS)</u>	30	Additional measures potentially before 2027	Current policies tend to favour hard engineered, short term solutions over longer term, upstream multiple benefit approaches. Work with partners to revise decision making policies to managing uncertainty to better support implementation of Nature Based Solutions and catchment and or landscape approaches in the long term (e.g., future proofing investment for climate change).
	31	Additional measures potentially before 2027	Improve strategic planning for Periodic Review 2024 and beyond to better support Nature-based Solutions (NbS) and habitat improvement (e.g., through revision of Water Industry Strategic Environmental Requirements driver guidance and operational guidance).
	32	Additional measures potentially before 2027	Need to continue to improve our understanding of how 'Working With Natural Processes' can help restore our catchments and coasts and manage natural hazards including flooding and coastal risks. For instance the impact of natural flood management on the timing and nature of flood peaks in groundwater catchments.

Theme	PoM Number	Category	Potential Measure (or Mechanism)
<u>Naturalness and Nature-based Solutions (NbS)</u>	33	Additional measures potentially before 2027	No current planning to specifically address the poor physical habitat state (morphology) of our waters. Work with all relevant partners to improve planning mechanisms for physical modification (e.g., Local Nature Recovery Strategies (LNRS), spatial planning, regulation, flood risk planning, water industry plans, etc.).
	34	Potential additional measures likely after 2027	Continue exploring existing planning reform, to build on planning mechanisms such as Biodiversity Net Gain and Environment Net Gain. Encourage local development plans to address physical modification and plan for better river morphology including improved access to private investment.
	35	Potential additional measures likely after 2027	Develop a successor to Water Level Management Plans, with a more comprehensive approach to hydrological management of wetland sites informed by natural ecosystem function, land use constraints, pressures from climate change, etc..
	36	Potential additional measures likely after 2027	Develop approaches to articulate wider aspects of natural function for Sites of Special Scientific Interest and European site rivers and the pressures acting on them. Linked with Common Standards Monitoring Guidance attributes beyond water quality and flow (e.g., for physical modification and hydrology), to help inform targets driving more appropriate action to protect and improve ecosystem function.
<u>Sediment Management</u>	37	Additional measures potentially before 2027	Develop messages on the importance of improving 'soil health' and land management to engage farmers reducing risks to Drinking Water Protected Areas by improving water quality. Help with adaptation to climate change and delivering multiple benefits. Including: improved water quality, alleviating flooding at catchment-scale, reduce drought risk, protect, and restore priority habitats and species. Holistic catchment management - use of cover crops; agroforestry and regenerative agriculture to improve soil health; increasing woodland and grassland soil cover to reduce soil loss, lower pesticide levels and phosphorus levels. Improving carbon sequestration and help achieve net zero.

Theme	PoM Number	Category	Potential Measure (or Mechanism)
<u>Sediment Management</u>	38	Additional measures potentially before 2027	Estuaries and coasts need “Sediment Resource Management Plans” or equivalent, including identifying and quantifying potential future dredged sediment sources (e.g., particle size distribution and volumes and beneficial use of dredging opportunities). Promoting habitat restoration to support the more sustainable management of sediment resources.
	39	Potential additional measures likely after 2027	Gain better evidence around sediment management to set targets to both prevent negative impacts of sediment release and support positive benefits.
	40	Potential additional measures likely after 2027	Historical issues of contaminated sediment. Explore options for legislative change or voluntary action to improve approaches for dealing with historical contamination which may be a source of chemical pollution.
<u>Ecosystem Services</u>	41	Additional measures potentially before 2027	Map where our carbon sink hotspots are from source to sea and catchment to coast, and where to protect them for use in future strategic planning.
	42	Additional measures potentially before 2027	Review and improve approaches to assessing the benefits of measures to protect and enhance the water environment such as use of the National Water Environment Benefits Survey. Explore ways to include additional wider benefits such as improved health and wellbeing.
<u>Funding</u>	43	Additional measures potentially before 2027	Explore development of an estuary and coast ecosystem resilience fund (e.g., Blue Recovery Fund through collaborative partnerships).
	44	Additional measures potentially before 2027	Funding alignment. Requirement for better alignment of funding to action at appropriate spatial scale. Traditionally funding opportunities were locally focused, but currently the biggest opportunities are for scaling up investment in nature-based solutions, including at a catchment, regional and river basin scale. Improve strategic planning and funding allocation to deliver multiple actions (e.g., improving the environment improvement and reducing flood risk). Ensure they a) consider the benefits and value of Nature-based Solutions (NbS)/natural capital in the round b) are flexible enough in timing and eligibility to enable a combination of capital and revenue (land management) elements.

