Green Finance, Flood and Water Governance

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eunomia

Report For

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Acknowledgements

Executive Summary

The Purpose of this Report

Addressing the climate and biodiversity crises will require a change in how land is used and managed, as well as an increase in public and private sector funding in nature-based solutions.[1] Governance - the actors, rules, resources and discourses which shape decision-making - plays a crucial role in effectively coordinating funding and management of water, land and nature.

An integrated governance approach is particularly important given that many natural resources spread across administrative boundaries, complicating decision-making about use and management. An integrated approach to governance at multiple scales can help address such challenges by focusing on co-ordination and collaboration of multiple stakeholders across a network to achieve common goals.

This report provides an independent view (through delivery of a roadmap) on how to achieve integrated land and water governance, with the ultimate aim of attracting more private investment into the environment.

Approach and Scope

This study aims to answer two overarching research questions:

1) What are the different ways in which integrated management/governance of water and land can be achieved to effectively deliver (multiple) environmental outcomes and attract private investment?

2) What practical action does Defra need to take over the next ten years to improve integration of water, land and nature and attract private investment?

These research questions, definitions and scope of analysis were developed through a number of scoping meetings between Eunomia, the Environment Agency and Defra. In order to answer each question, the current system was mapped through a focused review of relevant work previously completed by Eunomia (including Collingwood Environmental Planning (CEP))[2] and a series of internal workshops. Further brainstorming and rationalisation sessions were conducted internally within the team to compile the findings into this report and deliver a roadmap.

The scope is intentionally open to capture all relevant experiences from the Eunomia team over many years working in this field. Therefore, although the focus of the work is on achieving more integrated governance in England, no restriction was placed on where examples of good practice could be drawn from. Similarly, there were no restrictions on the types of change that could be included in the road map.

[1] NbS are defined by the IUCN as actions to protect, sustainably manage and restore nature or modified ecosystems, which address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.
[2] in 2021 CEP joined the Eunomia group.

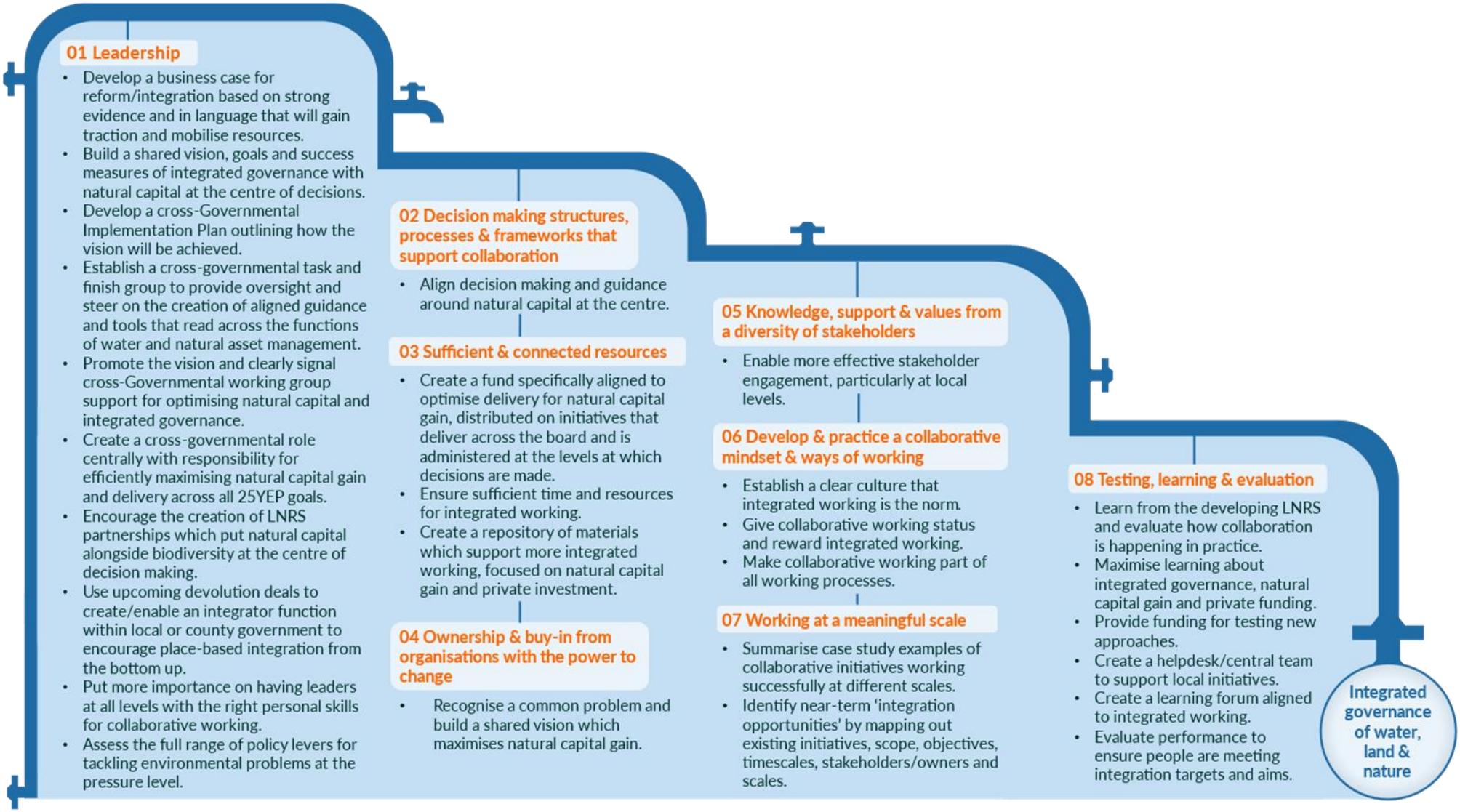
Key Messages

We propose that effective integrated governance of water, land and nature is underpinned by eight key 'ingredients', summarised as follows:

1. Leadership.
2. Decision-making structures, processes and regulatory frameworks that support collaboration and are aligned to a shared vision.
3. Sufficient and connected resources and capability.
4. Ownership and buy-in from those with power to make change.
5. Ability to bring in knowledge, support and values from a diverse range of stakeholders, formal and informal organisations and community groups.
6. Developing and practising a collaborative mindset and ways of working.
7. Working at a meaningful scale in which people feel invested.
8. Testing, evaluation and learning.

The actions and inputs needed to achieve these 'ingredients' are summarised and presented in Figure 1.

Figure 1: Summary of ingredients and key actions for integrated governance of water, land and nature



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1.0

Introduction & Approach

1.1 Introduction

Addressing the climate and biodiversity crises will require a change in how land is used and managed. The UK Government has set ambitious targets to be net zero by 2050 and to protect and enhance natural landscapes and habitats in the UK within a generation.

To achieve these goals, the 25 Year Environment Plan (YEP) highlights the crucial need for both public and private sector investment in the environment. Indeed, a study commissioned by the Green Finance Institute estimated that around £56 billion in investment above current commitments by the public sector is required for the UK to meet nature-related targets in the next decade.[3] Moreover, governance - the actors, rules, resources and discourses which shape decision-making[4] - plays a crucial role in effectively coordinating funding and management of water, land and nature.

This report, commissioned by the Environment Agency (EA) and Defra, **provides an independent view on how to achieve joined up and integrated land and water governance, with the ultimate aim of attracting more private investment into the environment.**

This report is structured as follows:

- Section 1.0 provides an overview of the project scope and method, including a definition of governance.
- Section 2.0 maps the current system of land and water governance. The section also examines what is working well, what is not working well and the challenges and barriers of existing governance arrangements (as identified in previous Eunomia and Collingwood Environmental Planning (CEP)5 studies).
- Section 3.0 describes what different governance could look like and presents and discusses key components, or 'ingredients', of initiatives which have successfully integrated governance of land, water and nature. It also provides reflections on integration and the assumption that integration linked to increased private finance will deliver environmental improvement.
- Section 4.0 summarises actions to bring about a more integrated approach and presents a rough roadmap for change.
- Section 5.0 describes tools that could be developed to evaluate change.

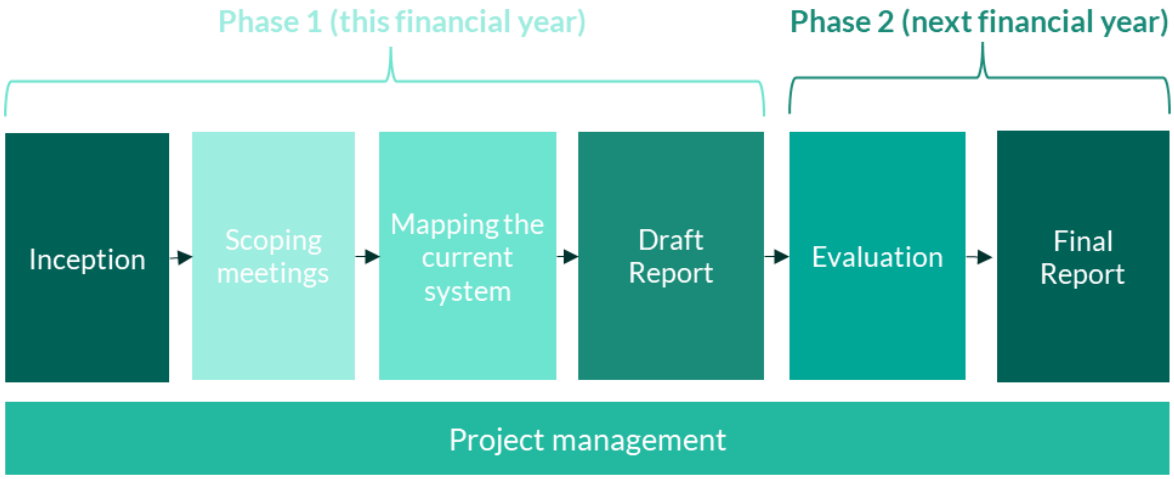
This report is accompanied by an Appendix. This provides further details of the approach and the literature review.

1.2 Approach

The project was split into Phase 1 and Phase 2 as shown in Figure 2. This document reports on Phase 1 and comments on the value of the proposed outputs for Phase 2.

[3] Green Finance Institute (2021) Finance Gap for UK Nature
[4] Environment Agency (2021) Evaluating the effectiveness of flood and coastal erosion risk governance in England and Wales
[5] In 2021, CEP joined the Eunomia group.

Figure 2: Methodology



Key Phase 1 tasks were:

1. **Scoping meetings** between Eunomia, the EA and Defra team to define the scope of the project more specifically. For example, the boundaries of the analysis, definitions for governance, planned future government direction, and desired format of the outputs.
2. **Mapping the current system**, which comprised
    a. a focused review of relevant work previously completed by Eunomia (including CEP); and
    b. a series of internal workshops with principal members of the Eunomia team to: reflect on the findings of the literature review; brainstorm key questions; and rationalise / consolidate the findings from both of these steps.
3. **Reporting**, which bought together evidence from the literature, brainstorming and rationalisation sessions and was iterated several times within the team to present a fair picture of combined knowledge.

Further detail of the approach is provided in within the Appendix.

1.2.1 Scope

The aim and scope of this project was to provide Defra and the EA with an independent, external view on how to achieve joined up and integrated governance of land and water. From discussions with Defra and the EA, it was clear that attracting more private investment is also important and that the ultimate goal is a better environment. There are two assumptions which link the focus on this work to the ultimate goal:

1. that integrated management/governance of water and land will lead to more efficient and effective delivery of outcomes; and
2. attracting more private investment will lead to more efficient and effective delivery of outcomes.

Success would be integrated management/governance of water and land that attracts more private investment and leads to more efficient and effective delivery of environmental outcomes.

The overarching research questions derived were:

1. What are the different ways in which integrated management/governance of water and land can be achieved to effectively deliver (multiple) environmental outcomes and attract private investment?
2. What practical action does Defra need to take over the next ten years to improve integration of water, land and nature/attraction of private investment?

The intention was to keep the scope open, to capture all relevant experiences from the experienced Eunomia team. Therefore, although the focus of the work was on achieving more integrated governance in England, no restriction was placed on where examples of good practice could be drawn from. Similarly, there were no restrictions on the types of change that could be included in the road map described in section 4.0, the stakeholders it should influence, or the policy instruments that could be effectively applied. Rather, the focus was to distil combined experiences into something which could most usefully shape future direction.

Defining Governance

Governance can be understood as 'who decides what and how'. As defined by the EA (2021), governance refers to:

> *The range of **actors** (public, private, civil society), **rules** (formal and informal), **resources** (financial, knowledge, technological) and **discourses** that shape the decision-making process, as well as the outcome and impact of this process, in relation to a collective goal.*[6]

Governance provides a framework for how decisions are made and actions implemented, who has authority and who is accountable. As such, governance is dependent on context, and any changes need to consider place specificities.[7] Attention to governance highlights the role of multiple state and non-state actors in decision-making across different scales, and how each level interacts.

Integrated governance of water and land

In the context of environmental governance, many natural resources spread across administrative boundaries. This makes decision-making about resource use and management complex and requires the input of multiple perspectives.[8] In the case of water for instance, it flows across authority borders with upstream choices impacting downstream characteristics and it is a vital resource across different sectors of society and the economy.

An integrated governance approach can help address such challenges by focusing on co-ordination and collaboration of multiple stakeholders across a network to achieve common goals. Integrating governance can take place at different scales, including within and between organisations, across sectors and between local, regional and national authorities. The OECD for instance, has developed 12 principles for good governance of the water sector, grouped into effectiveness, efficiency and trust and engagement (see Appendix 1.3).[9] Crucially, all 12 principles apply across water management, water use and ownership at all levels of government, seeking to enhance coordination and mitigate fragmentation.

Integrated governance encourages a holistic, inter-connected and more strategic approach to managing environmental systems which, in turn, can improve the efficiency and effectiveness of policy and interventions.[10] In practice, there are barriers and challenges to overcome when establishing integrated governance.

[6] Environment Agency (2021) Evaluating the effectiveness of flood and coastal erosion risk governance in England and Wales.
[7] Aziza Akhmouch, Delphine Clavreul & Peter Glas (2018) Introducing the OECD Principles on Water Governance, Water International, 43:1, 5-12, DOI: 10.1080/02508060.2017.1407561
[8] Waylen, Kerry A., Kirsty L. Blackstock, Sophie J. Tindale, and Alba Juárez-Bourke. 2019. "Governing Integration: Insights from Integrating Implementation of European Water Policies" Water 11, no. 3: 598. https://doi.org/10.3390/w11030598
[9] Aziza Akhmouch, Delphine Clavreul & Peter Glas (2018) Introducing the OECD Principles on Water Governance, Water International, 43:1, 5-12, DOI: 10.1080/02508060.2017.1407561
[10] European Communities (2007) Integrated Environmental Management. Available at: guide_environment_mangement.pdf (ccre.org)

The purpose of this study is to examine how to achieve integrated governance of land and water, with the ultimate aim of attracting more private investment into the environment.

