



Legitimate partnerships

Journey Planner [1]

Guidance document
November 2021

Background

Governance is concerned with the way in which decisions are taken and implemented to realise a collective goal. In short, it is the means to an end.

Purpose – Effective partnership working is crucial for achieving better outcomes and aligning benefits for the environment, economy and society. This document provides suggested guidance for designing and implementing effective partnership governance arrangements.

Focus – Partnerships related to flood and coastal erosion risk management, water management or broader partnerships featuring these aspects.

Target audience – This guidance aims to support existing partnerships, or those looking to establish new partnerships.

Self-assessment framework – a separate self-assessment framework is also available to download to enable (existing/emerging) partnerships to assess the effectiveness of their partnership arrangements.



Department
for Environment
Food & Rural Affairs



Cyfoeth Naturiol Cymru
Natural Resources Wales



Llywodraeth Cymru
Welsh Government



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Background

Journey Planners – Guidance is provided in the form of Journey Planners, which are each made up of modules (including objectives, advice and good practice examples).

Your partnership: Your priorities – Although the Journey Planners are numbered (1 to 3) they do not need to be read in order, or in their entirety. You can navigate to specific modules of interest to suit your needs and priorities.

Background – This guidance was produced as a result of the Flood and Coastal Erosion Risk Management Research and Development Programme funded research project '[Understanding effective Flood and Coastal Erosion Risk Management governance in England and Wales](#)' (2019/20) and an internal Environment Agency project on water governance and catchment partnerships (2018/19). Both projects identified governance challenges encountered in partnerships and conditions for successful partnership working. These lessons have been combined to create practical guidance on effective partnership governance. This is not intended to provide a definitive or prescriptive view on good practice, but to offer suggestions for overcoming common governance challenges and establishing stronger, more effective and legitimate partnerships.



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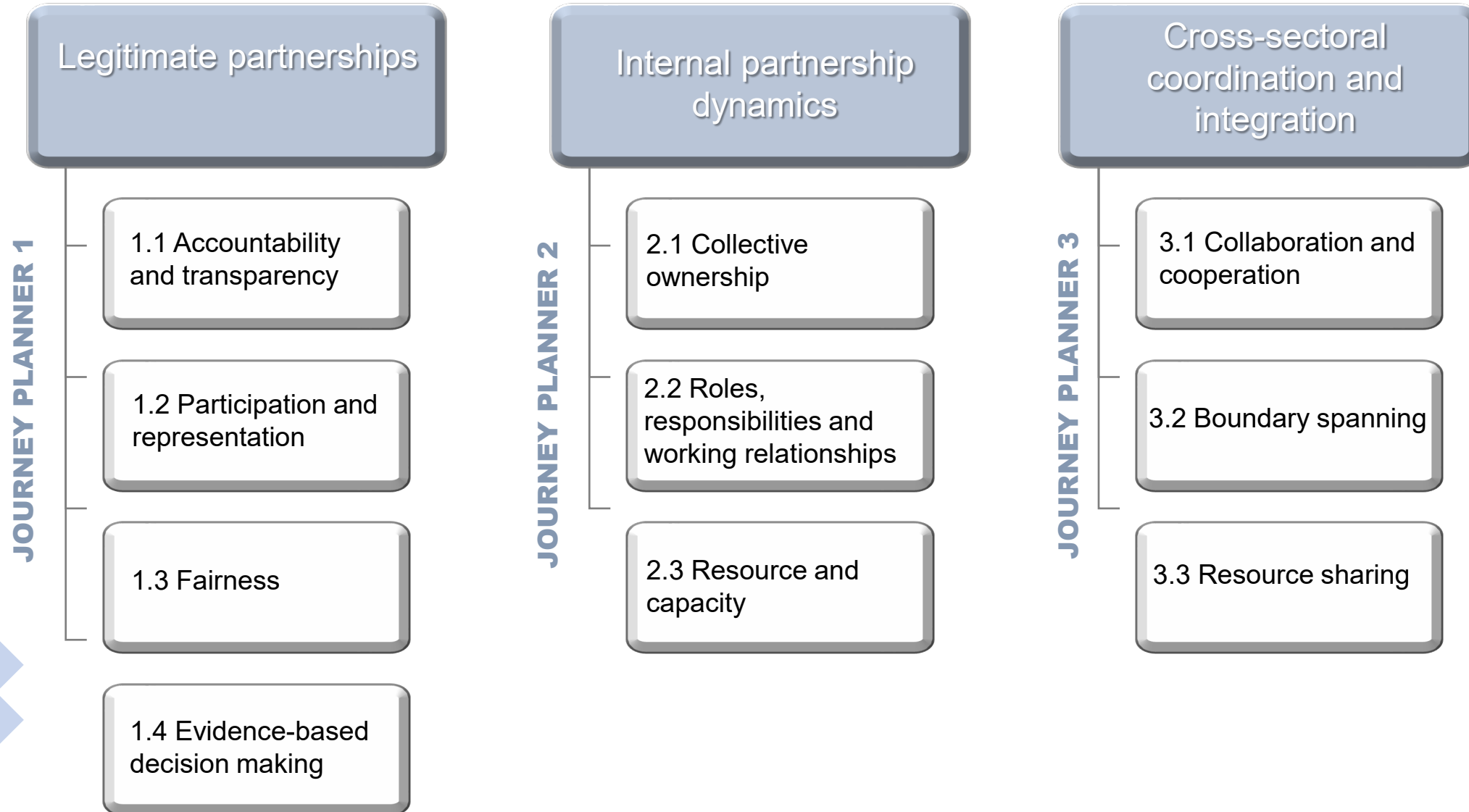


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Overview of Journey Planners



Legitimate partnerships

Journey structure

Modules

1.1 **Accountability and transparency**

1.2 **Participation and representation**

1.3 **Fairness**

1.4 **Evidence-based decision making**

Destination

Legitimacy is regarded as essential for good governance. This is dependent on several interlinked factors related to:

- **Accountability and transparency**
- **Participation and representation**
- **Fairness**
- **Evidence-based decision making**

The governance mechanisms through which these are achieved will vary between different types of partnerships.

Pathways to legitimacy

- 1 Accountability** – mechanisms should be available to hold key actors accountable for decisions and actions taken. Transparency is a pre-requisite for this and means that the decision-making process (not just the outcome of this process) should be visible, and important information accessible and understandable to others. Partnerships should be open to an appropriate degree of internal and external scrutiny to ensure accountable decision making.
- 2 Participation and representation** – the interests of all relevant stakeholder groups, including the public, should be represented to an appropriate degree within the decision-making process. Representation can take many forms; for instance, stakeholder representatives may be active members of the partnership. Alternatively, partnerships may rely on consultation and engagement processes, at various or specific stages of the decision-making process.

Pathways to legitimacy

- 3 **Fairness** – the principle of fairness should be embedded into the decision-making process and outcome(s) of this process; this is often described as essential for ensuring *procedural* and *distributive justice* in governance. Accountability mechanisms and participation are particularly important for procedural justice. Consideration should also be given to the impacts of specific decisions and how these will be distributed across different groups.
- 4 **Evidence-based decision making** – underpinning decisions with the best available evidence, and drawing from different sources of evidence (for example scientific data, economic data, social science, local knowledge), is an important part of building trust and enhancing the acceptability of decisions and actions taken.