Theme	PoM Number	Category	Potential Measure (or Mechanism)
<u>Fisheries</u>	45	Potential additional measures likely after 2027	Support an expansion of sustainable shellfish aquaculture around our coastline. this can make a huge contribution to improving our waters, storing carbon and producing healthy safe food.
	46	Additional measures potentially before 2027	Partnership working to develop new approaches to understanding pressures in the marine, coastal and estuarine environment on fish species migrating to and from freshwaters. Salmonid Management Round the Channel and Missing Salmon Alliance 'Likely Suspects Framework'.
	47	Additional measures potentially before 2027	Aim to establish temperature monitoring networks on principal salmon rivers, initially targeted at five rivers in England by 2024. To inform fisheries and environmental decision making in light of climate change.
	48	Additional measures potentially before 2027	Strengthen the protection of migratory fish in the marine, coastal and estuarine environment, using the evidence of Salmonid Management Round the Channel and review of marine stressors.
	49	Potential additional measures likely after 2027	Currently there is limited ability to improve ecological and hydromorphological connectivity at physical structures. Ensure proposed new fish passage regulation, in preparation but not certain of implementation is brought in. Would help drive measures such as barrier removal through to technical and natural fish passes.
	50	Additional measures potentially before 2027	Fishing gear. Angling and fisheries adopt code of practise to use alternatives, recycling plastic line and prevent littering. Building on existing Angling Trust initiative for recreational fishing and government for commercial fisheries.
<u>Citizen Science and Education</u>	51	Potential additional measures likely after 2027	Citizen participation, local action groups. As recommended by the Environmental Audit Committee on invasive non-native species (INNS), more support and funding for local action groups, catchment partnerships and NGOs to deliver prevention and control of INNS.
	52	Additional measures potentially before 2027	Education and knowledge. Often limited and patchy knowledge and awareness on the importance and role of natural catchment coastal functioning for climate resilience.

Theme	PoM Number	Category	Potential Measure (or Mechanism)
<u>Citizen Science and Education</u>	53	Additional measures potentially before 2027	Education/public awareness campaign to relay benefits and pressures on our coastal habitats, and actions the public can do to protect them. Measures like increased signs on coastal/marine areas with sensitive habitats/features, asking public for voluntary zero encroachment where possible. This is also particularly important for habitats/species below water that are difficult to see/visualise, like seagrass, kelp and oysters. Delivered with coastal groups, Shoreline Management Plan process, environmental Non-Government Organisations.
	54	Additional measures potentially before 2027	Establish a three-year innovation project to explore, assess and work with established and emerging citizen science initiatives including the Catchment Systems Thinking Co-operative project. The project will develop a clear understanding of how citizen science information can be used to inform decision making and to harness and make use of it.
	55	Additional measures potentially before 2027	Education and incentives to work with landowners (such as golf course owners) to manage habitats to provide the most multiple benefits for people and nature. This is identified as particularly important to coastal habitats. Environment Agency leads propose working with the Golf Industry and coastal golf course owners on opportunities to share learning and collaborate to ensure their habitats outside of the golf green provide the most multiple benefits
<u>Strategic Co-ordination</u>	56	Additional measures potentially before 2027	Work with partners to increase participation from across catchment communities from catchment to coast. Develop more inclusive and representative partnerships and support improved decision making.
	57	Additional measures potentially before 2027	Strengthen 'catchment to coast' approach, scaling up implementing nature-based solutions. Achieve by spatial prioritisation, engaging coastal stakeholders and others providing a suitable forum for discussion and cooperation with a much broader range of partners.