2.0

Mapping the Current System

The institutional framework for water management in England is complex. The overall legal and policy framework for water in England is set by the UK Government at a national level, primarily through Defra. Defra also leads and works with other relevant arms-length bodies, departments and regulators, such as the EA, Natural England and the Water Services Regulation Authority (Ofwat). The environment, including water, is devolved across the UK, meaning devolved administrations also play a role in water policy.[11]

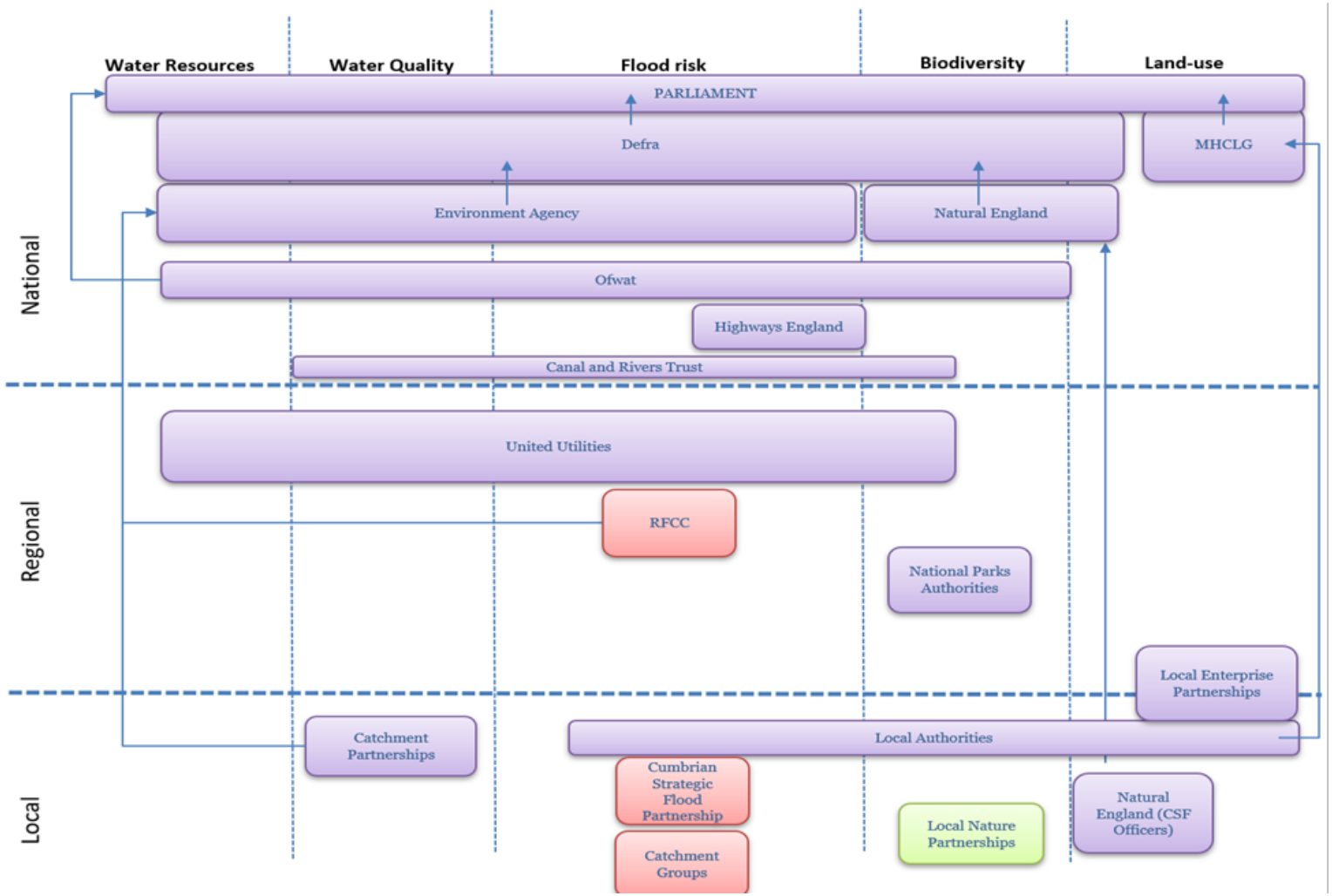
At a local level, local authorities play a more limited role in water governance, focussing on flood risk management and controlling land-use development. Some formal roles are shared across multiple organisations, for example roles such as Lead Local Flood Authority (LLFA) and Risk Management Authority (RMA). In addition, there are numerous formal and informal partnerships and arrangements, such as coordination mechanisms focussed on the catchment level (e.g. with Catchment Based Approach (CaBA) partnerships operating since 2013 and Catchment Flood Partnerships (CFP) operating since 2018).

Finally, the water industry in the UK is privatised, with companies providing water and sewerage services at a regional level.

The figures below are based on those produced by Eunomia for the Natural Course Study in 2020. They show the main institutions (Figure 3) and plans (Figure 4) covering the governance of water, land and nature at national, regional and local levels. Whilst Figure 4 is currently focused on the North-West River Basin District, it helps to illustrate the complexity of water management in England.

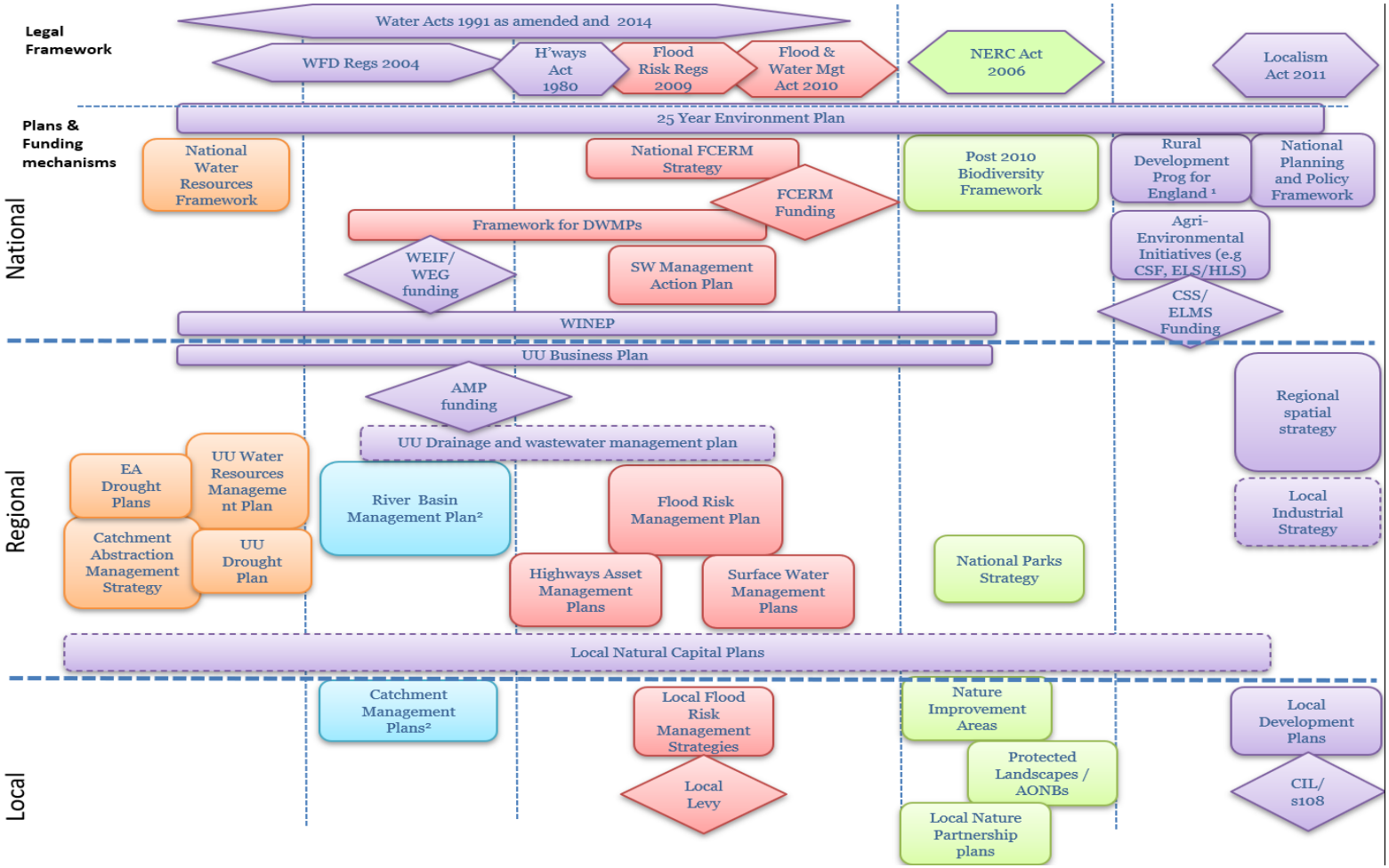
[11] Defra (2023) Our integrated plan for delivering clean and plentiful water

Figure 3: Map summarising the key institutions for water management at national, regional and local levels



Source: Eunomia (2020) Natural Course Regional Water Governance Study- Phase 1.

Figure 4: Map summarising the key laws, strategies and plans governing water management in the North-West River Basin District



Source: Eunomia (2020) Natural Course Regional Water Governance Study- Phase 1.

2.1 What Works and What Does Not

This section summarises information from previous research projects on what is, and is not, working well and the challenges and barriers with regards to existing governance arrangements. It is important to note that much of the research was conducted several years ago and some positions have changed. This has been noted where it is apparent. The findings are organised according to the scale which each previous research project focussed on, namely:

- broader, national and regional level findings; and
- local level findings.

Additional insight from an internal brainstorm has been added where relevant.

A synthesis of the weaknesses, challenges and barriers, identified from previous research and the internal brainstorm, is subsequently presented in section 2.1.3.

2.1.1 Broader, national and regional findings

This section predominately utilises data from two past research projects:

- the Natural Course Regional Water Governance Study- Phases 1, 2 & 3 (2020-2021)12 (the Natural Course study); and
- assessing the opportunities for aligning planning and delivery of water and natural asset management (Defra (2014)) (the Alignment Study).

Strengths and weaknesses from strategic decision making/funding mechanism case studies across England captured in the Natural Course Phase 3 study are also included, as our deliberations from internal brainstorms. The overall findings from the stakeholders consulted in these studies were similar, giving a sense that:

- existing governance arrangements were 'more of a hindrance than a barrier; they 'work well enough' - from stakeholders in the North-West consulted for the Natural Course study; and
- there are not barriers to integration, so much as 'gaps and limitations' – from stakeholders consulted in the Alignment Study.

What is working well

- Involvement of a diverse and appropriate range of organisations in water governance in the North-West demonstrates high levels of transparency, professionalism, and a willingness to work in partnership and develop good personal working relationships.
- Managing the catchment as a system. Where this is the case, such as in Manchester, it helps develop a good overview of issues and brings water into wider conversations.
- Mechanisms like CaBA enable conversations and provide opportunities to work collaboratively in a different way (i.e. working as equals). CaBA also plays a role in enabling communities to be involved in decision making.

[12] Natural Course (2021) Regional Water Governance Study

- Water Industry National Environment Programme (WINEP) is a useful mechanism which connects requirements from the EA, Natural England and Drinking Water Inspectorate (DWI) to funding.
- Other funding schemes with flexibility to address local priorities include Catchment Sensitive Farming (CSF) (which compensates farmers in catchments without stewardship) and Landscape Enterprise Networks (LENs) (which bring in private sector funding).
- In Cumbria, stakeholders felt that there are high levels of local knowledge and expertise held by those working in catchments which could be harnessed to make the right decisions.
- Linking water with the local economy works well in Cumbria, including engagement between the Cumbrian Pioneer project and the Local Economic Partnership (LEP).
- The role of 'catchment director' (a role sitting above the level of catchments that was trialled by Natural Course for Cumbria and Lancashire) was found to be useful and strategic given the director's technical knowledge of a specific catchment and ability to provide a good link between local and county levels. Similarly, in the Greater Manchester 'Devo-Water' model, having an officer working at the Greater Manchester level to coordinate the lead local flood authorities is a strength.
- The Greater Manchester environment fund successfully gained political buy-in from the Mayor and ten local authorities.

What is not working well

- In the North-West, stakeholders felt there is a lack of clarity and overlapping responsibilities regarding decision making. For instance, a plethora of local partnerships working across different elements of water resulted in duplication of effort. This makes it difficult for core organisations to engage properly (Natural Course Phase 1).
- There is no place for water management to be united at a political or strategic/regional level in the North-West - a 'missing middle'.
- Siloed policy and objectives are driving siloed decision making via siloed planning and funding mechanisms. Insufficient time is spent situating issues in a broader context and enabling more effective measures and efficient funding to be identified.
- There are misaligned timescales of key flood and water quality planning mechanisms, namely: Flood Risk Planning, Water Company business planning process and the River Basin Management Planning (RBMP) process. This makes it difficult to discuss problems across silos and to identify cross-cutting measures with pooled funding.
- There are insufficient levels of meaningful community involvement driving strategic decisions, regional planning and investment.
- There is insufficient funding for partnership hosts to properly engage and extend their scope.
- Funding can be unwieldy (e.g. Water Environment Grant (WEG) and be difficult to translate to local issues or have inflexible and narrow criteria.
- There is a lack of recognition of value of agricultural land and the services it provides in decision-making on flooding.

Challenges and barriers to alignment

Within the alignment study, stakeholders identified key barriers to alignment. There were very different views from those in and outside of Defra, as summarised in Table 1 below.

Table 1: Barriers to alignment identified by Defra and non-Defra stakeholders

Barriers to alignment identified by Defra staff working in water and natural asset management	Barriers to alignment identified from those outside Defra working in water and natural asset management:
Uncertainty around level of integration.	Lack of a policy drive/steer leading to poor alignment of objectives and performance measures (lack of integrated policy drive from Defra).
'Fear of take over'	Divergent understandings in core elements such as language, evidence and benefits assessment making it difficult to read-across functions and gain a clear picture of water and natural asset management as a whole.
Lack of evidence and lack of a clear business case.	Different cultures and siloed mentality. Different legal and institutional structures.
Limited knowledge of what others do, insufficient time and too much complexity.	Constraints around funding.

Source: Cascade (2014) Investigating opportunities for aligning planning and delivery mechanisms for water management at the catchment scale [Presentation].

2.1.2 Local level findings

This section merges findings from the internal brainstorm and four past projects for Defra, including:

- Local Delivery of the 25YEP (2020)[13];
- Monitoring and Evaluation of Nature Improvement Areas (NIAs) (2015)[14];
- CaBA evaluations (2013 to 2015 and 2022)[15];
- and Flood Resilience Community Pathfinder Evaluation (2015).[16]

What is working well

- The most successful partnerships delivering the 25 YEP focus on area- or asset-specific issues or concerns that engage a range of actors/organisations and diversity of skillsets. These are typically driven by individuals with a clear vision and strong networking skills.
- Local authorities are well positioned to increase collaboration on matters like air pollution that have an impact on economic, health and environmental outcomes.
- Within the environment sector there is clear interest in using a natural capital approach.
- The NIAs are able to achieve effective partnership working. The NIA government grant enables staff to be employed to coordinate partnerships and encourages joined-up working. Most NIAs can start quickly because they evolve from existing partnerships.
- In the NIAs, shared visions and objectives improves communication, encourages joined-up working and more integrated implementation. The NIAs also involve organisations beyond conservation such as local businesses, land managers, research institutions and local authorities.

[13] Orr, P., Morse-Jones, S., Watson, N., et al (2020) 25 Year Environment Plan Local Delivery: Enhancing Local Delivery and Implementation Through Strengthening Stakeholder Relationships, Integration, and Leadership. A report to the Department for Environment, Food and Rural Affairs (DEFRA).
[14] CEP (2015) Monitoring and Evaluation of Nature Improvement Areas: Final Report (2012-2015) Executive Summary.
[15] CaBA Benefits Assessment Working Group (2022) CaBA Monitoring & Evaluation 2020/2021.
[16] Defra (2015) Flood Resilience Community Pathfinder Evaluation Final Evaluation Report.

- NIA grant funding flexibility means projects can align with local needs/objectives. Visible government support, leadership and clear policy messages provides impetus and helps attract additional resources.
- Joined up support from Natural England, EA and Forestry Commission is important for local delivery of NIAs.
- Within a year, CaBA pilots can generate a sense of partnership at the local level leading (in most cases) to the production of viable catchment plans.
- With regards to CaBA, the catchment scale is felt to be an effective scale for planning and activities based on management of natural processes, allowing integration of local issues and consideration of other administrative interactions. It allows objectives to be incorporated and multiple benefits realised.
- Four areas are important for collaborative working: leadership, co-ordination, technical skills, expert facilitation.
- Relationships between the CaBA partnerships and the EA, environmental NGOs and, to a lesser extent, water companies are felt to be working well, or very well (2013, 2014 evaluations). The organisations that CaBA partnerships typically engage with most strongly are water companies, local authority environment teams and landowners, land managers or farming & forestry community (2020/21 evaluation)[17].
- Collaboration takes time, the more mature CaBA partnerships are felt to be applying collaborative working principles more widely.
- With regards to community flood resilience, a community-led or combined (community and institution-led) approach is the most effective approach to community engagement. Communities are better able to contribute to ensuring their own resilience if they are working with local authorities.
- Setting up flood groups and creating networks (e.g. through multi-agency meetings), proves to be a valuable way of linking community members with formal institutions.

What is not working well

- Differences exist in the status and role of local partnership organisations in the health, economy and environment sectors. Partnerships need to have legitimacy to be able to act effectively.
- There is interest among organisations and partnerships in integrated working (regarding 25 YEP delivery), but in practice this is difficult to achieve.
- The 2014 evaluation of CaBA found that not all of the right organisations are involved at the right level in CaBA partnerships. Stakeholders or groups considered missing or difficult to engage by some pilots include local authorities, landowners, industry and businesses, agricultural sectors and in some cases some national organisations and government bodies. The involvement of landowners is considered top priority.
- Most CaBA partnerships (as reported in 2015) have no clear working relationships with groups such as Local Nature Partnerships (LNPs), NIAs, Internal Drainage Boards (IDB), Regional Flood and Coastal Committees (RFCC). Linking with other landscape or catchment-based planning initiatives could result in efficiency savings (avoiding duplication of effort by pooling of resources) and provide a mechanism to enable joining up of other planning activities. As reported in the 2022 CaBA evaluation, partnerships continue, typically, to have lower engagement levels with LEPs, Nature Recovery Networks (NRNs), Coastal Partnerships and Community Flood Partnerships. The majority of partnerships are either not engaged with these groups or report that these groups are aware of the partnership but not more involved. Increasing engagement with these groups could be supported by the CaBA Working Groups focusing on biodiversity, estuaries and coasts, and flooding.[18]
- Almost half of those surveyed in the CaBA Phase 2 evaluation (2014) are not sufficiently clear about the roles and responsibilities of all stakeholders involved in CaBA and how to work with other local partnerships.

Challenges and barriers to alignment

- The Natural Capital Approach (NCA) is perceived as a difficult concept to understand and communicate to some key audiences (as reported in 2020). Beyond the environmental sector - for instance in the

[17] CaBA Benefits Assessment Working Group (2022). CaBA Monitoring & Evaluation 2020/21.
[18] CaBA Benefits Assessment Working Group (2022). CaBA Monitoring & Evaluation 2020/21.