A partnership is more likely to be perceived as legitimate and accepted if each of the factors above are addressed.

Navigating the journey planner: user guide

Symbols



Objective



Statutory requirement: (^W) indicates Wales only and (^E) indicates England only; otherwise assume both



Advice. Examples of good practice are marked as **Eg**



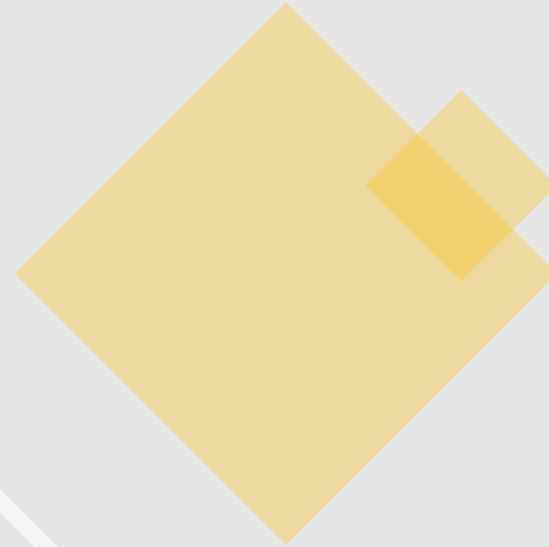
Further information and resources

Abbreviations

CaBA	Catchment Based Approach
Defra	Department for Environment, Food and Rural Affairs
FCERM	Flood and Coastal Erosion Risk Management
LLFA	Lead Local Flood Authority
LA	Local Authority
NRW	Natural Resources Wales
PSB	Public Service Board (Wales)
RFCC	Regional Flood and Coastal Committee
RMA	Risk Management Authority

Module 1.1

**Accountability and
transparency**



Accountability and transparency

Accountability and assurance mechanisms are not only essential for legitimate governance, but by ensuring responsibilities and commitments have been met, can help realise more outcomes and facilitate coordinated, joined-up approaches. [1]

Internal scrutiny is fundamental - All partners should be able to understand how decisions have been reached and have the ability to ask questions and challenge the process. [2]

Assigning roles and responsibilities is important - either with the support of governance mechanisms such as terms of reference, collaboration agreements or clearly outlined in strategy document. Related to this, partners need to understand the wider governance structures within which individual partners are operating and where certain decisions/actions agreed within the partnership might require additional approval/sign-off from partner organisations. [3]

Eg

Establishing Terms of Reference – Example 1:

An example of good practice is evident in **the Northumbria Integrated Drainage Partnership**, where the terms of reference are clearly outlined and subject to periodic review (every 2 years). This short document outlines the purpose and scope of the partnership, alongside governance matters related to partnership membership, internal processes and internal/external reporting. The responsibilities of partnership members are clearly explained and expectations established on a range of issues, such as the timely sharing of data and communication activities.

The terms of reference is seen as essential for ensuring that the goals of the partnership are clearly communicated and agreed by all members. The periodic review element helps to support the sustainability of the partnership by regularly encouraging partners to revisit the purpose and scope of the partnership to ensure that it remains relevant and fit-for-purpose.

[4]

Accountability and transparency

Eg

Establishing Terms of Reference – Example 2:

The **Devon, Cornwall and Isles of Scilly (DCIoS) Environment Agency Area: Future Investment and Strategy (FIS) Board** established a clear terms of reference in 2019. This short document outlines the purpose and scope, governance related to partnership membership, internal processes, ways of working and required internal/external reporting. Responsibilities of members are very clearly explained and expectations established. It outlines the aim of the Board as setting the strategic themes, ensuring the creation of an integrated, innovative and environment enhancing programme for the whole of DCIoS. The expected outputs are also clearly articulated including: stronger data and risk assessment approaches, making better investment choices and developing a modern integrated pipeline through the approval of projects across DCIoS, influencing and shaping the Area implementation of the 25 year plan and improving place-based work.

The terms of reference is seen as essential for ensuring the Board's remit and activities are clearly communicated, visible and agreed by all members. It also helps ensure that all Area teams are represented and those involved know their roles and responsibilities. The terms of reference specifies that "*The Board aims for the right person around the table for appropriate representation*". It is clear on expected work culture and behaviours of members; highlighting (among other things) the principles of trust, collaboration and honesty. The wide representation at DCIoS FIS Board ensures a strong foundation for shared decision making, building trust and achieving the best possible partnerships.

[5]



Photo above: CRITTER - Co-ordinated Response for Intertidal Taw Torridge Estuary Restoration creating space for water and an example of the integrated partnership approach in DCIoS Area. Credit: 2021 draft RBMP case studies.

1.1

Accountability and transparency

Enhancing the democratic process – Where appropriate and proportionate, efforts should be made to embed democratic principles within partnership governance. Democracy-enhancing devices could include elected roles, fixed-term roles, specifying a minimum number for important decisions or establishing formal arrangements for independent review.

[6]

The chair – The chair of the partnership can play an important role in ensuring accountable and legitimate governance practices. In this regard, an independent chair is advantageous. By being free from conflicts of interest, an independent chair may have more credibility and trust, and be in a better position to manage potential conflicts, ensure accountable action and fair deliberation. Where this is not possible consideration should be given to who will act as the chair and what impact this might have on the power dynamics of the group. Rotating the role of chair is a useful strategy.

[7]

A road map for action – Committing to specific outputs and timelines is essential for monitoring progress and ensuring the accountability of partners' (and partnership) implementation.

[8]

Transparency – Partnership documents should be made publicly available where possible, including meeting minutes, reports, plans and strategies. The partnership's aims and details of its members should be transparent and publicly visible.

[9]

External scrutiny and reporting – Consideration should be given to how external scrutiny and accountability might be supported. For example, the partnership could establish a reporting relationship with another partnership or organisation (such as the relevant RFCC), or establish formal arrangements for independent review.

[10]

1.1

Accountability and transparency

The potential value of an outsiders perspective – It may be useful to seek the advice of an ‘outsider’ to the partnership; this is sometimes referred to as a ‘critical friend’. This should be a person/organisation who is independent from the partnership and does not have a stake in the decision-making process. A critical friend could be employed on an ad hoc basis to undertake a review of activities at a specific points in time, or embedded within the partnership on a more permanent basis to provide on-the-ground ‘eyes’ on the effectiveness of partnership working. Their role is to challenge and ask questions of the process, while also reinforcing positive actions.

[11]

Eg A ‘critical friend’ in practice – Fairbourne Moving Forwards

Within the Fairbourne Moving Forwards partnership, JBA adopted the role of ‘critical friend’ for several years, as part of the Fairbourne Learning Project. The role of critical friend was described by JBA as *‘providing a helicopter view [...] it’s identifying the thorny issues and applying a bit of challenge to the processes, you ask the ‘so what’ questions ...and also reinforcing when good things are happening’*. This was seen within the partnership as a valuable way of supporting ongoing learning and providing real-time feedback into the decision-making process.