Theme	PoM Number	Category	Potential Measure (or Mechanism)
<u>Strategic Co-ordination</u>	58	Additional measures potentially before 2027	Habitat management and planning. Supratidal habitats (e.g., dune systems), not captured effectively in current policies, plans and strategies. They sit between marine and terrestrial management and action to protect/restore are missed. Improve future strategic planning, funding allocation to better incorporate supratidal habitats.
	59	Additional measures potentially before 2027	Develop ways of working with communities and partners that provides a shared evidence base suitable for supporting decision making. Supporting the Catchment Based Approach and grounding our activities around 'place'.
	60	Additional measures potentially before 2027	Explore opportunities for modifying Flood and Coastal Erosion Risk Management and Water Resources asset management approaches (e.g., mapping risks and opportunities in responses to a changing climate).
	61	Additional measures potentially before 2027	Integrated planning. Need for stronger integrated project planning as part of project delivery programmes (e.g., Flood and Coastal Erosion Risk Management capital programme). Earlier input of partners and geomorphological expertise to identify appropriate nature based / catchment scale options and cost benefit analysis needs reflect the benefits fully.
	62	Additional measures potentially before 2027	Refine strategic restoration planning for rivers, building on existing Protected Area and SSSI approaches, with a focus on Nature-based Solutions (NbS) action and investment.
	63	Potential additional measures likely after 2027	Advice, incentive and regulatory policies do not complement one another missing opportunities for more joined up local outcomes. Improve coordination of agricultural regulation, advice and incentive to support land managers including forestry, farmers and wider supply chain) to minimise the impact of their activities on water and wider catchment (e.g., soils).

Appendix II: Summary of Recommendations

Theme	Recommendations
Water Quality	E&C stakeholders working in partnership, to engage with water companies through PR24 and associated WINEP delivery period (2025 – 2030), to strategically develop and deliver E&C and C2C Potential PoMs that are of relevance to water quality issues within their respective catchments.
Restoration	E&C stakeholders, working in partnership, engage with ReMeMaRe to support the development and delivery of local E&C restoration strategies.
	E&C stakeholders, working in partnership with others across their relevant catchments, identify key actions through the catchment that will support the passive recovery of E&C environments and create conditions that are more likely to support successful active E&C restoration.
Sediment Management	E&C stakeholders, working in partnership with others across their relevant catchments, use this guidance to develop specific targets and/or actions for inclusion as Planned PoMs in the 2027 RBMP updates. These may be RBD specific, or relevant at a national level.
	E&C stakeholders interested in developing BUDS strategies, engage with the SRD once published (a dedicated contact point will be provided on the website).
Citizen Science	If you are interested in developing your own citizen science project to monitor your local E&C environment, we recommend using online documents available that provide guidance on how to establish projects (e.g., Citizen Science Best Practice Guide). To ensure that the project and associated data being collected can be used in the most impactful way, we also recommend discussing your ideas with relevant organisations. Accordingly, if your project relates to the RBMP potential PoMs in the E&C context, please contact the rbmpprogramme@environment-agency.gov.uk . (please reference “FAO Estuarine and Coastal Planning (ECP) team: RBMP Citizen Science” in the subject line).

Acronyms	
25 Year Environment Plan	25YEP
Beneficial Use of Dredged Sediments	BUDS
Catchment to Coast	C2C
Championing Coastal Co-ordination	3Cs
Estuaries and Coasts	E&C
Flood and Coastal Risk Management	FCRM
Invasive Non-Native Species	INNS
Local Nature Recovery Strategies	LNRS
Nature-based Solutions	NbS
Natural Capital Ecosystem Assessment Programme	NCEAP
Natural Flood Management	NFM
Programme of Measures	PoMs
River Basin District	RBD
River Basin Management Plan	RBMP
Restoring Meadow, Marsh and Reef	ReMeMaRe
Sediment Resource Database	SRD
Shoreline Management Plans	SMP
Ubiquitous, Persistent, Bio-accumulative, Toxic substances	uPBT
Water Environment Regulations	WER
Water Framework Directive	WFD
Water Industry Natural Environment Programme	WINEP