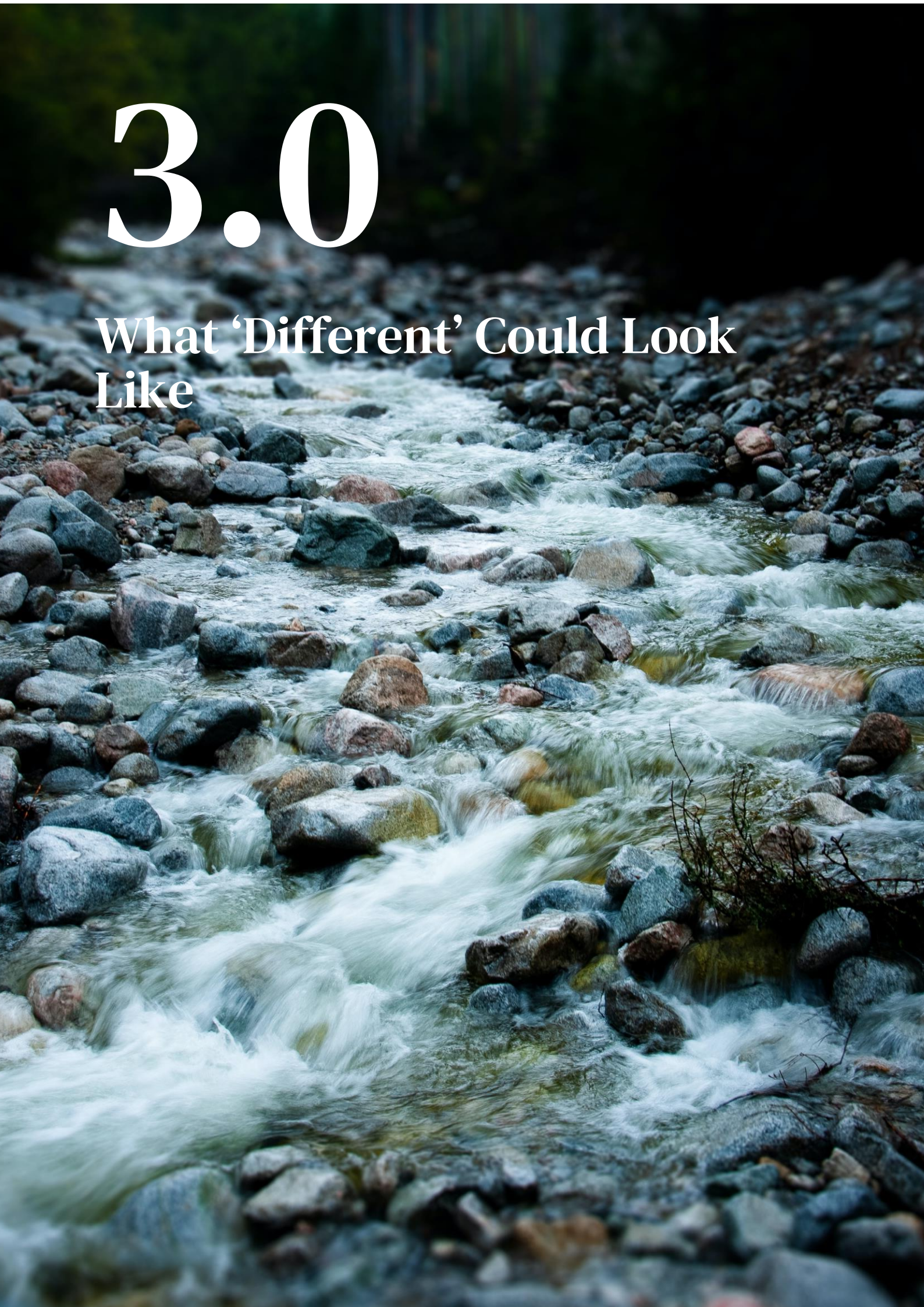
health and economic sectors - the relevance of a NCA is often not immediately clear (e.g. due to a lack of familiarity and already having other established ways of working and priorities).

- Differences in understanding and language are a barrier to inter-organisational and cross sector collaborative working to protect and enhance natural capital assets.
- Additional workload and admin burden, particularly when setting up and maintaining a new NIA partnership, means delivery expectations are potentially difficult to meet. A three-year timescale is believed to be too short to achieve large scale, lasting improvements, particularly once funding ends.
- With regards to CaBA, there is sometimes a lack of funding (particularly core funding for a central person and/or to support applications for further funding bids), lack of enthusiasm/interest and local knowledge in the catchment. Stakeholder fatigue is also a barrier, as is the impenetrable/academic nature of the RBMP process and information provided to support it. There is also a lack of clarity over the role of partnerships.
- Time and resources are needed to create new ways of working and new forms of community infrastructure.
- Dealing with the number of represented agencies (from the national to the local level) involved in delivering flood resilience is complex.
- For the flood resilience community pathfinder projects, challenges include maintaining links between flood groups and volunteers and formal institutions, and sustaining momentum within the network over time.

2.1.3 Weaknesses/Pinch Points

Based on data gathered from previous research projects along with the internal brainstorm, a high-level list of eleven key weaknesses or 'pinch-points' of the current system can be identified as follows:

1. Lack of leadership.
2. Lack of clarity and overlapping responsibilities regarding decision making.
3. Siloed working at the local and national level. Insufficient cross communication, meaning there is a tendency to slip into silos and form groups and sub-groups around specific issues.
4. No place for water management to be united at a political or strategic/regional level.
5. Misaligned timescales of key planning mechanisms.
6. Working with uncertainty: uncertain policy, regulation and funding landscape, especially for farmers. Different systems are being driven in different directions.
7. Lack of resources, knowledge and 'space' to integrate: insufficient time and funding to have someone with the space to maintain effective partnership working and enable integration/collaboration, or lack of knowledge about how/when to influence change levers and decision making.
8. Insufficient level of meaningful community involvement driving strategic decisions and investment.
9. Some funding is unwieldy or have criteria which is too inflexible and narrow.
10. Lack of recognition of value of agricultural land and the services it provides in decision-making on flooding.
11. Symptoms vs cause: too much focus on addressing the status problems rather than tackling the causes.



3.0

What ‘Different’ Could Look Like

3.1 Examples of Good Practice

As a team, examples of integrated governance working well, where and why were reflected upon. Whilst an all-round example was difficult to identify, the **Lake District National Park Partnership (LNDPP) and Foundation** was potentially the closest, for reasons set out below.

1. National Parks' statutory purposes focus on the conservation and enhancement of natural beauty, wildlife and cultural heritage and on promoting opportunities for public understanding and enjoyment of the special qualities of the parks. Each National Park has a National Park Authority (NPA) which acts as the local planning authority. NPAs determine all planning applications submitted in their areas - whilst they are not directly responsible for water quality, they need to take account of water quality in planning application decisions. In 2022, the Lake District NPA was advised by Natural England that four water catchments within the park had been designated as Nutrient Neutrality areas. As a result the Lake District NPA requires developments within these catchments to meet nutrient neutrality criteria.
2. To achieve its aims and vision, the Lake District National Park created a partnership group (the LDNPP) with wide ranging duties and powers capturing powers to influence land and water management across the landscape. The LNDPP has developed a shared vision, strategy and action plan, with shared ownership and buy-in from those with power to change.
3. The LDNP Foundation was established as the main fundraising and grant making partner of the LDNPP and supports the delivery of the shared aims of the Partnership. The Foundation aims to support partners to work together to ensure a coordinated approach to fundraising and income generation (capacity to attract private finance aligned to integrated vision).

Other examples demonstrating elements of good practice are as follows:

- **Water Resources East (WRE):** engages across water quality and water resource issues, has good communication between wide range of stakeholders and structure - enabling everyone to have a voice. Time and resource were invested to enable time for the partnership to develop and it had good legitimacy as it was supported from the start by Anglian Water. It had a good leader from a fairly senior level, with strong personal skills, who recognised the importance of listening to all partners and being independent from Anglian Water. There was a widely recognised problem to solve and a new organisation was set up focused on this problem (rather than on the objectives of an existing organisation).
- **Greater Manchester**: considerable buy-in/loyalty to the area, good leadership, and strong commitment from all with key powers including the Greater Manchester Combined Authority, WC, EA and Natural England.
- **Catchment directors in Cumbria and Lancashire**: overseeing work of catchments, experienced and motivated person, focused on taking a wider more strategic perspective.
- **Nene Catchment Partnership**: experienced and motivated leader, focused on understanding others and influencing to good effect. The leader also recognised value of influencing others to achieve positive overall outcomes rather than delivering small projects.
- **Ribble Catchment Partnership**: considerable investment from the EA initially with the appointment of a team and senior level leader, plus a long lead-in time to create a strong network of relationships which have laid the foundations for new leadership (also experienced and highly motivated) to drive forward an ambitious agenda.
- **Farmers**: some of the best examples of integration happen in practice because farmers have to manage their land and understand all the factors impacting it such as land status, climate, regulations and incentive schemes. Farmers have clear accountability on making a viable business which means integrating all these siloed schemes – although sometimes schemes drive perverse outcomes.

3.2 Ingredients for Success

Reflecting on the key messages from the literature review, thoughts on good practices encountered, and the principles for good water governance developed by the OECD (see Appendix), we consider the following to be key ingredients that underpin success:

1. **Leadership:** clear direction with a personal drive to achieve overall success/viability of the whole system rather than one part and so uniting water and land management at a political, strategic and operational level.
2. **Ownership and buy-in from the diverse range of organisations with the power to change:** based on common recognition of the problem, and development of a shared vision for what 'better' means. Related issues are talking the right language, thinking big, making change something people want to be part of as well capturing the energy and passion of local people.
3. **An honest, collaborative mindset:** i.e. acknowledging others' agendas, relationships of trust and reciprocity, sharing resources and power. Actual working together towards a shared vision whilst acknowledging and being honest about the conflicts between water, land and nature outcomes and processes.
4. **Decision-making structures, processes and regulatory frameworks that support collaboration and are aligned to a shared vision:** especially between informal and formal organisations. Inclusion of community groups in decision making.
    a. e.g. CaBA have enabled collaborative working and communities to be involved in decision making (Natural Course Phase 1).
    b. e.g. Simplifying the strategic planning landscape, by aligning the 3 key strategic planning processes around Flood Risk Planning, Water Company business planning process and the RBMP process (Natural Course Phase 2).
    c. e.g. Co-ordinating the major investment programmes linked to flood management, farm subsidies and water industry investment, to pool efforts. (Natural Course Phase 2).
5. **Working at the right scale:** a scale that is meaningful and in which people feel invested e.g. place-based, but possibly networked into larger structures for efficiency/impact reasons. This could include funding with local flexibility to address local priorities.
6. **Providing sufficient time and connected resources and capability:** this includes setting realistic timescales for setting up, particularly if starting from scratch, and focussing on quick wins with funding that allows local flexibility to address local priorities.
7. **Ability to bring in knowledge, support and values from a diverse range of stakeholders, formal and informal organisations and community groups.**
8. **Testing, learning and evaluation:** including feedback from previous learning so that pilots aren't starting again.

These ingredients could be considered as the intermediary outcomes that a good, integrated governance system could try to achieve. Each of the ingredients are explored further in the following sections, where related issues and considerations of scale are highlighted, along with the proposing of actions that could help Defra to instigate change in this direction. Supporting information is included where relevant. The proposed actions are then synthesised and sequenced to provide a rough road map in section 4.0.

Supporting information and comments

There are a number of ongoing pilot/trials programmes which incorporate, at least in design, many of the core ingredients of success proposed above: ownership and buy-in from those with power to change, collaborative working, leadership and working at the right scale, at the local level (varying geography to something that is meaningful). Projects are tasked with finding ways of attracting private finance to secure long-term implementation of integrated nature-based solutions. Examples include:

- **The landscape recovery pilot scheme.**[19] Provides funding to landowners and managers who want to take a more radical and large-scale approach to producing environmental and climate goods on their land. The successful projects are organised at different geographies reflecting a problem and geography meaningful to those active in the pilot, and support is dependent upon collaboration and good project leadership. One example is around the Evenlode catchment[20] where local farmers worked together to find alternative sources of payment for adopting sustainable practices, including those to support biodiversity, reduce carbon emissions, improve soil health and water retention, alongside their core business of growing food. One of the aims is to bring in private finance.
- **The National Flood and Coastal Resilience Innovation Programme**. Bristol City Council, in partnership with South Gloucestershire Council, Wessex Water and the EA, is delivering one of 25 projects across the country as part of this programme. Their project, Resilient Frome, is trialling nature based and integrated water management solutions to improve flood resilience in the form of retrofitting sustainable drainage systems in urban areas, delivering rural natural flood management measures, and incorporating a city centre river restoration scheme at the heart of wider regeneration proposals. The project is seeking finance to support long-term implementation.
- **The Natural Environment Investment Readiness Fund (NEIRF).** NEIRF has provided grants of between £10,000 and £100,000 to support the government's goals in the 25 YEP, green finance strategy and 10-point plan for a green industrial revolution. It aims were to stimulate private investment and market-based mechanisms that improve and safeguard the natural environment by helping projects get ready for investment.

The collective learning from these schemes will be significant.

3.2.1 Leadership

Of all the ingredients for success, leadership is one of the most vital. This is true in an instititutional sense, but also at a personal level. In a study of collaborative working across Europe (Harmonicop[21]) the "continued high motivation and engagement with high technical competence; personal qualities establishing and maintaining the legitimacy of the organiser" was identified as the most important factor for success in social learning. For better integration, this means there needs to be a person with the right skills and a clear drive to achieve overall success/viability of the whole system rather than one part and so uniting water and land management at a political, strategic and operational level.

Related issues: an honest and collaborative mindset, ownership and buy-in, sufficient and connected resources and capability, and ability to bring in knowedge, support and values from a diverse range of stakeholders. Leaders must have sufficient time and support but absolutely critical is the need for the right skills, with collaborative working and the ability to gain respect of and support of others.

[19] Defra, NE, and EA (2022) Projects of Landscape Recovery scheme announced.
[20] Northeast Cotswold Farmer Cluster (2021) The North East Cotswold Farmer Cluster
[21] Mostert, E., C. Pahl-Wostl, Y. Rees, B. Searle, D. Tàbara, and J. Tippett. 2007. Social learning in European river-basin management: barriers and fostering mechanisms from 10 river basins. Ecology and Society 12 (1): 19.

Scales: leadership is key at all levels of decision-making, nationally, regionally and locally, from strategic leadership at a national level to direct the actions of individual organisations and functional teams, to leadership locally to motivate action and at all levels to help conflict resolution.

3.2.2 Ownership and buy-in from those with power to change

Ownership and buy-in starts with having a clear problem to solve that would benefit from an integrated approach. Achieving an integrated approach will take time and effort so the benefit must be at least equivalent to the investment needed to achieve integration. It is important to understand the causes of the problem and who has the power to enable positive change. It also requires adopting a collaborative mindset to understand the problem and potential solutions from the perspectives of all with a role to play. This enables common **recognition of the problem, and development of a shared vision for what 'better' means** from which an integrated plan can be developed and implemented together.

Related issues: leadership, talking the right language (i.e. thinking of how to highlight the benefits to others), making change something people want to be part of, and finding ways to capture the energy and passion of local people at local levels.

Scale: ownership and buy-in are essential ingredients at all scales. Nationally (probably led by Defra), regionally (with a prominent role for Water Companies given the level of power and influence they have at this scale in terms of funding, with a clear mechanism to raise more funds for environmental improvement subject to approval from OfWAT, skills and capacity) and locally (where local authorities seem increasingly to have a remit to lead). The new Plan for Water increases requirements for investment to tackle pollution, gives regulators powers to impose larger penalties for polluters and puts those penalties into a Water Restoration Fund to support projects that improve the environment. [22]

The nature of the problem and the players with power that need to be bought in will vary at different scales.

Supporting information and comments

1. The Forum for the Future[23] created a collaboration guidebook in 2014. Although commissioned by the British Retail Consortium, the guide shares collaboration insight and experiences applicable across different sectors. The guide outlines eight key steps for collaboration as summarised in Figure 5. As emphasised above, these steps include confirming the need (common recognition of the problem) and aligning around a shared vision (development of a shared vision).