[12]



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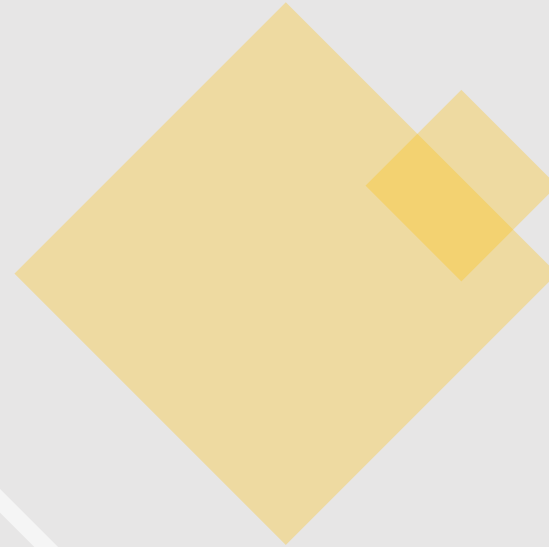
Wider governance context – Other accountability and assurance mechanisms in FCERM

- **Section 18 reporting mechanism** – under the Flood and Water Management Act 2010, the Environment Agency and NRW have a statutory duty to report on FCERM to the Minister, on behalf of all RMAs.
- **Section 19 reporting mechanism** – under the Flood and Water Management Act 2010, LLFAs are required to investigate flooding incidents, to the extent that they consider necessary or appropriate.
- **Local Authority Overview and Scrutiny Committees** may scrutinise FCERM activities and local arrangements for FCERM.
- **Regional Flood and Coastal Committees** (RFCCs, England) – help to ensure that investment and resources are allocated according to local needs.
- **Flood and Coastal Erosion Committee for Wales** – provides an independent review of Section 18 reports.
- **Scrutiny bodies**, namely the National Audit Office, Public Accounts Committee and departmental Select Committees (such as the Environment, Food and Rural Affairs Committee).
- **Post-flood event inquiries and reviews**, such as the Pitt Review 2007, the National Flood Resilience Review (HM Government, 2016) and Wales Coastal Flooding Review (NRW, 2014).



Module 1.2

**Participation and
representation**



1.2

Participation and representation

Internal (within the partnership itself)

Internal representation – All relevant stakeholder groups should be represented within decision making in some form. Diversity of membership should be appropriate to the partnership's aims and goals.

[14]

Getting to know each other – This is essential for effective partnership working. Members need to understand each other's roles, remits and crucially the constraints within which they are working.

[15]

Understanding the representativeness of partnership members – It is important to clarify the relationship between stakeholder representatives and those they represent. For instance, it cannot be assumed that a community representative will have the skills, resources or networks to engage with their wider community.

[16]

Absentees and substitutes – It may not always be possible for individual partners to attend every meeting, therefore steps need to be in place to ensure that their views are still considered, particularly when important decisions are being made. This might include arranging to send someone else in their place and ideally establishing consistent 'substitutes' to minimise disruption and repetition in discussions. Where this is not possible, the absentee should be fully briefed, either before or after the meeting, and given the opportunity to input into the decision-making process. Detailed agendas should be shared ahead of time and clearly indicate where certain decisions will need to be made to alert partners in advance. Partners who are unable to attend (themselves or via a substitute) should give notice so that the partnership can consider the impact of this on its ability to deliberate in an inclusive way, and reorganise the agenda accordingly if necessarily.

[17]

Participation and representation

Internal (within the partnership itself)

Prioritising partners – For particularly complex partnerships (for example dealing with complex issues or operating over a large geographical area), it may be necessary to prioritise the involvement of critical stakeholders (those with authority to act). This was the case for the Thames Estuary 2100 Project, for example (see [Environment Agency, 2021](#)). The composition of the partnership should be fully justified and transparent to others. A clear strategy should be outlined early for engaging other stakeholders who may not be in the partnership itself.

[18]

Conflict management within partnerships – Conflicts and differences in opinion are an inevitable part of partnership working. Strategies for dealing with conflicts fairly are therefore essential. It is important to consider the position of the Chair and how this might affect this process. An independent Chair may inspire more trust and be in a better position to manage potential conflicts and ensure fair deliberation. Alternatively, an independent broker or mediator could be brought in to help facilitate group discussions.

[19]

Understanding power dynamics – It is important to be aware of differences in power between partners, which often result from the formal distribution of roles and responsibilities, and corresponding distribution of resources. Third sector, voluntary and non-statutory groups in particular may be less able to act and potentially feel disempowered by public actors. It is important to be mindful of these differences and understand how this may influence deliberation and resulting decisions taken by the partnership.

[20]

Inclusivity – It is important to be aware of Equality, Diversity and Inclusion (EDI), in terms of the representativeness of the partnership and deliberative processes, as well as the outcomes/impact of decisions that are made (this is discussed further under Module 1.3). Steps should be taken to ensure that the principles of EDI are embedded in the partnership's identity, ethos and practices.

[21]

1.2 Participation and representation

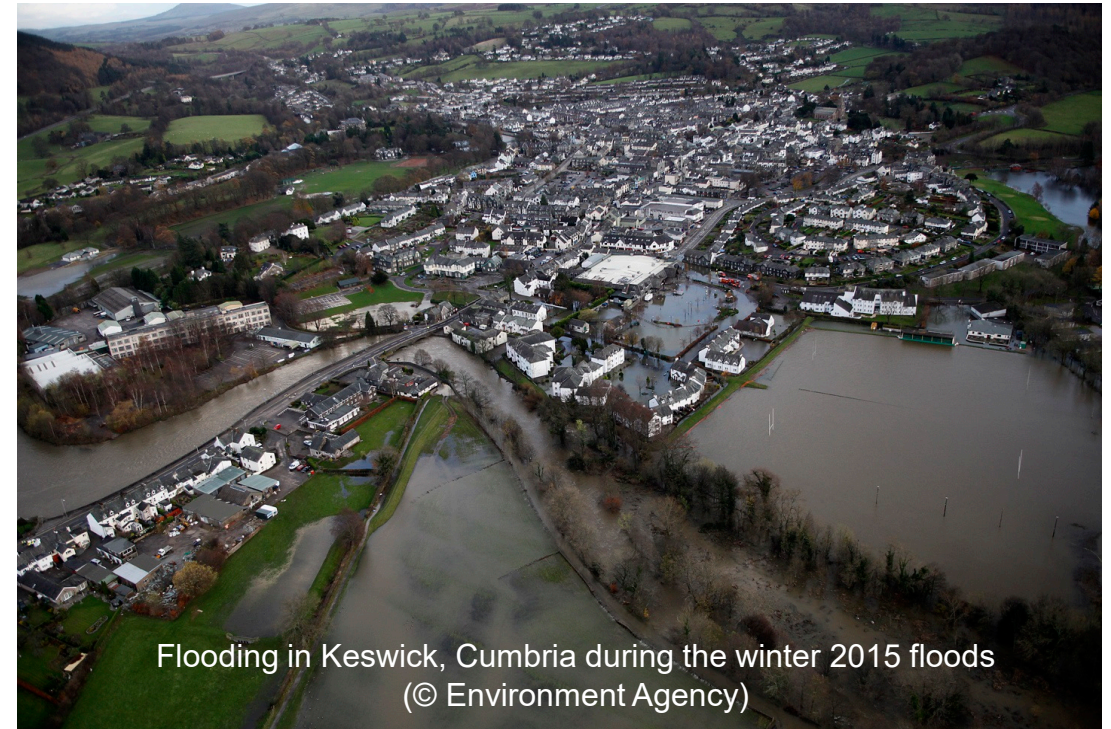
Internal (within the partnership itself)