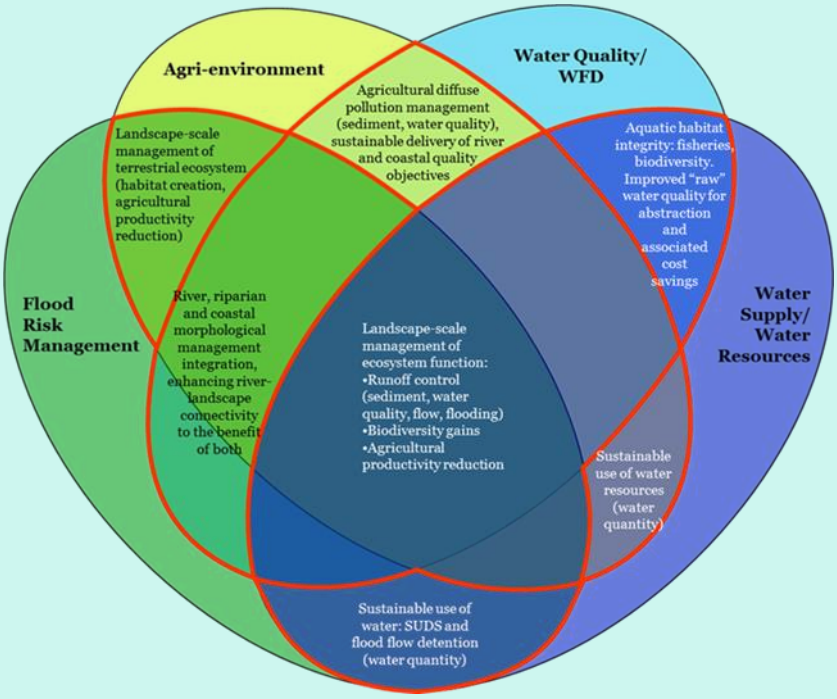
[22] Defra (2023) Plan for Water: our integrated plan for delivering clean and plentiful water
[23] Forum for the Future (2014) Collaboration Guidebook

Figure 5: The process of collaboration

1. Confirm the need	•Define a burning issue in a system ripe for change
2. Convene partners	•Bring together initial partners around a shared goal
3. Scope and diagnose	•Expore the system to develop a shared understanding of it and the issues
4. Explore emerging issues	•Create scenarios or explore future trends shaping the system or sector
5. Align around a vision	•Define a vision or principles that partners can align and commit to
6. Create strategies	•Innovate and prioritise strategies for change
7. Take collective action	•Implement workstreams towards defined objectives
8. Maintain momentum	•Review and adapt through lessons learned

2. From the 2014 Defra opportunities for alignment study, Figure 6 illustrates the overlaps and co-benefits of integrating ecosystem service provision.

Figure 6: Key areas of integration



3. **The convening power of water companies: Wessex Water Collaboration Cost Savings case study**

   Water companies have established and extensive networks with public bodies and can be a key player in collaboration. In the Bristol Avon, sponsorship from Wessex Water has enabled the partnership to connect widely and at multiple levels. **The involvement of Wessex Water was driven by a clear commitment to catchment-based solutions as a way of minimising costs to its customers.** Insular working was calculated to result in costs of around £550m, whereas catchment collaboration was calculated to reduce water company costs to £60m.[24]

[24] Indepen (2017) Finding Funds for Urban Projects: a guide for catchment partnerships

3.2.3 Developing and practising a collaborative mindset

This ingredient focuses on developing and practising a collaborative mindset. It is about the attitudes that need to be developed before and during a process that is focussed on integration across different sectors. Broadly, a collaborative mindset means going into a process acknowledging others' agendas, having a willingness to sharing power, risks and ownership.[25] It can be developed through working together towards a shared vision whilst acknowledging and being honest about the conflicts between water, land and nature outcomes and processes. This ingredient also focusses on the power of people acting together to embed approaches to integration into working practices. It is not enough to state that integration is being carried out, it will be important to show where it has happened and how it happens in practice. Through working on a common problem, learning about different perspectives can take place and relationships are developed. Further, acting together to develop a strategy, implement a project etc. provides a clear purpose for a group to focus on and invest in that is beyond their organisational bourndaries. It also can avoid the setting up of groups which become talking shops.

Related issues: Leadership- having a leader who is committed to collaboration to set the frame and encourage ownership and buyin for any working together is important, as are structures that do not privilege one group over another. Development of a common identity for the integrated approach will also help sustain collaboration.

Scale: Collaborative mindsets are needed at all scales because they are essentially empowering, that is, they facilitate a wider number of people at different scales to act because power and decision-making becomes diffused across networks.

Supporting Information and Comments: Attributes of collaborative mindsets[26]

1. **Cultivate humility:** Being humble means acknowledging you don't know everything, and that you can learn from others. It will be important to think clearly about the goal of your involvement - is it about you or your organisation's reputation or is it about solving problems. Focussing on the latter (a superordinate goal) and putting organisational/institutional identities aside will facilitate collaboration.
2. **Be confident:** Linked to cultivating humility is, perhaps counterintuitively, being confident in what you do know and what you bring to the table. This is going to be important when trying to cross different boundaries, having a clear foundation from which to collaborate so you are able to make your contribution count.
3. **Appreciate different perspectives:** Understanding that people will be coming at the problems from their perspectives and that includes you. Looking at those perspectives as complementary will be key to enabling the development of consensus. Also it is good to work with people who have something different to offer or have different skills – that difference brings creativity.
4. **Being honest about conflicts in objectives:** Linked to point 3 it will be important to be honest and open about potential conflicts between different objectives for water, land and nature. Whilst win-win solutions are possible, there will be times when objectives are not compatible, and compromise will be necessary.

[25] Cascade Consulting (2013) Evaluation of the Catchment Based Approach – Pilot Stage. London: Defra
[26] Cascade Consulting (2013) Evaluation of the Catchment Based Approach – Pilot Stage. London: Defra

5. **Practice curiosity:** Being open to learning is key to success; only then can you weigh all the options and reach a better outcome. So, it will be important for the group to keep asking what it is you need to know to facilitate integrated solutions.
6. **Change your position into an option:** Going into a collaborative working situation you are likely to have an organisational position on how to work develop integrated solutions but if that can be presented as an option you open up the possibility for collaboration and, most likely, innovation by improving on the options.

3.2.4 Decision making structures, processes and regulatory frameworks that support collaboration and are aligned to a shared vision

The key to this ingredient is making sure that structures and processes facilitate collaboration and are aligned to a shared vision. Structures mean groups, committees, institutions and how they relate to each other. For example, within a local authority, water and spatial planning will typically be in separate departments which have limited contact with each other. Likewise in central government; integration across departments (e.g Defra and DLUHC) is limited. Creating structures that bring people together across these different departments will be important and ensuring those structures have influence and power to make decisions, such as working groups, co-ordinating investment programmes etc.

Developing structures to embed public involvement in local decision-making processes will be important. Processes refers to how people work together and the nature of those interactions. In relation to engaging members of the public for example, progress has been made to move governments and organisations from a Decide-Announce-Defend approach to an Engage, Deliberate and Decide approach.[27] Organisations such as the National Flood Forum (NFF and CEP, 2018) have developed sets of principles that apply to engaging with communities but they can equally apply to bring together different organisations as they are based on creating spaces where all people are heard, power hierarchies are not invoked, all parties are recognised equally and relationships of trust and integrity are developed.

Furthermore, local flood groups for example, are part of Parish councils, or specific multi-agency meetings can be set up to link local people into more formal decision-making structures. In addition, the Natural Course Phase 1 study found that CaBA has enabled collaborative working and communities to be involved in decision making. Other suggested actions in the Natural Course Phase 2 study include: 1) simplifying the strategic planning landscape by aligning the three key strategic planning processes around Flood Risk Planning, Water Company business planning process and the RBMP process, and 2) co-ordinating the major investment programmes linked to flood management, farm subsidies and water industry investment, to pool efforts.

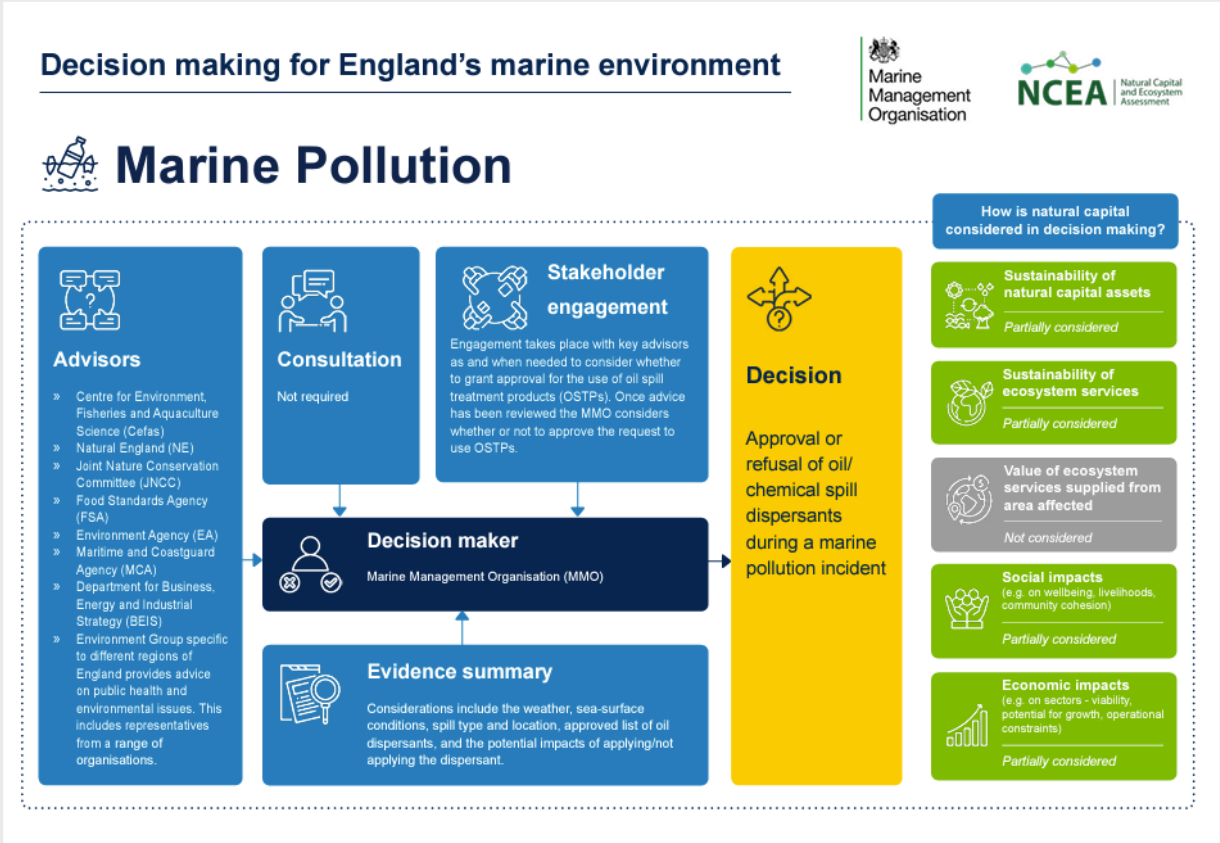
Scale: Important at all levels. It will be important to establish cross government groups that bring together people from the different sectors and this to be mirrored at the regional and county level. We suggest though, at the local level (e.g. within counties), there may be a strategy to work collaboratively but the structures are enabled to develop organically so as to be relevant to the issues of the local places.

[27] Walker, P (2019) Dad And Edd: Two Approaches To Engaging Stakeholders In Decisions

Supporting information and comments

Figure 7 provides an example of how decision making can be systematically analysed to assess the extent to which natural capital is taken into account. Such an approach could support the prioritisation of decisions which need to better align with natural capital goals.

Figure 7: Example decision making process for natural capital



Source: Eunomia (upcoming), Decision Mapping Guidance Document, for the Marine Management Organisation.

3.2.5 Working at a meaningful scale that people feel invested in

The key to this ingredient is understanding the meaningful scales for collaboration for different organisations based on the nature of their work, their size and capacity but also the other networks and partnerships they are involved with as this may give them different or wider perspectives and interests in water governance. Guidance from the Natural Capital Initiative recommends a 'wholescape approach', one that transcends conventional administrative, sectoral and geographical boundaries. [28] New 'wholescape thinking' encourages holistic solutions, replacing sometimes narrow perspectives that can create conflict between different interest groups or miss critical linkages. This type of approach depends on strong partnership working that brings together diverse organisations who agree to collaborate closely to solve problems of common concern.

Therefore, by meaningful scale refers to the scale at which collaborative action or management addresses issues which are the daily concern of the organisation in question, or the overriding concern for that

[28] Natural Capital Initiative (n.d.) Wholescale thinking

location. A local community organisation for instance, is likely to find meaning or value in participating in collaboration around local water management issues that its members have already identified as factors that affect them. National organisations may not find collaboration at this scale meaningful because the decisions being made or actions undertaken do not affect them or their activities directly, unless they engage in activities at this level, in which case they will likely have local staff who would be involved in the collaboration.

For example, Natural England is not directly responsible for local nature recovery strategies (LNRS) and national staff would not be involved in collaboration on environmental or water governance at this level. But, in recognition of the role of LNRS in the achievement of its national objectives around protecting and enhancing nature, Natural England has set up local projects to promote effective participation in the development of LNRS.

The concept of people or organisations feeling invested in collaboration at certain levels (and not others) relates to the idea that collaboration requires a commitment and input of time and capacity in order to gain benefits. This commitment/input can be understood as an investment and is likely to be assessed by the organisation or individual in terms of the benefits realised. Some of the benefits are economic, e.g. funding for projects which the organisation cannot do with its own resources. In other cases, the benefits are less tangible and relate to knowledge, relationships or power. An example of these benefits is provided by the Dales to Vale Rivers Network, described in the 25YEP local delivery study.[29] The Dales to Vale Rivers Network is a catchment partnership that brings together local people, communities, organisations and businesses to make decisions on managing the interconnected bodies of water in the catchment area. One main problem which the partnership seeks to address is the lack of funding for local projects. To avoid creating a situation where some organisations are seen to be prioritised in terms of access to funding opportunities, the partnership developed a pipeline of multi-beneficial projects and established a 'taxi rank' approach to funding opportunities. Once projects are agreed by the group, these are ordered sequentially so that funding goes to the first project in the 'taxi rank' that meets the required criteria of the funders. This has increased the sense of ownership and positive investment in the partnership.

Related issues: This issue is related to the way that decision-making structures and processes are set up and operate. While involvement in collaborative working is by no means only about decision-making, the ability to contribute to decisions may be a key consideration in individual or organisational decisions to continue working on collaborative ventures. Interest in contributing the decision-making is likely to be heightened during periods of change or when problems arise that generate conflicting responses, especially where these are rooted in deeply held values collaboratively.

Scale: this is relevant across all scales.

3.2.6 Sufficient and connected resources and capability

Integration can add complexity to processes which are already complicated. Achieving integrated governance will therefore require more attention and resources. Collaboration and coordination activities which are important for joint objective setting, building trust and social capital - such as joining meetings, communication and knowledge sharing - all take time and effort. Further resources will also be needed if

[29] Orr, P., Morse-Jones, S., Watson, N., et al (2020) 25 Year Environment Plan Local Delivery: Enhancing Local Delivery and Implementation Through Strengthening Stakeholder Relationships, Integration, and Leadership. A report to the Department for Environment, Food and Rural Affairs (DEFRA).

new structures or processes for integration are created. Specific resources should be allocated to develop the capacity and capability of key stakeholders to integrate governance of water, land and nature.

As well as needing sufficient resources for governance, often resources paid for from the public sector, it is also important to have sufficient resources for implementing improvement schemes. This is where the drive for **attracting private investment** is relevant.

Related issues: having sufficient resources and building capability links to a number of other components for integration, namely:

1. leadership (adding integration activities to someone's role, or creating a new role specifically for integration may require additional funding and time);
2. resources will likely be required if new decision-making structures and processes for collaboration are created, including for gathering knowledge and support from a range of stakeholders; and
3. time, effort and resources will be needed for any additional testing and evaluation of integrated governance.

Scale: activities to increase integrated governance such as collaboration and coordination need to happen both among people in parallel organisations or groups (*within* a particular level), and between groups and organisations at different scales such as local, regional and national (*between* levels). Capacity building and resources will thus be needed at each level for integration.

Supporting information and comments

Challenges of private investment. Recent projects on nature markets, and land use change have highlighted some weaknesses in attracting private investment:

- **Land-use change is likely to be driven by market demand rather than environmental and social need.** The market maturity for ecosystem services is variable. Markets for Carbon Credits are mature, for biodiversity net gain (BNG) are maturing but for others are in development. This means that project developers have the task of convincing those currently not paying for ecosystem services of the need to pay for them which can take considerable time and skill. In the Wyre for example, which was able to create the 'First of its kind' £1.5m nature restoration project to reduce flood risk, this took two years with considerable support from investment experts from Triodos Bank.[30] This means that decisions on land-use change can be distorted to match market demand rather than optimising environmental and social gain. Anecdotal evidence from land managers suggests that productive land is being planted with trees to generate Carbon Credits or bought by developers to use to offset biodiversity for planned development, taking it out of food production for many years. One comment was "everyone knows a tenant farmer that has been kicked off the farm for environmental purposes". There have also been concerns that communities are being overlooked in the rush to buy-up large areas of land. If we are to address all of the challenges outlined in the 25YEP and potential strains on food supply in the future, some drive towards optimising delivery across goals for optimal benefit is needed.
- **There is a mismatch in scale between investors and project developers.** The Wyre project quoted above is referred to by Triodos Bank as a "small project" despite at £1.5 million being a large environmental project. Typically investors are looking to invest sums in excess of £10 million, but the number of large areas suitable for investments of this size is increasingly limited. Finding private income for smaller areas of land will be more complex and time consuming as interest is sought from multiple funders.
- **Uncertainty about the market is making land-owners hesitant about committing to land use change.** There are many schemes for selling carbon and BNG and landowners are confused by what is available, its impacts and how it might change. Better regulation of the markets is one potential route for addressing this issue.
- **Funders vs investors.** Another source of private income is from funders. Organisations seeking to buy services provided by nature-based solutions or save costs. Large amounts of funding already go into local environmental improvement. In 2014/15, and excluding Environmental Land Management (ELM) payments, it was estimated that over £13 billion is spent each year in England on catchment-related activities, from research grants and grant-giving charities and a wide range of operational funders such as: Water companies; Businesses; Local growth programmes; Local authorities; Flood risk authorities; Public health and social care organisations; and Road and rail network organisations.