Managing diverse partnerships – In highly diverse partnerships, there is a need to strike a balance between listening to the different perspectives of different members, while equally safeguarding against the partnership becoming a ‘talking shop’. A useful approach is to establish working groups related to specific activities. [22]

Managing internal expectations – It is essential to manage expectations of partnership members to sustain shared buy-in and momentum. Establishing a shared vision early on is crucial, alongside clear goals and realistic timelines for implementing partnership activities. [24]

Eg Diverse stakeholder representation – the Cumbria Strategic Flood Partnership

The [Cumbria Strategic Flood Partnership](#) (formed in 2017) has embraced a diverse range of stakeholder groups, including several community Flood Action Groups, third sector bodies and various County, Borough and District Councils. With 23 different partners in total, the partnership aims to bring together the knowledge, skills and competencies to promote a collaborative approach to flood risk management in Cumbria. However, with this diverse representation comes challenges, as the partnership tries to navigate different viewpoints. Establishing a culture ‘*for respectful questioning and disagreement, within an evidence-based context*’ has been central. Recognising the importance of establishing shared goals, the Partnership published its [Interim Strategy](#) in March 2020. [23]



Flooding in Keswick, Cumbria during the winter 2015 floods
(© Environment Agency)

Internal (within the partnership itself)

Eg

Representing different stakeholders in the Anglian Eastern RFCC Natural Environment Sub Group

Established in 2020, the group spans the counties of Norfolk, Suffolk and Essex. Importantly, members include a range of relevant sectors, links to partnerships and appropriate professional representation:

- FCERM - coastal group, LLFAs
- Environment - catchment hosts/partnerships, Natural England, Woodland Trust, Marine Management Organisation, water companies, Water Resources East
- Landowners and Internal Drainage Board
- Academia
- Environment Agency officers from FCERM and Environment Programme/Catchment Coordinators

Clear links to other groups and partnerships ensures a shared basis for decision making and improving climate, environment and natural flood management outcomes. Five of the 12 RFCCs in England have an Environment or NFM sub group – this represents an opportunity to inform and improve ways of working.

[25]



Photos left:
Natural flood management initiatives in Anglian Eastern region - a leaky woody structure in construction and beaver dam, Finchingfield, Essex.
© 2021 RBMP case studies, Environment Agency.

External (outside of the partnership)

External engagement – Engagement processes should strive to be representative and proportional and appropriate to the scope of decision making. Even where representatives of key stakeholder groups (such as community groups) are active partnership members, representativeness cannot be assumed and engagement activities remain vital.

[26]

Involvement in Wales – Under the Well-being of Future Generations (Wales) Act 2015, public bodies are required to adopt Five Ways of Working, including duties to *involve* those with an interest in achieving the well-being goals and to ensure that those involved reflect the diversity of the area which the body serves.

[27]

Wider governance context – Public participation and consultation

In flood and coastal erosion risk management, risk management authorities are expected to engage local communities to help them understand and prepare for flooding and coastal change (as specified in policy, see below). The [Flood and Water Management Act 2010](#) also outlines consultation requirements pertaining to the development of national and local flood risk management strategies.

- “Risk management authorities need to ensure that people are at the heart of planning and adapting to future climate risks. The engagement practices adopted need to be ‘place-sensitive’ recognising how people’s emotional connections to a place can have a significant impact on whether and how they engage in thinking about the future of it” ([National FCERM Strategy for England](#))
- “Closer collaboration between NRW and Local Authorities to develop and engage with communities should become common practice” ([National FCERM Strategy for Wales](#)).

For managing the water environment, consultation and public participation procedures for river basin management planning are outlined in Part 6 of [The Water Environment \(Water Framework Directive\) \(England and Wales\) Regulations 2017](#). Responses to the [consultation](#) for reviewing and updating the River Basin Management Plans for 2021 are available.

[28]

1.2

Participation and representation

External (outside of the partnership)

Engagement planning – A stakeholder engagement plan should be established early on and clearly outline when, how and with whom engagement will be sought. This should be informed by a stakeholder mapping exercise to help identify all relevant groups. Engagement planning should take into account potential practical, financial or legal constraints to participation and how these may be mitigated.

[29]

Carrying out meaningful engagement – Efforts should be made to communicate and engage external stakeholders, including the public, in meaningful ways. This includes thinking about the way information is presented/framed and translating technical terminology. For example, the use of scenarios in adaptive approaches has been shown to improve understanding, trust and stakeholder buy-in ([Environment Agency, 2021](#)).

[30]

Place sensitivity – The importance of place-based decision making and taking a place-based approach is well recognised. From an engagement perspective, this means i) eliciting the views of those residing and/or deeply invested in place; ii) taking steps to capture a representative sample of opinions, reflecting the diversity of the area; iii) appreciating how people's connections and attachments to place influence their willingness to engage and their views for the future; and iv) incorporating the above into the decision-making process.

[31]

Managing expectations – It is essential to be clear to all involved how their engagement will inform decision making in order to manage expectations.

[32]

Being inclusive – Advocates/independents may be needed to assist those who are less visible or able to contribute to ensure that their interests are represented. This may involve going through local 'gatekeepers' (such as religious leaders or local community groups) and community champions.

[33]

1.2 Participation and representation

External (outside of the partnership)

Resources, training and capacity building – It is important to invest in training and skills development to build capacity for public engagement within the partnership. There may also be cases where it might be preferable to employ an external, independent facilitator to assist with engagement activities; for example, where proposed schemes may be highly contentious or where a collaborative, jointly-owned approach with local communities is sought. [34]

Tools for conflict analysis and management – The ability to identify, manage and resolve potential conflicts is useful for engagement, particularly in cases where divergences in opinion are likely to be high. Various conflict mapping tools exist (see example below), which could be used to plan and facilitate engagement to help overcome conflicts and build trust; the usefulness of these depends on the context and purpose of engagement.

- *Actor-focused conflict mapping* – who are the main parties? what are their needs, interests and positions?
- *Causes and drivers of conflict* – what factors generate or sustain conflict? (for example cognitive, emotional, structural or historical drivers? Conflicts in data? Triggers?)
- *A systems view on conflicts* – what are the different elements involved and how do these interact (via feedbacks and causal loops)?

See **Environment Agency (2019)** [Working together to adapt to a changing climate: flood and coast](#). [35]



(© Sally Priest)

External (outside of the partnership)

Selecting between different participatory techniques according to goals – There are numerous methods of stakeholder engagement, each with their strengths, limitations, costs and benefits. Selecting the appropriate (combination of) methods ultimately depends on the aims/objectives of engagement and who is being engaged.