3.2.7 Ability to bring in knowledge, support and values from a diverse range of stakeholders, formal and informal organisations and community groups

Bringing in inputs/resources defined as knowledge, support and values - from a diverse range of stakeholders, including formal and informal organisations - is essential for the credibility and quality of a collaborative process.

In terms of credibility or legitimacy, including people who have a stake or perceive themselves to have a stake in the decision or action is vital. This should include those from a range of perspectives both supportive and unsupportive. Care needs to be taken to list all those who have influence over the decision or action, those who are affected, and those who are interested. Reaching out to beyond the "usual

[30] Triodos (2022) First of its kind £1.5m nature restoration project to reduce flood risk

suspects" by systematically reviewing who is involved helps to ensure diversity. Having and showing that the inclusion process is open and unbiased will increase the credibility and legitimacy of the process. People who may be sceptical that a group is being set up to promote a specific issue will be able to see that integration efforts are genuine.

In terms of quality, decisions and actions will be improved by being exposed to different values and opinions, but also by including different knowledges. Table 2 sets out a summary of examples from flood risk management, specifically in relation to involving members of the public, covering three ways knowledge can be used to improve the quality of decision making.

Table 2: Improving decision making through different knowledge

Local citizens included in identifying local FCERM options bringing local knowledge of the area.[31]	Public participation can enhance the quality of the decision output by providing decision makers with environmentally and/or socially relevant information and knowledge.	1. Harnessing local information and knowledge
Members of the local community providing their view of recovery from flooding as input to national guidance on recovery.[32]	Public participation can increase the quality of the decision output by providing decision-makers with relevant experiential and value-based knowledge.[33]	2. Incorporating experiential and value-based knowledge
Local citizens inputting information on upstream storage to create accurate flood models with flood modellers.[34]	Public participation can increase the quality of the decision output by testing the robustness of information from other sources.	3. Testing the robustness of information from other sources

There is much research on the importance of inclusion and the challenges to achieving it[35] which underlines that:

> *'Successfully tackling climate and environmental challenges – such as biodiversity loss, sustainable use of resources, and decarbonisation – will only be achieved if we actively include diverse voices in both the design and delivery of solutions and if we reduce the environmental impacts of our own research practices'.*[36]

[31] Maskrey, S., Mount, N.J., Thorne, C.R., and Dryden, I (2016) Participatory modelling for stakeholder involvement in the development of flood risk management intervention options Environmental Modelling and Software, pp 275 – 294
[32] Hull Floods Project (n.d.) Outputs
[33] Glicken (2000) define experiential knowledge as "based on common sense and personal experience and, again, is developed by individuals…[and]….value-based knowledge is moral or normative, is derived from social interests, and is based on perceptions of social value. Such knowledge engenders debates about the 'goodness' of activities." p. 307
[34] Lane, S.N., Odoni, N., Landstrom, C., Whatmore, S.J., Ward, N. and Bradley, S. (2010) 'Doing flood risk science differently: an experiment in radical scientific method', Transactions of the Institute of British Geographers, 36: 15-3
[35] The ACCESS Network of social researchers has established three guiding principles which are central not just for research but also policy and practice: Sustainable Development; Equality, Diversity and Inclusion; and Knowledge Co-production.
[36] ACCESS Network (n.d.) Guiding Principles

There are still many gaps in knowledge and capacities in national and local institutions that are preventing effective participation of communities and individuals in decision-making, for example in flood risk management.[37]

Setting up different participation structures can produce an immediate change in relations between decision-makers and those affected by the decisions. The National Flood Forum for instance, promotes the use of multi-agency meetings to bring together all the relevant flood management institutions in an area (e.g. EA, local authority, water company) with local communities to discuss and progress measures to reduce flood risk. These provide non-confrontational spaces where community members and professionals can share their different kinds of knowledge.[38]

Related Issues: sufficient and connected resources and capability, alongside developing and practising a collaborative mindset.

Scale: the actions here need to happen at all scales.

3.2.8 Testing, evaluation and learning

This ingredient is about taking a critical approach to collaborative practice. Testing, evaluation and learning is about ensuring those involved can identify and make sense of the strengths and weaknesses in their collaboration and to explore new approaches to problem solving:

- **Testing** refers to the process of trying out new approaches, ways of working or methods to see whether they are effective in addressing the problem(s) identified. Tests must involve all the relevant actors and be given enough time to demonstrate whether and how well they work to address the issue identified. The specific elements to be tested and criteria for assessing the results need to be agreed before the test begins.
- **Evaluation** is what those involved do to assess how the elements being tested are working / have worked and to what extent the test has been successful or what has been learned from it. An evaluation can be a simple process but how it is being done and who is doing it should be defined before the test begins. Evaluation should always involve all those who have been part of the testing, with the nature / extent of participation depending on roles / what benefit participants will get from their involvement.
- **Learning** is about what happens to the results of the test and evaluation. There can be positive learning from unsuccessful tests- this depends on participants (including external evaluators, if these are used) sharing their experience and reflecting on what has come out of the test. It is important for those involved to agree what shared learning has come out of the test, even if there are disagreement about specific points such as the degree to which success was achieved.

3.3 Achieving Environmental Improvement

So far, discussion has focused on the ingredients that underly integrated governance. However, as described in1.0, the ultimate goal is a better environment. For integrated governance to deliver that goal, two assumptions need to be true:

[37] Twigger-Ross et al (2021) Flood and coastal erosion risk management research and development framework: working with communities. Literature Review. Environment Agency.
[38] Collingwood Environmental Planning and National Flood Forum (2018). Sustainable Communities Pilot Study. For Welsh Government and Natural Resources Wales.

1. integrated management/governance of water and land will lead to more efficient and effective delivery of outcomes; and
2. attracting more private investment will lead to more efficient and effective delivery of outcomes.

On integrated governance, whilst this will indeed lead to more efficient and effective delivery of positive change, this will not be sufficient to achieve the ambitious goals set in the 25YEP. It is questionable whether some 25YEP goals are achievable at all, but to make real progress greater attention is needed on addressing the driving forces and pressures rather than responding to causes. If the pressures continue to grow, the challenge to improve the state of the environment will become increasingly tough. More focus needs to be placed on reducing the pressure on the environment and ideally also the driving forces, such as through a Driver-Pressure-State-Impact-Response (DPSIR) framework (see Table 3 for example). This is about influencing people to stop over-using and wasting resources. In a way, this is also about governance since it is about the decisions each individual makes about environmental resource use (e.g. recycling, food and clothes consumption, water and chemical use etc).

Table 3: Driver-Pressure-State-Impact-Response for the 25YEP

Indicator	Description
Driver	Population growth/growth in consumption of resources.
Pressure	Over-use and waste of environmental resources as well as increased greenhouse gas emissions.
State	• The environment deteriorates • There is not enough land to provide all the services needed • There is not enough public money to invest in protecting/improving the environment
Impact	We are facing biodiversity and climate crises, which reinforce each other.
Response	Responses could be derived to focus on the state, or more effectively on the pressures or driving forces.

4.

To achieve this change by tackling the root causes will require education and incentivisation. Incentivising change through well designed charging schemes (e.g. for discharge, abstraction, water use, carbon use, biodiversity damage) also provides opportunities to raise investment from the private sector. Affordability will be important, so an allowance for basic needs could be included with scaled charges as an increasing disincentive to damaging behaviour (see for instance the Natural Capital Levy, as proposed by Eunomia et al. (2018)).[39] Most European countries do have incentive or revenue raising elements to their water based charging schemes (Eurowater).

On the second assumption, it is widely accepted that after many years of under-investment, additional investment in natural capital is urgently needed. It is also widely accepted that the level of investment needed is considerably above that currently available from public funds which are under increasing strain.

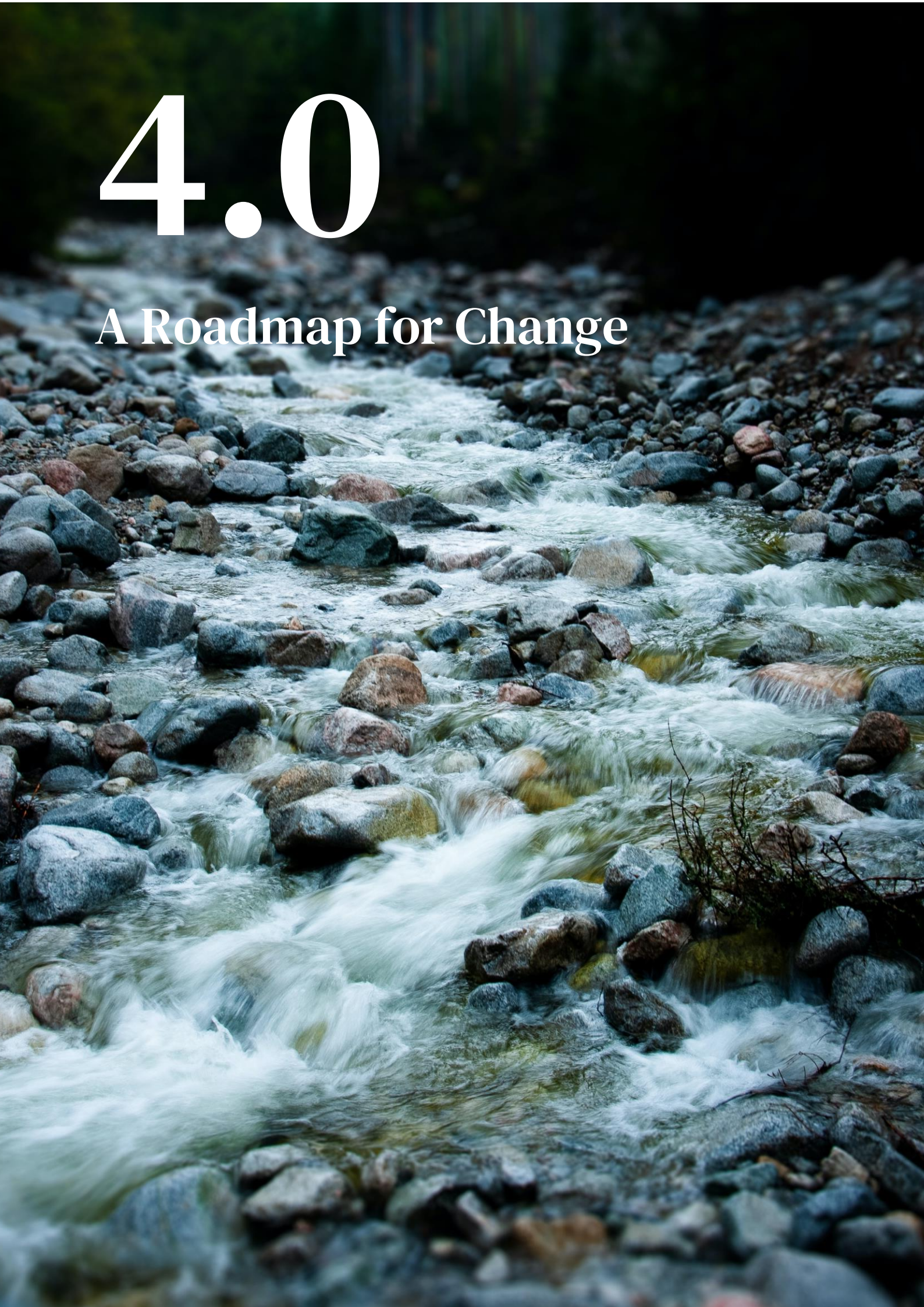
We have not conducted a literature review to test how effective recent initiatives to increase private investment have been, but our sense from recent studies exploring nature based markets is that using a

[39] Eunomia, WENP, Avon Wildlife Trust (2018) Developing the Concept of a Natural Capital Trust in the West of England and Beyond.

market approach has had mixed results. There has certainly been additional investment, and a plethora of mechanisms springing up to attract investment for example in tree planting in return for carbon credits. Whether this is realising true environmental benefits is yet to be proven and indeed there has been considerable concern about negative effects on local communities and reported cases of unintended consequences as investment is driven to maximise return to the investors rather than maximise benefits for the environment or community. A market based approach may not be the most effective way of achieving a better environment and it may be worth considering other forms of raising private funding, for example from revenue raising levy schemes which could be more effective.

4.0

A Roadmap for Change



4.1 Roadmap Approach

In proposing a roadmap for change, the Eunomia team took two approaches:

1. Identifying the changes we would make to enable more integrated governance of water, land and nature. The 'top-down' list which emerged is shown in the Appendix.
2. Looking at each of the key ingredients and identifying what would need to happen- 'actions'- in order to realise each of the desired outcomes.

We reviewed the outputs from these two approaches iteratively to derive the rough road map provided in Table 4. The table suggests which of the key ingredients the actions support and indicates the sequence of actions from immediate (<6 months), through medium (up to 12 months) and longer term (>12 months) time frames.

Our aim has been to frame actions as a roadmap for Defra to enable better integration of water, land and nature governance and increase private investment in these areas. As such, the actions capture what Defra would need to lead or enable, as well as actions Defra should directly conduct (where appropriate). There are three broad types of action:

1. Actions which would require Defra to change how it operates/makes decisions and to put together evidence to influence others. These are likely to be actions which could start more immediately (i.e. <6 months).
2. Actions which involve working with other departments and national bodies. Some of these actions may require the materials and evidence compiled by Defra, while other actions are about working more collaboratively together.
3. Actions which seek to influence the behaviour of organisations at other levels. Many of the actions are intended for implementation at the local level (i.e. regional, county or local authorities), but these would need to take place within a framework and direction of travel set by Defra, and implemented in conjunction with relevant arm's length bodies and departments. These actions include for instance making funding available for/conditional on collaborative working.

Some of the actions presented in Table 4 address more than one of these areas.

Table 4: Broad indication of incremental steps for better integration of water, land and nature governance

Ingredient and theme	Action	When (months)		
		<6	<12	12+
Leadership, ownership and buy-in	**1. Build an increasingly shared vision (goals and success measures) of integrated governance that puts Natural Capital at the centre of decision making (and/or aligning across the 25YEP with governance) that: 1) enables cost-effective use of limited resources, 2) reduces unintended consequences and wasted resource of separate functional decisions, and 3) identifies the 'right scales' at which integrated governance should be achieved. This would be led by Defra, but including Natural England, the EA etc. Build this shared vision through the following actions:**			
	a. Initial thoughts should be outlined in a high-level theory of change.	✓		
	b. Refine the initial vision and goals to create a shared vision and goals with partners. This shared vision, to which partners would align and commit, would recognise 'a burning issue' in a system ripe for change and needing collaborative action to address urgent issues. This is the first snowballing step from which wider cross-governmental strategies can form.		✓	
	c. Gain support for integration from highest level ministers in Defra and encourage them to lobby (using the business case and linked evidence) to build support with other government departments[40] to address priority problems, e.g. Cabinet Office, DLUHC, DHSC.		✓	
	d. Lead a cross-governmental Working Group focussed on collaboratively creating a widely held shared vision.			✓
Leadership: Evidence	**2. Develop a compelling business case for reform/integration[41] based on hard-hitting evidence[42] and in language that will gain traction to create credibility and mobilise resources. Build the evidence base for this by the following actions:**			
	a. Showcase the benefits of an integrated approach using existing evidence from case-studies (see below).	✓		
	b. Identify the top five problems where an integrated approach could have maximum benefit. Prioritisation could be based on ease of implementation for instance (e.g. there is already an accepted problem and a clear leader). Mapping areas where functions could be integrated/overlap, such as in Figure 3, could also be useful.	✓	✓	
	c. In the medium-term (within 12 months) strengthen the evidence base for integration, for example by learning lessons from elsewhere e.g., is integrated governance of water, land and nature achieved elsewhere in Europe, and does it save money?		✓	
	d. In the medium/long term, build the testing of integrated approaches into current 'integration opportunities', e.g. Local Nature Recovery Strategies (LNRS), Nature Recovery Network and Landscape Recovery to: 1) include a focus on integration/collaboration		✓	✓

[40] Aiming for support from a range of departments to create a cross-governmental group focussing on cost-effective delivery of 25 YEP possibly overseen by Treasury/Cabinet and including DESNZ, DHSC and DLUHC.
[41] Building on the business case created in 'Assessing the opportunities for aligning planning and delivery of water and natural asset management' (Defra, 2014).