Different methods:

- Workshops
- Focus groups
- One-on-one discussions and interviews
- Public presentations
- Consultation events
- Citizens' jury

[36]

Participation and engagement

Guidelines for facilitating local participation are available via the [CaBA website](#).

[37]

Participation goals for the initiator of activities

The underlying goals of participation/engagement activities will influence the type of governance structures required. Goal examples:

Inform – to provide others with balanced and objective information to help them understand the problem, alternatives, opportunities and solutions.

Consult – to obtain feedback on analysis, alternatives and decisions.

Involve – to work directly with others throughout the process to ensure that all concerns and aspirations are consistently understood and considered.

Collaborate – to partner with others in each aspect of the decision making, including developing alternative solutions and identifying the preferred solution.

Empower – to place final decision making in the hands of people other than those initiating the process.

Environment Agency (2021) [Flood and coastal erosion risk management research and development framework: working with communities](#).

[38]

1.2 Participation and representation

External (outside of the partnership)

Eg Being visible in the community – Fairbourne Moving Forwards

The Fairbourne Moving Forwards partnership has a dedicated project manager within Gwynedd Council who frequently visits the town for informal 'drop-in' sessions, to meet with local residents and discuss any concerns. This has been essential for trying to build and maintain trust between the public, the local authority and other agencies involved. This is vital for navigating the challenges facing Fairbourne and difficult conversations ahead with implementing managed realignment.

See the Fairbourne Moving Forwards [website](#).

[39]

Committing to the process of community engagement – It is vital to invest in the process of engagement and not simply be driven by outputs ([NFF and CEP, 2018](#)). Building and sustaining relationships is essential, especially in the context of highly complex, contentious and/or long-term initiatives. Commitment, inclusivity, transparency and honesty are fundamental.

[40]



Coastal adaptation is underway in Fairbourne, N. Wales
© Dr Meghan Alexander, 2019

External (outside of the partnership)



Community engagement on climate adaptation

The FCERM R&D Programme funded research project “*Working together to adapt to a changing climate: flood and coast*” undertook an [evidence review](#) of different engagement techniques. The research identified the following recommendations:

- **Assess the readiness** of communities, stakeholders and authorities to make adaptation decisions.
- Consider how people’s **attachment to places** affects decision making on local change.
- **Frame issues sensitively.** Using appropriate language can increase people’s comprehension of adaptation and reduce contention.
- **Be attentive to local needs and conditions.** Set realistic engagement goals based on this.
- **Adopt a co-production approach.** Include engagement practitioners, technical specialists, artists and local residents.
- **Use participatory methods** to build understanding and capacity. Suggested approaches include simulations, visualisation, storytelling and conflict analysis.
- Create ways to **better share learning** within risk management authorities.

[41]



External (outside of the partnership)

Eg

Citizens' juries or assemblies – There has been increasing interest in the use of citizens' juries in recent years. Citizens' juries or assemblies are comprised of a representative sample of randomly selected members of the public, who learn and collectively discuss a specific issue to inform a shared set of recommendations. One of the most prominent examples in the UK is the [Climate Assembly UK](#), which was convened between January and May 2020 and produce a series of recommendations, outlined in "The path to net zero" (published 10 September 2020).

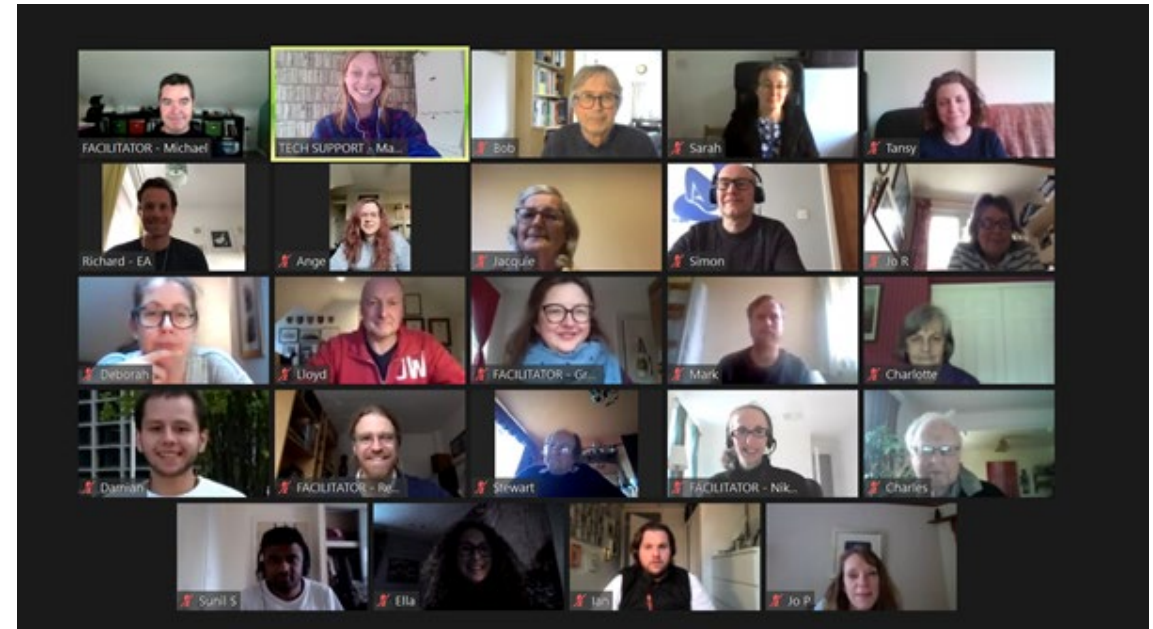
In 2021, several citizens' juries were initiated on "[Rethinking Water](#)" and held virtually (including the North East, River Wharfe and River Thames, January to March 2021). The purpose of these juries is to address the critical question - *How do you connect with water in your local environment, and what needs to be changed in the future to benefit people and wildlife?* This can be a useful approach for engaging the public in informed debate and informing recommendations for future water management planning.

Examples:

[Citizens' Jury for the Ouseburn River, Lower Tyne](#)

[Citizens' Jury for the River Wharfe, Yorkshire](#)

[42]



The River Thames Citizens' Jury on Rethinking Water – 18th March to 27th March – during the COVID-19 pandemic 2021 (© Environment Agency)



Module 1.3

Fairness

1.3

Fairness

Procedural fairness – The fairness of the decision-making *process* should be fully considered. Steps should be taken to ensure that relevant stakeholders have been fairly represented within deliberations and have had the opportunity to participate to an appropriate degree (see Module 1.2). Furthermore, the decision-making process should be transparent and open to scrutiny, with mechanisms in place to hold actors to account (see Module 1.1).

[43]

Distributive fairness – Full consideration should be given to the fairness of different decision options when determining and justifying the preferred course of action. This should be made transparent to all.

[44]

St

The Public Sector Equality Duty – under [section 149 of the Equality Act 2010](#), public authorities must have due regard to equality and protected characteristics. Equality Impact Assessments are encouraged prior to policy implementation to ensure compliance to the Equality Duty.