Ingredient and theme	Action	When (months)		
		<6	<12	12+
	and optimising natural capital in the evaluation of these initiative, 2) feedback results to gain higher traction with others and support the business case.			
	e. In the medium-longer-term, piloting integrated management of water, land and nature (links to learning action, see below).		✓	✓
Right scale: Evidence/ Guidance	3. **Summarise case study examples of collaborative initiatives working successfully at different scales**. Highlight how the case studies define the scales at which they work. The aim is to allow a better understanding of how decisions about the scale at which collaboration takes place are dynamic, and may respond to opportunities (e.g. to influence or to get funding/resources) as well as, or instead of, being agreed and defined in advance.	✓		
Leadership and right scale	4. **Identify near-term 'integration opportunities' by mapping out existing initiatives, scope, objectives, timescales, stakeholders/owners and scales**. Share across functions to help identify quick win opportunities for alignment or testing alignment e.g. LNRS and Nature Recovery Network piloting (working with the evidence directorate).		✓	
	5. **Encourage LNRS partnerships to think widely about Environmental Gain, putting Natural Capital alongside Biodiversity at the centre of decision making**			
Learning	6. **Learn from the developing LNRS,** specifically:			
	a. Incentivise collaborative, integrated working as the way in which LNRS are developed. LNRS are providing opportunities to practise working across boundaries in a collaborative fashion. The pilots have drawn out a number of lessons around collaboration, including recognising the variety of ways in which different places will do collaboration.		✓	✓
	b. Evaluate the ways in which collaboration is happening in the LNRS in practice, including what structures and processes are being developed. Natural England is shortly going to commission an evaluation of LNRS; if it does not include a focus on collaborative approaches involving land, water, flood and biodiversity, commission a parallel study with this focus.		✓	✓
Leadership: Roles, legitimacy and support	7. **Create a cross-governmental role centrally with responsibility/accountability for efficiently maximising Natural Capital Gain** and delivery across all 25YEP goals by using resources (funding, land, water, people) across functions. This role should be cross-governmental to have sufficient influence over LEPs and Local Authorities, as well as Defra arm's length bodies, and possibly linked to Cabinet Office level (given its relationship to efficient use of resources). This should build on, and learn from, the work of the Natural Capital Committee which was intended to promote the use of Natural Capital but without the power to deliver[43]. Ensure the cross-governmental role has sufficient power to deliver by: a. providing them status/legitimacy, and b. supporting them with a small team with access to technical resources- tools, data and experts-and funds.		✓	

[43] The Office of Environmental Protection (OEP), created by the Environment Act 2021, states that it will build on the work of the NCC. However, the promotion of investment in Natural Capital and ecosystem services is not likely to sit easily with the OEP 's main role of enforcing environmental law.

Ingredient and theme	Action	When (months)		
		<6	<12	12+
Leadership: Roles	8. **Establish a cross-governmental task and finish group to provide oversight and steering to create aligned guidance and tools** that read across the functions of water and natural asset management. Defra should lead this action, but include DLUHC, arm's length bodies and other key stakeholders. This should include the evidence/analysis and data directorates to consider the full range of activities underway and reviewing the commissioning of delivery bodies to consider alignments proposed.		✓	
Leadership: Roles, legitimacy and support	9. **Use upcoming devolution deals[44] to create/enable an integrator function within local government, possibly at county level, to encourage integration from the bottom up in a way that is politically accountable and place-based**. The recent Northeast Devolution Deal (December 2022) only refers to protecting the natural environment in the very last section (headed 'Rural'). The final clause refers to investment in the natural environment, but seems like an afterthought, as investment is addressed in detail early on in the document.[45] To avoid a top-down process, conversations on this change need to start at the local level e.g. with local authorities, local authority leaders and the Local Government Association (LGA), while Defra and DLUHC need to connect with local authorities.			✓
Leadership: Culture	10. **Put more importance on having the right personal skills for collaborative working for leaders appointed at all levels** using government funds. Personal leadership qualities have been shown to be one of the highest factors determining success. This could be improved by putting more emphasis on the need for a collaborative style in describing key roles and putting greater weight on the skills and experience of named leaders in evaluating applications for pilot schemes and local partnership support.			✓
Sufficient resources	11. **Create a fund specifically aligned to optimise delivery for Natural Capital Gain**, a Natural Capital Fund, or a 25YEP Fund which is distributed on initiatives that deliver across the board and is administered at the levels at which decisions are made.			
Leadership, shared vision and collaborative mindset	12. **Develop a cross-Governmental Implementation Plan outlining how the vision will be achieved**, through: a. clearly defined roles with accountability for efficient use of resources; b. cultural changes supporting working together more effectively (from practical things like rotating chairing or hosting of meetings, to more deep-rooted changes like ensuring that no partner organisations are seen as taking precedence over others); c. aligned funding, environmental/social based metrics and tools that enable decision making to optimise Natural Capital; d. further progressive alignment of delivery; e. commissioning, KPIs and business planning processes; and f. cross governmental natural capital accounting requirements.		✓	
	13. **Promote the vision and implementation plan widely. Send a clear message that signals cross-Governmental working group support for optimising Natural Capital and integrated governance** and which encourages the use of synergistic measures where it makes sense to do		✓	

[44] The government is aiming to agree a devolution deal with every part of England that wants one by 2030. These will devolve powers and provide a long-term funding settlement.
[45] The clause says: "In line with commitments made in the Borderlands Inclusive Growth Deal, the government, which is committed to increasing private investment in nature's recovery across England, will support the Northeast MCA to capture the economic benefits of its natural capital and attract private investment including to deliver priorities identified in LNRSs. This support may include: a proportion of revenue funding; specialist expertise; co-ordination of peer support and networking; and/or local partnership working with DEFRA's Arm's Length Bodies (Environment Agency, Natural England, Forestry Commission). Any funding provided remains subject to further agreement and approvals and will be conditional on participation in a programme of evaluation and shared learning." North East devolution deal - GOV.UK (www.gov.uk)

Ingredient and theme	Action	When (months)		
		<6	<12	12+
	so. This should also indicate: 1) how the cross-Governmental working group will steer governance and management arrangements in line with the policy drive, 2) the role of the task and finish group, and 3) promote the piloting going forward and how the cross-Governmental working group is supporting that[46]. This should go to all Delivery Bodies which have powers to affect change i.e. Defra arm's length bodies, LNPs, LEPs and local partnerships.			
Decision making: Tools	14. **Put natural capital at the centre of all decision making and guidance**. Link to the Natural Capital and Ecosystem Approach research programme – NCEA – who are seeking transformative change in the use of NatCap[47]. Actions include:	✓		
	a. Use a common ecosystem approach and services framework to allow coordination and alignment of environmentally focused initiatives across functions, with a common suite of terminologies and approaches.	✓		
	b. Develop an action plan for aligning regulatory frameworks. This should be based on how integration is supported within current frameworks and what new frameworks/legislation/policy is needed to embed and encourage collaboration and remove barriers.		✓	
	c. Identify and promote- and where needed create or adapt- tools to help optimise delivery of natural capital at all levels and embed the use of tools that support decision-making across the board. See for instance the Landscape Scale Natural Capital Tool for Scotland currently in development by NatureScot.		✓	
	d. Map and align decisions on research, regulation and evaluation to determine the extent to which Natural Capital is taken into account. Use this to prioritise areas for better aligning decision making to focus on integrated delivery, maximising Natural Capital Gain and delivering across all 25YEP goals to reduce and mitigate negative consequences of siloed working and make efficient use of limited resources (funding, land, water, people) across functions.		✓	
	e. Review core guidance documents to remove blockers to integration and seek opportunities to read across/align, including how they link to delivery approaches.		✓	✓
	f. Develop a programme of realignment that identifies key decisions and ensures an integrated approach is a criterion for decision making e.g. on appointments, support, regulation, research, and evaluation. Identify key misalignment problems and propose solutions for a common framework with regards to terminology, benefits and benefits assessments, including developing a scheme to enable reading across the current functional approaches.		✓	✓
	g. Create a policy checklist for every major decision to check that decision makers have ensured efficient use of resources across the natural capital spectrum.			✓
	h. Support integrated delivery (at all levels) by providing central evaluation which can be used and tested by pilots.		✓	

[46] This message may be in the form of a letter to Chief Execs which would indicate the direction (and possibly expected pace) of change with reference to the natural step and water white paper, synergies paper and triennial review recommendations; note ongoing work and how these organisations should support these; and clarify how Defra (possibly with other government departments) will monitor and report progress against change.
[47] Defra (2022) Natural Capital and Ecosystem Assessment Programme

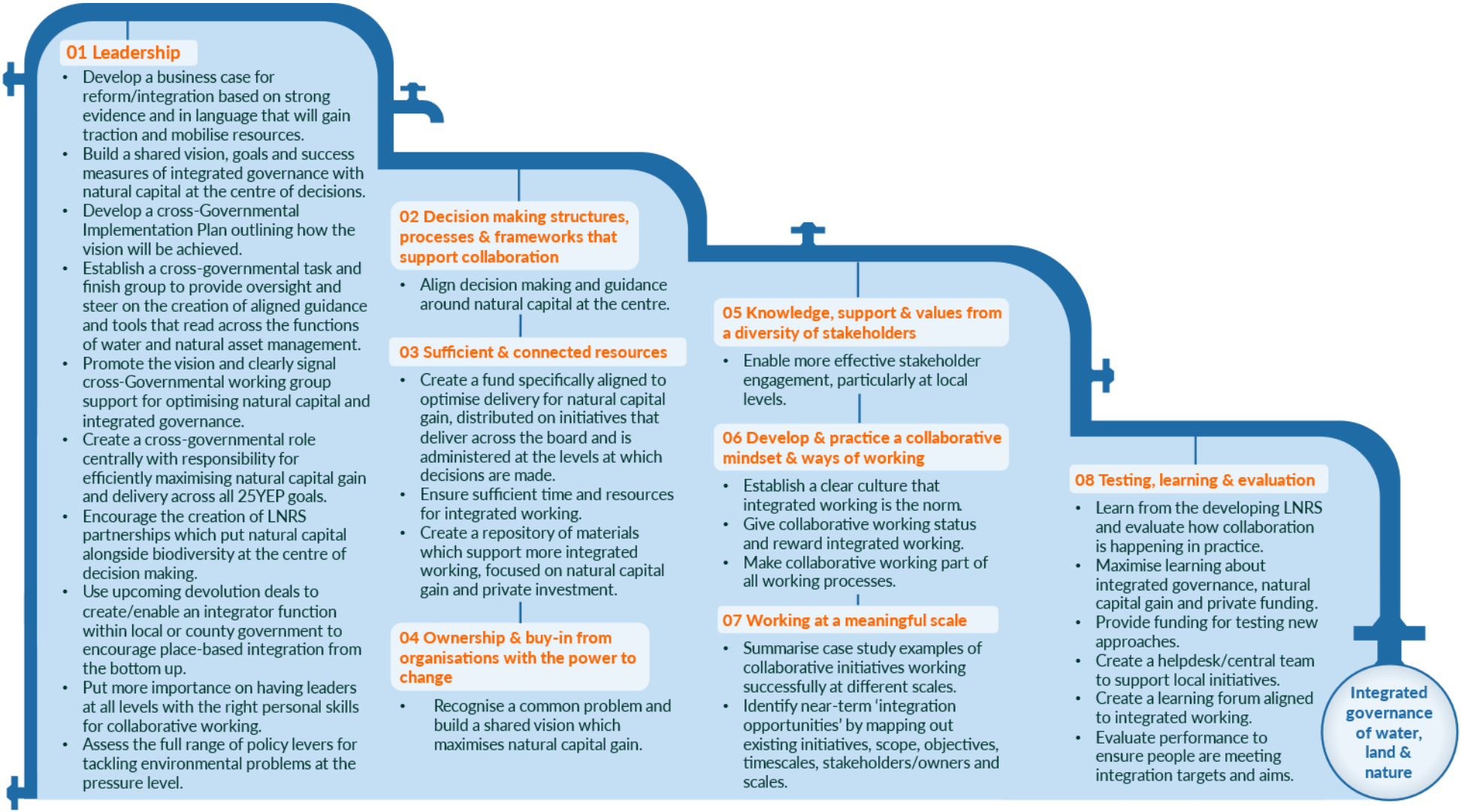
Ingredient and theme	Action	When (months)		
		<6	<12	12+
Collaborative mindset and sufficient resources	**15. Establish a clear culture that integrated working is the expected norm** particularly in certain areas. Reward those practicing integrated working, but note that there may be exceptions where the slower pace, or compromise, of integrated working might not be appropriate. **Give collaborative working status** by:		✓	
	a. Encouraging informal working together at all levels with leadership from Defra. This could take place through secondments, mentoring, simple actions like sitting in common areas and visiting offices.	✓		
	b. Exemplifying/modelling a collaborative mindset through setting up a cross-functional forum within Defra- and ideally across Government- bringing together all functions/groups relevant to developing an integrated approach. Within that forum practice a collaborative mindset by: cultivating humility, being confident, appreciating different perspectives, being honest about conflicts in objectives, practising curiosity and changing your position into an option.	✓		
	16. Make collaborative working part of all working processes, including policy development, implementation and evaluation and for new initiatives requiring departments or local authorities to submit bids together.	✓		
	17. Ensure sufficient time and resources are available for integrated working by:	✓		
	a. Checking everyone involved in programme implementation allows time for integrated working to happen. This requires time for knowledge sharing and relationship building through activities across different teams, and for individuals to attend each other's meetings, allowing people time to get to know each other to build trust.			✓
	b. Allowing lead-in time for new initiatives seeking to attract private funding. FIRNS for instance, (the NEIRF equivalent in Scotland), allows development grants for £6m and then investment grants for £24m. The evaluation of CaBA and coastal partnerships also demonstrated that an investment period is needed before real integration is achieved and that delivering 'quick wins' helps to maintain interest. While initial investment in integration may be high and returns may not be visible initially, in the long term, integration is likely to lead to cost savings from greater efficiency.			
Learning and sufficient resources	**18. Maximise learning about integrated governance, Natural Capital gain and private funding** by:			
	a. Providing funding for testing new approaches to solve identified problems for collaborative working or exploring innovative methods and applying a learning approach to any tests funded under the previous point or as part of programmes to foster collaboration. This would mean agreeing what elements of practice are to be evaluated, criteria for evaluation/success measures and who will be involved in the evaluation (as far as possible, this should include all participating in the evaluation, to some degree) and ensuring a process of sharing the results and identifying learning at the end of the test.		✓	
	b. Creating a helpdesk/central team/flying squad to support local initiatives including local authorities (e.g. on Natural Capital assessment), influencing others and gaining investment.		✓	