[45]

Perceptions of injustice – Perceptions of unfairness/injustice can have negative impacts for the (perceived) legitimacy of the partnership and acceptance of decisions that have been made. A crucial way to mitigate this, is to involve those directly impacted within the decision-making process through appropriate forms of participatory engagement (see Module 2). It is essential that real or perceived injustices are openly and honestly discussed in this process.

[46]

Sequencing decisions – Real and perceived fairness and justice issues may manifest because of the sequence of decisions, activities and outcomes (for example some areas or groups may get risk reduction before others). Therefore, it is important for partnerships to be clear and transparent about their pipeline of activities.

[47]

Identifying distributional consequences and knock-on effects – Steps should be taken to identify the potential consequences and impacts of decisions and activities on specific social groups and communities, and how these will be distributed over geographical space and time. Different techniques can support this; for example GIS and mapping tools can be used to assess the spatial distribution of risks, social vulnerability, and benefits of different mitigation measures; multi-criteria analysis can be used to score and weight different impact categories; or alternatively, focus groups could be used to stimulate these discussions. [48]

Climate Just platform

Climate Just is a free webtool which maps social vulnerability to climate change and 'climate disadvantage'. Crucially, the tool enables users to explore the underlying factors which shape vulnerability to help inform appropriate actions that not only support societal resilience, but achieve socially-just and equitable responses to climate change. See <https://www.climatejust.org.uk/> [49]

Deprivation indices

The Index of Multiple Deprivation (IMD) is available in both England and Wales. This is a composite index, made up of several domains of deprivation including income, employment, education, health, crimes, barriers to housing and services, and living environment (in Wales housing and access to services are separate domains). The index ranks small areas (Lower-layer Super Output Areas) in England (32,844) and Wales (1,909); where 1 is the most deprived. The scores are available for each deprivation domain separately or combined within a total IMD score.

- [English indices of deprivation](#) and [Mapping resources](#)
- [Welsh Index of Multiple Deprivation](#)

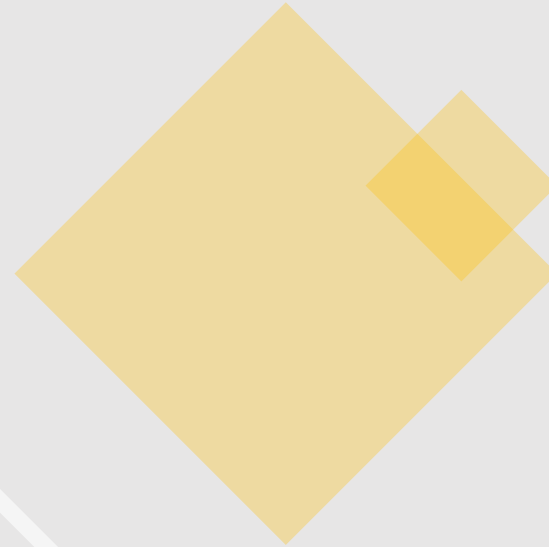
[50]

Flood disadvantage

For a UK assessment of flood disadvantage see Sayers et al. (2017) [Present and future flood vulnerability, risk and disadvantage: A UK assessment](#). [51]

Module 1.4

**Evidence-based
decision making**



Evidence-based decision making

Informing decisions – Decisions should be informed by the best available evidence, drawing from trusted sources and different types of evidence (for example scientific data, local knowledge). [52]

Reviewing evidence and establishing a shared evidence base – It is vital that evidence is transparent and clearly understood (including assumptions, uncertainties and limitations) for it to be trusted and to help reach a consensus on the appropriate course of action. Critical questions should be asked and addressed collectively, either by the full partnership or by a specific task group (and fed back), such as;

- What is the source?
- How reliable is the evidence? Are there any assumptions and uncertainties in the evidence? Is this clearly explained?
- What aspect of the problem does it focus on?
- Are there gaps in the evidence that limit the ability to understand the whole problem at hand?

[53]

Eg

Creating a shared evidence base: Lessons from the North Devon Landscape Pioneer

The North Devon Landscape Pioneer was one of the four Pioneer projects established by the Government's 25 Year Environment Plan to test and trial the natural capital approach (see box 62). The pioneer provides a useful example of how *participatory evidence gathering* enabled stakeholders to share their own evidence and collectively examine the state of natural capital across the North Devon Biosphere. This also included innovative and interactive presentations of data in the form of a heat map of public spending. The participatory approach not only enhanced transparency, trust and confidence in the evidence base, but nurtured relationships and fostered early buy-in and co-ownership. Further information can be found in [Lord and others 2021](#) and the [Natural Capital Evidence Handbook](#) (Natural England, 2021).

This example demonstrates how both the process of collecting and examining the evidence, and the actual presentation of the data itself, can play a crucial role in enhancing the legitimacy of the process, facilitating effective in-group dynamics (Module 2) and cross-sectoral collaboration (Module 3).

[54]

1.4

Evidence-based decision making

Eg

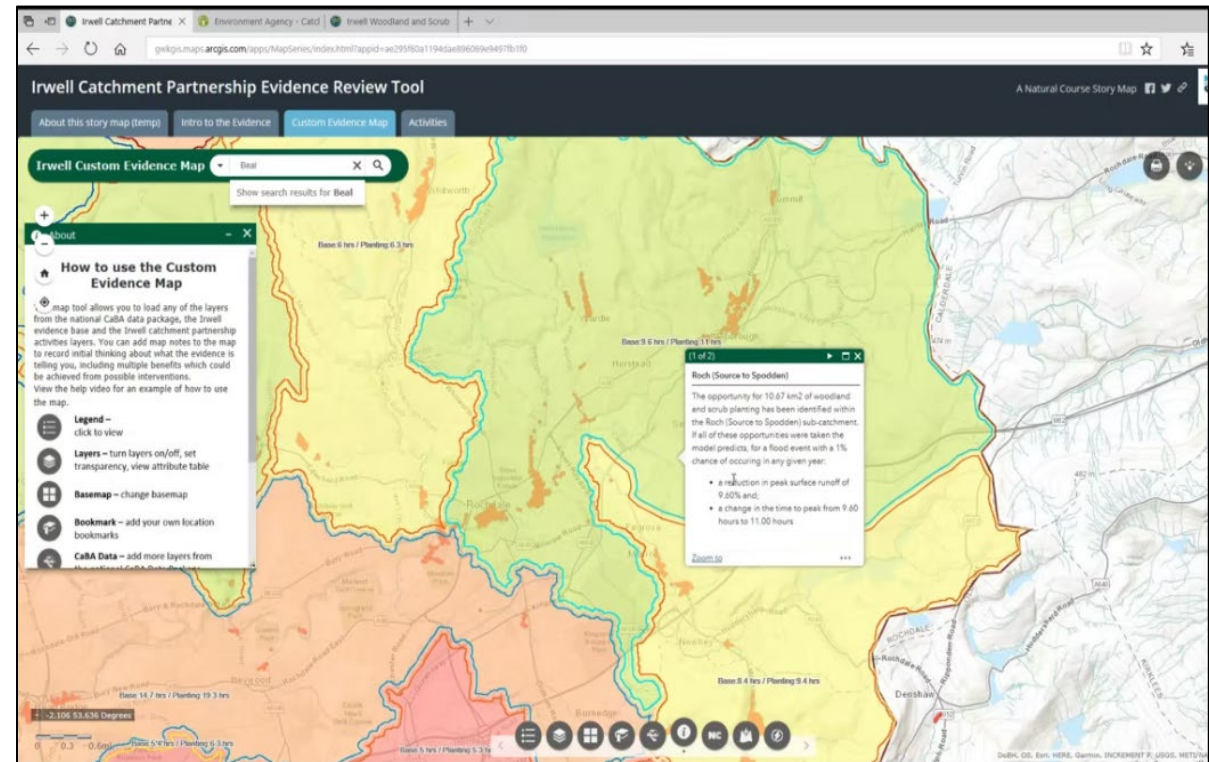
Irwell Catchment Evidence Review Tool

Designed to support the integrated catchment planning process, the Irwell Catchment Partnership has developed a catchment 'story map' to integrate different types of evidence from partners and assist with the development of evidence-based actions. This was supported by a collaboratively designed [web-based tool](#) developed as part of the Natural Course project, where different sources of evidence can be collated and geographically mapped, enabling development of a locally and widely informed action plan.

[55]

Knowledge transfer – Maximising opportunities for sharing knowledge with and between relevant organisations and other partnerships is important for evidence gathering, especially when resources may be stretched. A useful strategy is to utilise members who sit on other relevant partnerships (cross-membership). This may in turn facilitate coordinated working.

[56]



Irwell Catchment Partnership [Evidence Review Tool](#) (© [Natural Course](#))

Evidence-based decision making

Data sharing – Protocols for data sharing should be established early on to facilitate collaboration and efficient use of resources. These can rely on formal or informal agreements (also see Journey Planners 2 and 3). [57]

Living documents – establishing strategies and plans as 'living documents' where possible, can allow new data to be integrated and for revisions based on emerging trends, new evidence or changes in societal preferences. [58]

Climate data

- [UK Climate Projections interface for UKCP18](#)
- [UKCP18 guidelines, factsheets and key results](#)
- [Committee on Climate Change](#)
- [Flood and coastal risk projects, schemes and strategies: climate change allowances](#) (Environment Agency, 2020)

[59]



Flood and Coastal Erosion Risk Management (FCERM) research reports

[Research funded through the FCERM R&D Programme](#) is available under the following categories:

- Environmental management and sustainability
- Increasing resilience to flooding
- Managing flood incidents
- Policy, governance and funding
- Understanding risks from all sources of flooding
- Whole life asset management

[60]



Flood & Coastal Erosion
Risk Management
Research & Development Programme

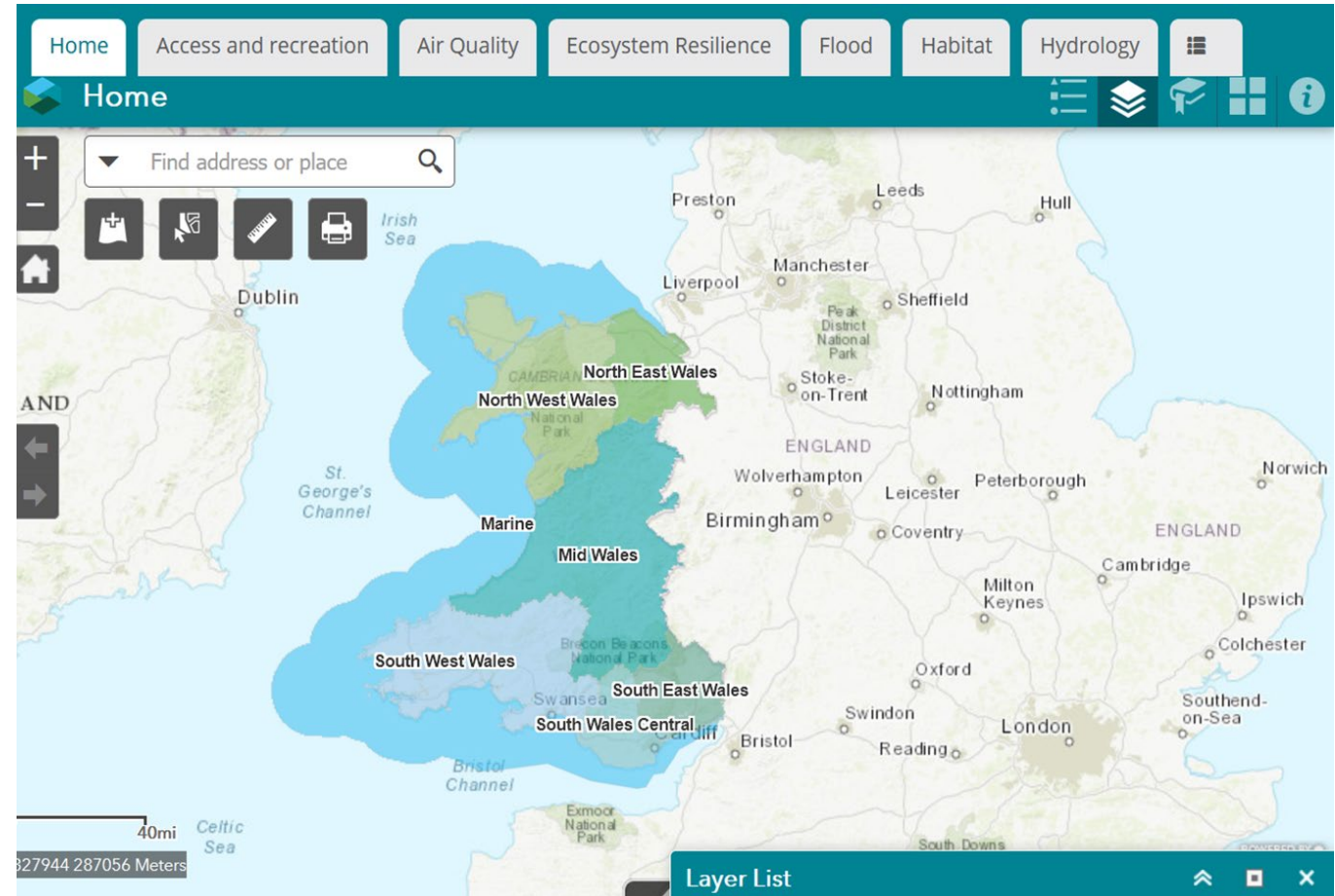


In Wales – Area Statements and the Wales Environmental Information Portal

A total of 7 [Area Statements](#) are available in Wales, which provide an overview of natural resources, the benefits they provide, the priorities, and the risks and opportunities for the sustainable management of natural resources (SMNR). The intention is that Area Statements will provide the necessary evidence for place-based decision making, engaging stakeholders and achieving ecosystem-based management in practice.

Accompanying the Area Statements, the [Wales Environmental Information Portal](#) makes the underlying evidence base and mapping accessible to users. [Welsh Information for Nature-based Solutions](#) (WINS) is also available, including a collection of explanatory ‘stories’, StoryMaps and map layers.