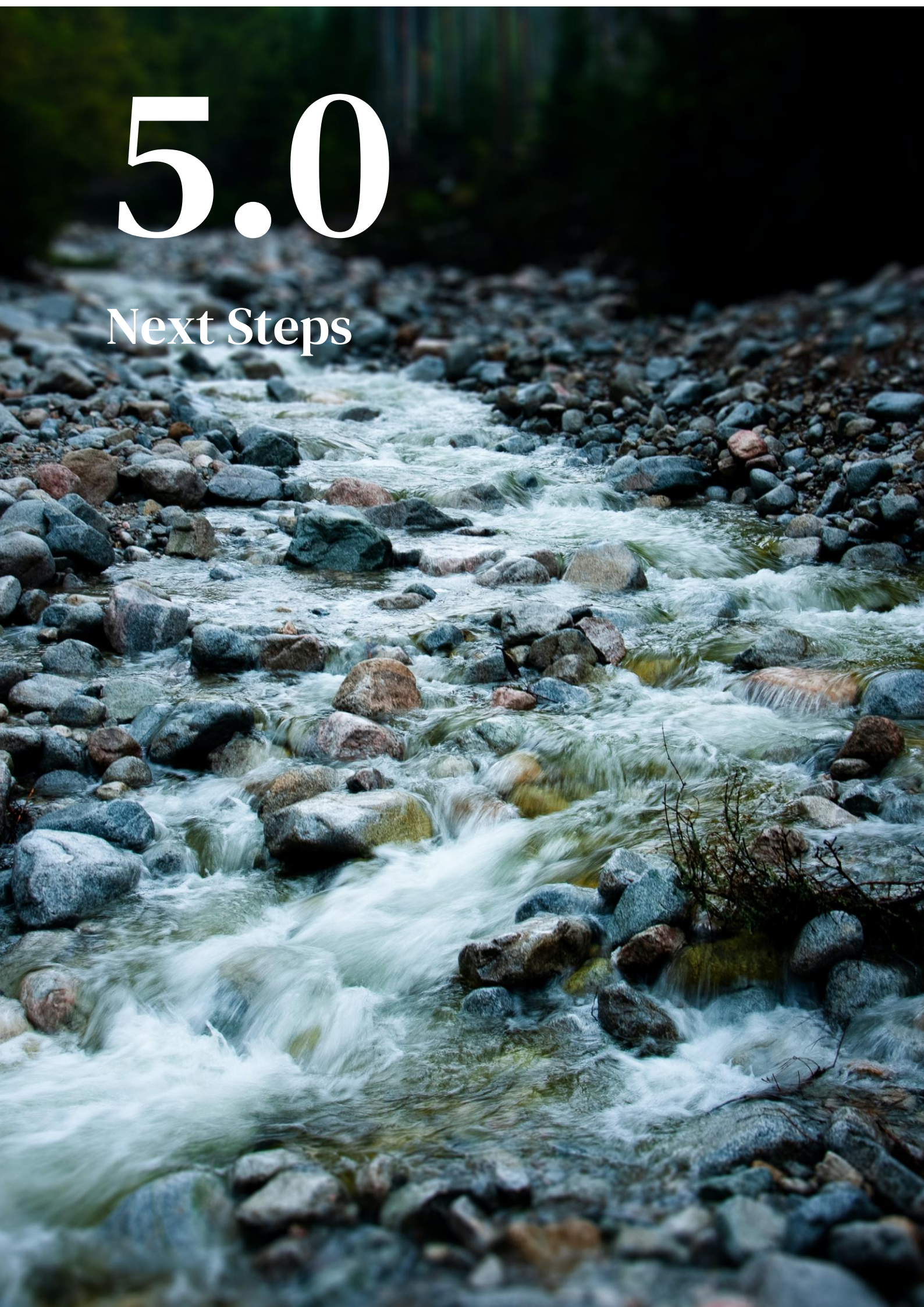
Ingredient and theme	Action	When (months)		
		<6	<12	12+
	19. Creating a repository of materials to support more integrated working. This would focus on Natural Capital gain and encouraging investment (capturing past lessons and adding new material) to help all those working in these areas at all levels, but particularly local (possibly linked to the GFI toolkit and/or NEIRF). The materials would: i. Provide a clear description of local roles, responsibilities and priority outcomes. Evaluate these against current and potential future roles across water and natural asset management. ii. Provide case-studies showing where integration has been achieved for priority areas– these are the areas where there are clear-cut benefits to integration. iii. Give guidance on how to gain buy-in from other stakeholders. iv. Map funding schemes to clarify the full range of national, local and catchment funding available for water and natural asset protection/improvement. Includes details on budgets, timescales, objectives and evaluation criteria. v. Map opportunities to influence plans and associated funding schemes. vi. Map the powers of different players against key problems at different geographical and administrative scales. This does not need to be proposed as an 'ideal' set of scales, providing it is understandable by users. This would enable those involved in collaborative initiatives (existing or proposed) to map their work against the decisions that take place at 'their' scale. vii. Support messaging and decisions on application of research findings, particularly those from the local piloting work.	✓		
	a. **Ensure that all stakeholders likely to initiate action in this space are aware of the guidance**.	✓		
	b. **Creating a learning forum** aligned to integrated working. There is a lot of existing practice on this which should be drawn on e.g. Ecosystems Knowledge Network, and where possible, existing learning forums should be used, rather than creating new forums.	✓		
	c. **Create appropriate conditions for generating income from the private sector in sustainable ways.** i. Utilise the excellent learning from NEIRF, showing top tips and pitfalls of securing private investment, to consider appropriate conditions for private investment/funding ii. Provide a clear and stable framework for green investment – for example by regulating private investment to avoid unintended consequences, and the 'Wild West' of nature markets currently observed. iii. Explore ways other than the sale of ecosystem services to raise income from private sources (see action under 'other') iv. Create a flying squad of experts to help local entities identify funding and investment sources appropriate for environmental improvements needed.	✓		
	20. Enable more effective stakeholder engagement particularly at local levels as place-based involvement can bring issues of integration and dis-integration to the fore. Specific actions could include:			

Ingredient and theme	Action	When (months)		
		<6	<12	12+
Stakeholder engagement	a. Hold conversations with a range of organisations and groups to understand the scale at which they work and their relationship with water governance. Use a decision tree/mapping to explore where these stakeholders could most usefully participate and in a way that would provide benefits for them and for collaborative governance.	✓		
	b. Undertake stakeholder mapping and analysis to identify the diverse organisations and groups that are not adequately included in decision making across land use, water and nature.		✓	
	c. Mobilise the capacity of the public, both in terms of their own decision making (through education – see action below) but also as the eyes and ears of observing negative environmental practices from diffuse sources.			✓
	d. Test experiences of bringing diverse organisations / groups into collaborative governance at different scales.		✓	
	e. Include community groups in decision making more generally. This can help ensure that decision making is fair and includes local knowledge.			
	f. Ensure there is follow through to the processes of stakeholder involvement, e.g. showing how different views have been considered and responded to.			✓
	g. Provide support in the form of external facilitators/guidance to ensure meetings and decision-making are run on collaborative lines, for example by involving Sciencewise to support national and local dialogue processes around areas of conflict such as competing demands on land especially between informal and formal organisations (e.g. in LNRS piloting).		✓	
Learning: Evaluation	21. **Evaluate performance to make sure people are achieving their aims and are meeting targets with respect to integration** (this could be a role for the Office for Environmental Protection).			✓
Other	22. **Assess the full range of policy levers for tackling environmental problems at the pressure level.** This should include:		✓	
	a. Exploring options for using education and charges to incentivise positive action and raise revenue, as in many other European countries – see for instance Eurowater. E.g. collating key messages for primary, secondary and adult education (with the DfE).		✓	
	b. Evaluating and trialling or using scenario testing to explore different ways of raising private funding for Natural Capital gain. In addition to the current focus on private investment via markets, consider revenue raising charging schemes which can also disincentivise negative behaviours (as widely used in other European countries) or a Nature Levy at the local level, proposed as part of a Natural Capital Trust for the West of England Nature Partnership.[48]		✓	

[48] Eunomia, WENP, Avon Wildlife Trust (2018) Developing the Concept of a Natural Capital Trust in the West of England and Beyond.

4.2 Roadmap Output





5.0

Next Steps

5.1 Tools for Evaluating Change

The findings reported in the earlier section of this report were compared with the outputs of a similar exercise being conducted internally by Defra and EA teams. Through a workshop, the similarities and differences (and reasons for these) were discussed. Following the workshop, the final roadmap was developed which can be used to develop a Theory of Change and Evidence Framework.

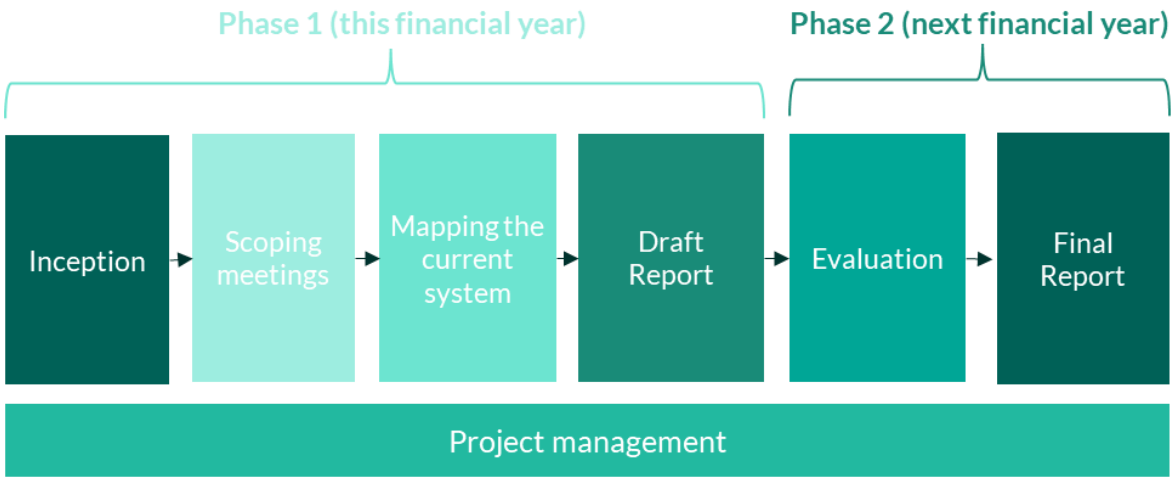
The Theory of Change and Evaluation framework should capture some of the inputs, processes, outputs and outcomes underpinning the initial vision for more integrated governance that would incentivise approaches to optimise Natural Capital and/or achievement of targets across the 25YEP. These tools could be used to identify key performance indicators (KPIs) and success measures discussed in the actions described in the roadmap.

Appendix

A 1.0 Further detail on the approach

The project was split into Phase 1 and Phase 2 as shown in Figure 8. This document reports on Phase 1 and comments on the value of the proposed outputs for Phase 2.

Figure 8 Methodology



Phase 1 included two key tasks:

1. **A scoping process:** In order to refine the scope of the study, three one-to-one scoping conversations were held between Eunomia and individual members of the Environment Agency and Defra team, based on the eight questions outlined in Table 1. The responses were recorded and analysed to identify similarities and differences between individual answers, define areas of agreement and highlight questions needing further clarity.

   The analysis was presented at a meeting on the 1st of March between principal consultants in Eunomia's project team, the Environment Agency and Defra. Following discussion, the final scope was agreed and is outlined in the section 1.2.1. For the full list of scoping questions and agreed scope, see Table 5.

2. **Mapping the current system**: After the scoping meetings, Eunomia conducted a focused review of relevant work previously completed by Eunomia (including CEP) followed by a series of internal workshops with principal members of the Eunomia team to: 1) reflect on the findings of the literature review, 2) brainstorm around key questions, and 3) rationalise/consolidate the findings from both of these steps.

   A meeting was then held on the 16th of March with the EA/Defra team to discuss interim findings and the structure of the project outputs.

A 1.1 Scope

The aim and scope of this project was to provide Defra and the EA with an independent external view on how to achieve joined up and integrated governance of land and water. From discussions with Defra and the EA, it was clear that attracting more private investment was also important and that the ultimate goal is a better environment. There are two assumptions which link the focus on this work to the ultimate goal:

1. That integrated management/governance of water and land will lead to more efficient and effective delivery of outcomes; and
2. Attracting more private investment will lead to more efficient and effective delivery of outcomes.

Success would be integrated management/governance of water and land that attracts more private investment and leads to more efficient and effective delivery of environmental outcomes.

Table 5: Scoping questions and agreed scope

Scoping question	Agreed scope
What is the geographical scope of the study?	England, but case study examples can be from the wider UK and beyond if applicable.
What change would Defra/the Agency like to see – what are the outcomes you are looking for?	The ultimate goal is a better environment. The assumptions are that integrated management/governance of water and land and attracting more private investment will lead to more efficient and effective delivery of outcomes, so the focus of this study is to examine the different ways in which these can be achieved.
Do you have a definition of governance that you are using?	Eunomia will use the following definition of governance in the study: 'Governance refers to the range of actors (public, private, civil society), rules (formal and informal), resources (financial, knowledge, technological) and discourses that shape the decision-making process, as well as the outcome and impact of this process, in relation to a collective goal.' (EA, 2021)
What are the boundaries of the system that needs to change?	Although water is the entry point for the study, the system will be broader than just water, to include other resources and sectors such as land-use and nature. Ultimately, all natural capital is within the boundaries and, by keeping the system open, the boundaries will be defined by what emerges as important from the research.
What are the functional outcomes we are trying to achieve?	Similarly the scope of functional outcomes is open to what emerges from the research, but it is envisaged this would include water, land, nature, carbon and air, and ecosystem services generally.
Which stakeholders are in scope?	Local authorities, civil society, Government, water companies, LEPs, natural resource managers, infrastructure managers, farmers, and local people are all in scope. The focus on the scale/level of governance remains unspecified at this point and will depend on what emerges from the research.
What is the scope of interventions being considered to solve the problem?	No interventions are excluded but could include: Funding and finance, Policy (policy levers), Structures (rules and processes), Cultures and Behaviours. The focus will depend on what emerges from the research.
Are there broad directions or initiatives that we need to be aware of to help us frame our outputs usefully?	Green finance targets/strategy Upcoming land use framework ELMs, LNRS, BNG, nutrient neutrality, offsetting policies Pulls on land use including housing, food and nature Funding announcements Devolution FCERM investment programme

Scoping question	Agreed scope
What outputs are you looking for from Phase 1 and what is the target audience for these?	Target audience: The output produced by the Eunomia team will be for the EA and Defra project team, but the output will provide evidence that may be used by the EA/Defra to develop other outputs, for example to inform Defra's roadmap for executive directors and the green finance board. Some of the outputs may also be used to support the 6 pilots under the NbS for Climate Change project. Content: Will include common themes or key 'ingredients' that are needed for effectiveness and success. Where possible these themes will be supported with real life examples of best practice or what didn't work. The content will be compiled through a focused review of Eunomia's previous work, and an expert view built from many years experience working in this field. This will draw out the current situation and indicate what 'different' could look like. There might be an element of sequencing to show incremental steps that could be taken now. The green finance board will be looking for practical suggestions. Structure: The output will depend to some degree on the information which emerges but must be digestible, simple, clear and relatable, probably composed of a more detailed roadmap accompanied by a summary or 'presentational' roadmap. Visuals/diagrams, similar to the FCVO water securities road map, could be useful.

A 1.2 Focused Literature Review

In order to identify where governance of land and water is already working well in practice, and where there are issues, a focused review of previous work completed by Eunomia (including CEP) was conducted. Given the scope of this study, the review was limited to projects which focused on governance or management of water, land and nature, and green finance.

Table 6 maps each relevant past project which was reviewed against the focus themes for this study. The table also highlights where additional themes were addressed by a project and the scale which the research in the project focused on.

Table 6: Summary of past projects reviewed

Past Projects Reviewed	Water Quality	Water Resources	Flooding	Land	Nature	Finance	Other	Scale
Assessing the opportunities for aligning planning and delivery of water and natural asset management- Defra (2014)								national
Natural Course Regional Water Governance Study (Phase 1 & 2)- EA (2020-2021)								local/ regional/ national
Natural Course Regional Water Governance Study (Phase 3)- EA (2020-2021)								local - county
Local delivery of the 25 Year Environment Plan- Defra (2020)							all 25YEP outcomes	local
Monitoring and Evaluation of Nature Improvement Areas- Defra (2015)								local
Evidence Review of Concept of the Flood Resilience- Defra (2020)								local
Flood Resilience Community Pathfinder Evaluation- Defra (2015)								local
Evaluation of the Catchment Based Approach Pilot Stage- Defra (2013)							health	local - catchment
Evaluation of the Catchment Based Approach: Phase 2- Defra (2015)							health	local- catchment
Natural Capital Trust- Defra (2018)							Natural Capital	local- county
Support to local authoritie/entities (various 2018- 2023)							Natural Capital	local
Finding urban funding for catchments- EA (2019)							health	local- catchment
Investable catchments (2020)							health	local- catchment

For each past relevant project, the following information was gathered:

- The aim of the project;
- Who was spoken to for the research i.e. which stakeholders were interviewed or surveyed;
- What those stakeholders said was working well/strengths/success factors in relation to governance;
- What those stakeholders said was not working well/challenges/barriers in relation to governance;
- Desire for change (where reported); and
- Recommendations (where reported and relevant).

A 1.3 The OECD Principles for Good Water Governance

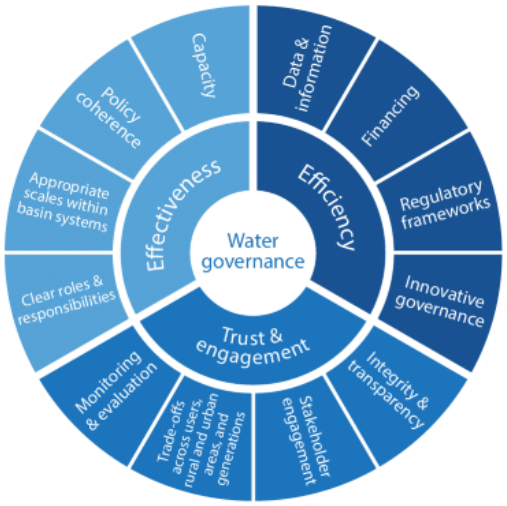
OECD Principles on Water Governance

Aim: to assist governments at all levels to make water governance fit for the future.

The principles set out 12 'must haves' to help manage water in a sustainable, integrated and inclusive way.

These principles are grouped into three clusters:

1. **The effectiveness of water governance** ; covering issues such as the clear allocation of roles and responsibilities, policy coherence and capacity development;
2. **The efficiency of water governance** , covering the dimensions of data and information, the governance - financing nexus and regulatory frameworks;
3. **And trust and engagement in water governance** , with special focus on integrity and transparency, equity across users, territories and generations, stakeholder engagement, monitoring and evaluation.



23 Literature review

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A 1.4 Creating the roadmap

All ideas from the 'top-down' brainstorm (see list below) and the 'bottom-up' list of actions derived to realise key ingredients were summarised in an excel spreadsheet. This list was supplemented with the actions derived from the 2014 alignment study. Each action was assigned to a theme/key ingredient, and approximate time frame, choosing between:

- Within 6 months
- Within 12 months
- Greater than 12 months.

Actions were then consolidated, rationalised and reconsidered (to check whether anything vital was considered missing) by each member of the team.

Key changes proposed from brainstorming the question 'What changes would you make to enable more integrated governance of water, land and nature?'