[61]



Wales Environmental Information Portal (© Natural Resources Wales 2021)

Evidence-based decision making



Embedding natural capital into decision making

Natural England have published a [Natural Capital Evidence Handbook: to support place-based planning and decision-making](#). This compiles best practices into one place, including Natural England's evidence-based tools, to help decision makers include natural capital evidence in decision making and in turn provide multi-benefit approaches that enhance nature and well-being. A natural capital approach recognises the benefits that the natural environment provides for people and provides a means of defining, valuing and representing these benefits in decision making. Various tools are highlighted in the Handbook, such as;

- [National Character Area Profiles](#) (for England), which include information such as landscape character, biodiversity and ecosystem services.
- [Key indicators from Natural Capital Indicators: for defining and measuring change in natural capital](#)
- [Natural Capital Atlases: Mapping Indicators for County and City Regions](#) and [spatial data package](#)
- [Ecosystem Approach Handbook](#) – advice for landscape scale partnerships and understanding drivers of change
- [Climate Change Adaptation Manual 2020](#)
- [Enabling a Natural Capital Approach \(ENCA\)](#)

[62]



The stages of a natural capital approach (© Natural England)

1.4

Evidence-based decision making

Local knowledge – Communities can be an important source of evidence. Effective engagement processes need to be established to be able to access and use local knowledge. See Module 1.2.

[63]

Citizen science – In some situations it may be appropriate to actively involve citizens in data collection and evidence gathering (such as sampling and monitoring of water quality), with the support of specific equipment and/or mobile apps for data capture. This can have added benefits for fostering participation and shared responsibility.

[64]



Further information – Citizen science

- [Citizen Science and Volunteer Monitoring Resource Pack 2016](#) by CaBA
- [Citizen science: Best practice guide](#) by Centre for Ecology and Hydrology
- [Guide to Citizen Science](#) by UK Environmental Observation Framework

[65]



(© CaBA)



(© Environment Agency)

Eg

Citizen science for monitoring catchments – Haltwhistle Burn Catchment in Northumberland

Part-funded by the Tyne Rivers Trust (and a PhD project at Newcastle University), this project encouraged the collection, monitoring and sharing of catchment-based knowledge of local people. 'River Watch' volunteers utilised low cost monitoring techniques to capture and submit information about rainfall, river level, flood and water quality. Data was shared with both scientists and online with the wider community.

By engaging the public in these practical ways, the research investigated how this approach can generate local data to improve catchment modelling and inform runoff management plans. It also tried to understand how this can help motivate the wider community to be involved in the catchment management process. Although the project has finished, some citizen scientists continue to monitor the burn and use the data for flood risk management.

For further information see:

<https://catchmentbasedapproach.org/learn/haltwhistle-burn-citizen-science/>

[66]



Just a bit soggy on @HaltwhistleBurn today - this at 2.55pm #flood

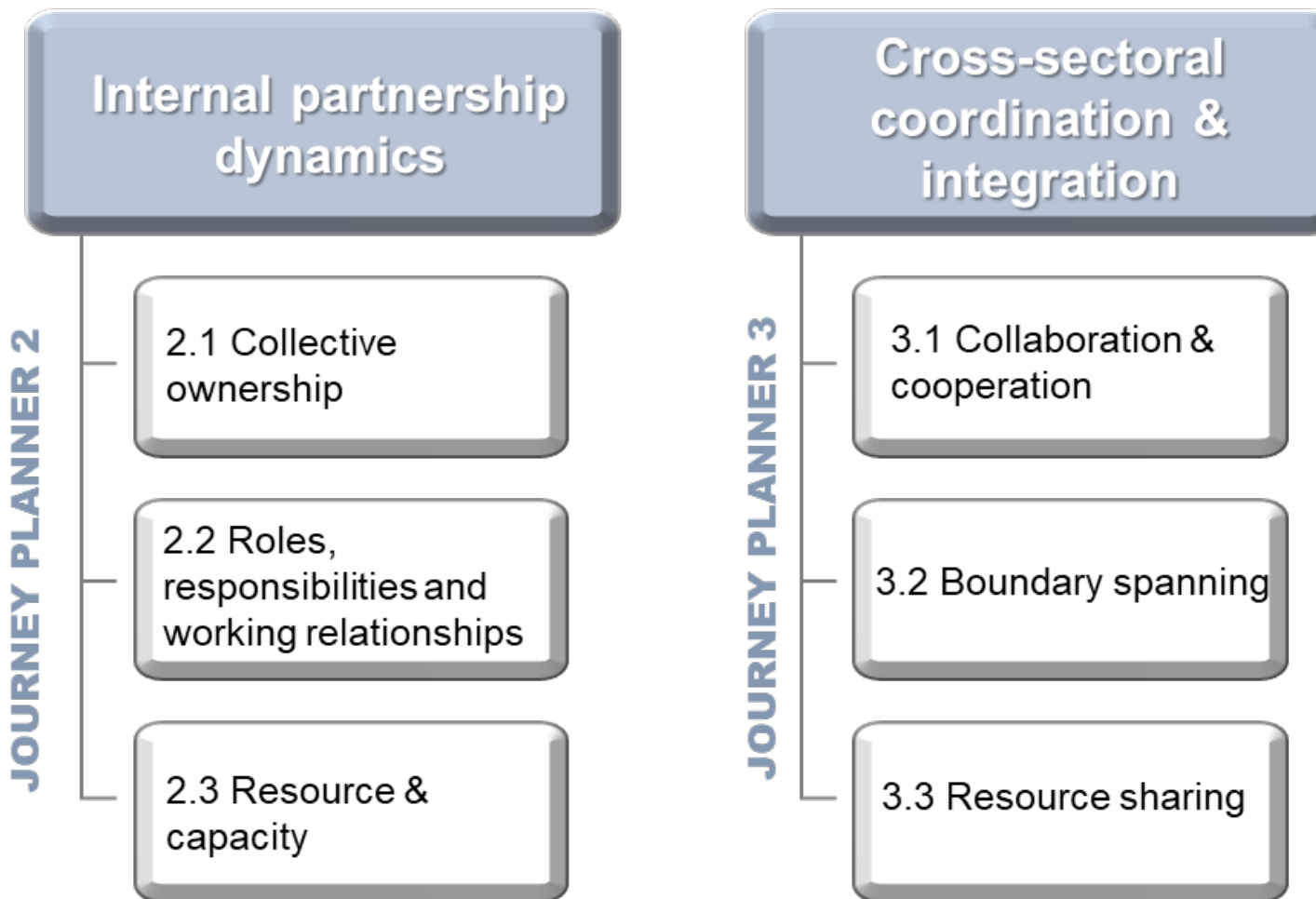




Destination

Journey planning

Continued



Background information

Research project FRS17186

Flood and Coastal Research Team, Environment Agency

Project webpage: <https://www.gov.uk/flood-and-coastal-erosion-risk-management-research-reports/understanding-effective-flood-and-coastal-erosion-risk-governance-in-england-and-wales>

Lead investigators:

Dr Sally Priest (Flood Hazard Research Centre, Middlesex University)

Dr Meghan Alexander (University of East Anglia)

For queries please contact the FCERM Research and Development Programme:

fcerm.evidence@environment-agency.gov.uk