3. Give someone responsibility for ensuring the efficient use of resources (land, water, food, money, people).
4. Put natural capital at the centre of all decision making: create a policy checklist for every major decision to check that decision makers have ensured efficient use of resources across the natural capital spectrum.
5. Create/enable an integrator function within local or county level government to encourage integration from the bottom up, in a way that is politically accountable and place-based. To avoid a top-down process, conversations need to start at the local level e.g. with local authorities, local authority leaders and the LGA.
6. Give collaborative working status by making it part of policy strategies.
7. Give someone the space, resources and responsibility for collaboration at the national and local authority levels (capacity building). Resources may need to be provided over long time periods to ensure the resilience and continuity of collaboration. At the same time, focus integration efforts on what needs to be integrated or what would benefit most from collaboration. Integration takes time and effort and could potentially distract from taking immediate action.
8. Provide resources that are also collaborative in nature, for instance requiring departments or local authorities to submit bids together.
9. Evaluate performance- make sure people are achieving what they aim to do and are meeting targets.
10. Start tackling things at the pressure level through education and charges which incentivise positive action and raise revenue (as in most other European countries – see Eurowater).

A 2.0 Literature review

A 2.1 Natural Course Regional Water Governance Study- Phase 1 (2020)

Key messages from interviewees:

- **Existing governance arrangements more a hindrance than a barrier. They 'work well enough'.**
- **Strengths:**
    - Involvement of a diverse range of organisations, willingness to work in partnerships
    - Managing the catchment as a system
    - Mechanisms like CaBA have enabled collaborative working and communities to be involved in decision making
    - WINEP is a good mechanism which connects requirements to funding
    - Other funding schemes with local flexibility to address local priorities
- **Gaps/weaknesses:**
    - Lack of clarity, overlapping responsibilities regarding decision making
    - No place for water management to be united at a political or strategic/regional level
    - Siloed policy and siloed objectives is driving siloed decision making
    - Misaligned timescales of key planning mechanisms
    - Insufficient level of meaningful community involvement driving strategic decisions and investment
    - Plethora of local partnerships working across different elements of water has resulted in duplication of effort
    - Insufficient funding to catchment partnership hosts
    - Some funding is unwieldy (e.g. WEG), or have criteria which is too inflexible and narrow
    - Lack of recognition of value of agricultural land and the services it provides in decision-making on flooding.

Interviewees from:

- **Cumbria County Council**
- **Environment Agency**
- **RFCC**
- **United Utilities plc**
- **Greater Manchester Metropolitan Borough Council**
- **Rivers Trust**
- **National Farmers Union**
- **Natural England**
- **Lake District Foundation**
- **And researchers from universities including: Open University, Imperial College London, Middlesex University**

Recommendations included: allow more devolved funding decisions and greater influence from local partnerships. Breakdown silos, simplify strategic planning landscape, tie up major investment programmes, create a system of environment-led management of land.

A 2.2 Natural Course Regional Water Governance Study- Phase 2: Cumbria (2021)

Key results from survey:

- **Strengths to build on:**
  - Almost half of respondents indicated that water in Cumbria was managed well.
  - A high level of transparency and professionalism.
  - Good local relationships and willingness to work in partnership in Cumbria.
  - Having a diverse range of organisations involved in water management.
  - Management of the catchment as a whole system.
  - There's enough local knowledge and understanding to make the right decisions.
- **Desire for change- widespread support for:**
  - Embedding water into wider discussions on the local economy.
  - Creating a more joined-up policy landscape with more coherent plans and action across silos.
  - Changing rules for flood partnership funding to recognise a wider range of values.
  - Committing to integration from the top down to ensure sufficient time and resources are allocated to achieve better integration.
  - Simplifying the strategic planning landscape, by aligning the 3 key strategic planning processes around Flood Risk Planning, Water Company business planning process and the River Basin Management Planning process.
  - Co-ordinating the major investment programmes linked to flood management, farm subsidies and water industry investment, to pool efforts.

Interviewees from:

- **Environment Agency**
- **National Park authorities**
- **United Utilities plc**
- **Councils**
- **Rivers Trusts**
- **Other NGOs**
- **Natural England**
- **Landowners and linked organisations NFU**
- **CSFP, flood action groups**
- **Organisations linked to recreation and tourism**

A 2.3 Natural Course Regional Water Governance Study- Phase 3 (2021)

Key messages from interviewees:

- **Strengths:**
  - Close partnership working.
  - Achieved political support and buy-in.
  - At least one member of full-time staff.
- **Challenges and barriers to effective operation of groups:**
  - Disparate policy and funding timescales.
  - Cultural and political tensions between pre-existing stakeholders and partners.
  - A risk of fragmentation and competition between numerous partnerships.
  - Ensuring the long-term resilience (future proofing) of the organisation.
  - Having a lead organisation with a single focus rather than being aligned specifically to the aims of a wider partnership can cause tension.

Interviewees from:

- **WRE**
- **LDF**
- **Cumbria & Lancashire based Catchment Directors**
- **Greater Manchester 'Devo-Water' model**
- **Trust for Oxfordshire's Environment**
- **GM Environment Fund**

A 2.4 Local Delivery of the 25 YEP- Defra (2020)

Key findings across six themes:

1. Significant differences exist in the status and role of local partnership organisations in the health, economy and environment sectors. Partnerships need to have legitimacy to be able to act effectively.
2. Most successful partnerships focus on area- or asset-specific issues or concerns that engage a range of actors/organisations and diversity of skillsets. They are typically driven by individuals with a clear vision and strong networking skills (but there's a risk if such leaders leave).
3. Local authorities are well positioned to increase collaboration on matters like air pollution that have an impact on economic, health and environmental outcomes.
4. There is interest among organisations and partnerships in integrated working, but in practice this has been difficult to achieve.
5. Within the environment sector there is clear interest in using a NCA. In other sectors, the relevance of a NCA is often not immediately clear e.g. due to a lack of familiarity, and already having other established ways of working and priorities.
6. NCA perceived as a difficult concept to understand and communicate to some key audiences. Differences in understanding and language are a barrier to inter-organisational and cross sector collaborative working to protect and enhance natural capital assets.

Interviewees from:

- **environment, economic and health sectors**

Case study areas:

- **North West England**
- **City of Sheffield**
- **Oxford - Milton Keynes - Cambridge growth corridor**
- **South West England, focusing on Devon**

A 2.5 Monitoring and Evaluation of Nature Improvement Areas- Defra (2015)

Key results from survey and interviews:

Achievements and success factors:

- More effective partnership working. The grant enabled staff to be employed to coordinate partnerships and encourage joined-up working. Most could also start quickly because they evolved from existing partnerships.
- shared visions and objectives improved communication, encouraged joined-up working and more integrated implementation.
- Involved organisations beyond conservation, like local businesses, land managers, research institutions and local authorities.
- Grant funding flexibility meant projects could align with local needs/objectives.
- Visible government support, leadership and clear policy messages provided impetus and helped attract additional resources.
- Joined up support from NE, EA and FC- important for local delivery of NIAs.

Challenges:

- Short timescale to prepare bids meant that much community and partner buy-in was developed during implementation.
- Three-year timescale deemed too short to achieve large scale, lasting improvements.
- Additional workload and admin burden, particularly when setting up and maintaining a new partnership. This meant delivery expectations were potentially difficult to meet.
- Continued delivery of objectives and relationships once grant funding had ended.

12 NIAs across England

Survey of 122 people from:

- **Partner organizations**
- **NIA partnership staff**

Interviewees from:

- **NIA partnership chairs**
- **National Stakeholders (incl NE, the EA, FC, wildlife trusts, RSPB, the national association for AONBs, the Game and Wildlife Conservation Trust and NFU).**

A 2.6 Evidence Review of Concept of the Flood Resilience- Defra (2020)

There is no single agreed definition or conceptualisation of resilience, and its application varies.

Challenges to embedding resilience across four key areas of activity, as identified in the workshops:

- Local decision-makers need to juggle many different priorities
- There is a lack of evidence about which flood resilience measures work well and in what combinations. Developing data collection methods which measure resilience at the right spatial scale.
- There is a need to scale up evidence from local to national level
- Time and resources are needed to create new ways of working and new forms of community infrastructure.
- Overcoming obstacles to changing the way that institutions work with communities.
- Uncertainties about what resilience looks like because of rapidly changing technologies and changing projections of future coastal erosion and flood risk.
- Dealing with the complexity represented by the number of agencies (from the national to the local level) that have a role in delivering flood resilience: finding a definition of resilience that works for all these stakeholders will be the first major challenge.

➢ There was appetite among most of the stakeholders who contributed to the workshops to see a clear approach to flood and coastal erosion resilience from Defra and the EA which would help actors in different sectors take appropriate decisions and actions to embed resilience.

Key messages from proposed approach to flood and coastal erosion resilience:

- Different resilience measures will be needed for different contexts- a toolkit/portfolio to draw upon.
- A resilience approach needs to create conversations with people which focus on: local flood risk, local capacities for FCERM (a baseline of resilience) and the active involvement of the local community.
- Acknowledge uncertainties and implement clear monitoring and evaluation.
- Work with infrastructure and service providers to understand dependencies between networks and resilience at different scales.

Method:

- **An expert driven Quick Scoping Review of literature supported by expert interviews**
- **Call for Evidence Analysis (72 responses)**
- **Collation of information from two policy implementation workshops (34 participants in total from government departments and other organisations)**

A 2.7 Flood Resilience Community Pathfinder Evaluation- Defra (2015)

Pathfinder projects' success factors in community engagement and building institutional resilience:

- A community-led or combined (community and institution-led) approach was found to be the most effective approach to community engagement. Communities are better able to contribute to ensuring their own resilience if they are working with local authorities.
- Taking time to understand the social factors, starting point, needs and capacities (strengths and weaknesses) that already exist within the community. E.g. identify key active community members and organisations.
- Embedding flooding initiatives into wider social issues can help communities see the relevance e.g. housing, poverty, litter etc.
- Involvement of the NFF was appreciated by several project managers.
- Setting up flood groups and creating networks e.g. through multi-agency meetings, proved to be a valuable way of linking community members with formal institutions.

Key challenges for institutional resilience:

- **Concern by property owners about effects on property prices and insurance premiums.**
- **Flood groups and flood volunteers:** Sustaining interest, knowledge and skills within the community. Developing clear communications and support. Maintaining links with formal institutions. Understanding needs of volunteers. Time and commitment needed.
- **Networks:** Sustaining momentum over time
- **Working with children and young people:** Clarity of objectives. Priorities of schools.

Method:

- **13 pathfinder projects across England**
- **REA, project baselines, national datasets**
- **Surveys of households in pathfinder locations**
- **Interviews with all 13 pathfinder project managers in 2014 and 2015.**
- **Short email surveys with 27 project stakeholders (representatives of community flood groups, the Environment Agency, water companies, etc)**

A 2.8 Evaluation of the Catchment Based Approach Pilot Stage- Defra (2013)

Success of CaBA pilots:

- CaBA pilots widely agreed by regulators and stakeholder participants to have been successful. Within a year, the pilots were able to generate a sense of partnership at the local level, leading (in most cases) to the production of viable catchment plans.
- Catchment scale is an effective scale for planning and activities based on management of natural processes, allowing integration of local issues and consideration of other administrative interactions (e.g., across local authorities and working with local communities). This scale allows potentially disparate objectives to be incorporated, the avoidance of perverse outcomes, and realisation of multiple benefits across the administrations, sectors and stakeholders involved.
- Providing pilots with a degree of freedom to "plot their own course", based on a thorough understanding of their catchment, was praised as a key to success (although was originally viewed by some to be problematic).
- Range of governance structures- all structures could successfully deliver a catchment plan.
- Four areas of competency appear to be crucial to the effectiveness of collaborative working: leadership, co-ordination, technical skills, expert facilitation.

Weaknesses/gaps:

- Stakeholders or groups considered missing or difficult to engage by some pilots included local authorities, landowners, industry and businesses, agricultural sectors and in some cases some national organisations and government bodies.
- Opportunities for CaBA to integrate more closely with other water related catchment activities, e.g., flood risk and water resources, particularly in relation to identifying and engaging on actions that can deliver multiple benefits.
- Opportunity for CaBA to link with other landscape or catchment based planning initiatives including LNPs, NIAs and Catchment Sensitive Farming. Feedback suggests this could result in efficiency savings (avoided duplication of effort, pooling of resources) and provide a mechanism to enable joining up of other planning activities.

Support needs:

- Funding, or in-kind contribution, for the catchment co-ordinator and independent facilitation roles is essential.
- Help gaining greater buy-in from institutional stakeholders at central level to encourage local engagement (including support at all levels of the Environment Agency)
- Greater tie-up with other planning and funding mechanisms
- Further clarification of the data and information available
- A single source for all learning information
- Limited public engagement by the majority of pilots and catchment initiatives. Where carried out, its influence was positive and its impact varied from peripheral to being viewed as central to catchment based working. Process requires continued support.

Approach:

- **Quarterly surveys sent to pilot hosts**
- **Participant surveys sent to a wider range of stakeholders participating in the Catchment Based Approach at the beginning and end of the pilot phase**
- **A series of in-depth observations and interviews for six of the pilots.**

A 2.9 Evaluation of the Catchment Based Approach: Phase 2- Defra (2015)

Success of CaBA partnerships:

- Overall 75% of respondents' felt that their partnership is working effectively together and the majority (60-75%) agreed decisions in their partnership were: made transparently, evidence-based, made with clarity; and were not overly influenced by one or more party with vested interests. Respondents felt the more mature partnerships are applying collaborative working principles more widely.
- Relationships between the partnerships and the EA (85%), Environmental NGOs (70%) and to a lesser extent water companies (55%) are working well, or very well.
- The majority of respondents agree that the more mature partnerships (existing pre-2013) are delivering against all success measures, with 81-90% agreeing partnerships had increased involvement of stakeholders.

Challenges/weaknesses:

- 40-60% of respondents required clearer consistent guidance on the roles and responsibilities of all stakeholders involved in the CabA, how to work with other local partnerships. Overall NGOs seem least positive about the clarity around partnership working in the catchment.
- Around 60% of respondents felt that most of the right organisations were involved but only 12% felt all of the right organisations were involved at the right level.
- Landowners/managers, local government and business are the three stakeholder groups identified as needing to be more involved in the partnership. c.36% of respondents felt that land owners/managers were the top priority.
- Only around 45% of respondents overall agreed that decisions were 'representative of all views in the catchment' most partnerships identified there was not enough involvement from some and suggests that respondents see the partnerships and collaborative working as 'work in progress' rather than 'achieved'.
- About 50% of respondents stated they were not sufficiently clear about the roles and responsibilities of all stakeholders involved in CaBA and how to work with other local partnerships. Additional clarification was needed
- Most partnerships have no clear working relationships with groups such as LNPs, NIAs, IDMs, RFCC.
- Few (typically <10%) indicate a good level of success in influencing other plans (e.g. plans of the Local flood partnership, LA, LNP, or AONB; This suggests that the partnerships are not clear on how to relate to these local plans,

Barriers

- lack of funding (particularly core funding for a central person and/or to support applications for further funding bids), lack of enthusiasm/interest and local knowledge in the catchment, and stakeholder fatigue were also cited as common barriers.
- barriers to influencing the River Basin Management Planning (RBMP) process: newness of the partnerships, impenetrable/academic nature of the RBMP process and information provided to support it, lack of clarity over the role of partnerships and tight deadlines.

Approach:

Results from >450 responses across 100 catchments. Respondents included:

- **Catchment partnership hosts/lead organisations,**
- **Representatives from agencies with statutory responsibilities related to protecting the water environment (namely, the EA, Internal Drainage Boards (IDB) Local Authority (s), Water Companies, and Natural England).**
- **Representatives of regional/local arenas such as River Basin District Liaison Panels (RBDLP), Regional Flood and Coastal Committees (RFCCs), Local Nature Partnerships (LNP) and Nature Improvement Areas (NIA).**
- **Other representatives, selected by partnership hosts**

A 2.10 Assessing the opportunities for aligning planning and delivery of water and natural asset Management- Defra (2014)

Barriers to alignment- views from Defra staff:

- Lack of evidence and lack of a clear business case.
- Uncertainty around level of integration.
- limited knowledge of what others do, insufficient time and too much complexity.
- Fear of 'take over'
- limited knowledge of what others do, insufficient time and too much complexity.

Barriers to alignment- views from outside Defra:

- Lack of a policy drive/steer leading to poor alignment of objectives and performance measures and functionally orientated requirements that are difficult to navigate (lack of integrated policy drive from Defra).
- diverging understandings in core elements such as language, evidence and benefits assessment making it difficult to read-across functions and get a clear picture of water and natural asset management as a whole.
- Different cultures and siloed mentality. Different legal and institutional structures.
- Constraints around funding.
- ➢ Not barriers so much as gaps and limitations.

Opportunities for alignment:

- Support for alignment at process and delivery levels and for the use of co-beneficial measures driven by 'cost & common sense'.
- ➢ Proposal to create an umbrella framework that brings together the activities already in train, signals the broad intention and then monitors implementation.

Approach:

- ➢ **Examination of over 201 reports and papers.**
- ➢ **41 stakeholder interviews (Defra staff and those outside of Defra in water and natural asset management)**

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