# Working together to adapt to a changing climate: flood and coast Summary of research and tools

Research project FRS17192/2
Flood and Coastal Research Team
Environment Agency











### Working together to adapt to a changing climate A collaborative action research project (2018-2021)

#### The aims of this project were to:

- Learn more about the distinctive engagement challenges in places and communities that face
  - increasing levels of flood/coastal erosion risk, especially in the context of climate change
  - limited or contentious options for protection in response to future risks
- Develop approaches to engagement that are responsive to these challenges and that can usefully inform future practice in flood and coastal erosion risk management (FCERM).







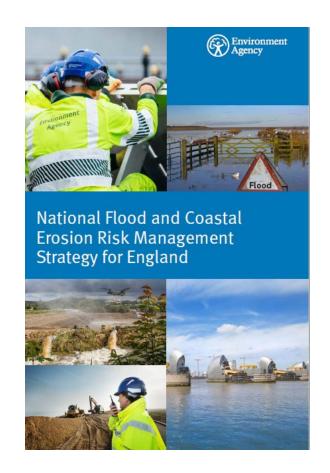




#### **National Strategy measures**

Strategic objective 1.2: Between now and 2050 risk management authorities will help places plan and adapt to flooding and coastal change for a range of climate scenarios.

Measure 3.1.3: the Environment Agency will share learning and best practice with other risk management authorities on working with communities to manage and adapt to future flooding and coastal change.













#### **Project phases**

- 1) An evidence review
- 2) Two pilot action research projects
- 3) Learning capture, documentation and reflection













#### **Project products**

- Evidence review a comprehensive review of work on this topic
- Record of engagement practical overview of what was done in each location
- Overall project learning summary of key learning
- Readiness assessment a tool to help consider how ready we are to engage in planning for climate adaptation
- Simulations engagement tool to increase understanding of and planning for flood risk and climate adaptation
- Scenario development how to bring people together to develop scenarios and use them to inform good conversations and engagement planning











### Six engagement challenges

- 1. Readiness
- 2. Framing, language and communication
- 3. Climate change, emotions and mental health
- 4. Place attachment, culture and identity
- 5. Power, politics and conflict
- 6. Questions of scale











### **Challenge #1: Readiness**













#### **Challenge #1: Readiness**

- Readiness assessment helps us understand how 'ready' we are to engage in difficult conversations about climate adaptation.
- Be clear about whose readiness is being assessed questions should be asked of all stakeholders, including practitioners leading on this work.
- Asking individuals or groups to self-assess their readiness helps them reflect on their skills, knowledge and assumptions, plus identify areas for further development.
- Readiness assessment is probably best carried out by impartial outsiders in more complex and/or conflictual situations.
- Readiness assessment is not a stand-alone process; it should be integrated into longer-term strategic planning.











### Challenge #2: Framing, language and communication













### Challenge #2: Framing, language and communication

- Framing needs careful consideration and explicit discussion, ideally at an early stage.
- There is benefit to involving people with detailed local knowledge in discussions about which language may help or hinder engagement in particular contexts.
- Framing can exacerbate a nervousness that stems from the desire to 'get the message right'.
- Sharing 'the problem' and discussing different ways in which it can be understood and defined is more helpful than avoiding disagreement or challenge.











### Challenge #3: Climate change, emotions & mental health













### Challenge #3: Climate change, emotions & mental health

- Experiences of flooding and coastal erosion have a strong emotional dimension that can include significant and lasting mental health impacts.
- The links between exposure to risk and emotional responses are not straightforward –
  not everyone is affected in the same way, even when experiencing the same events or
  similar risks.
- There is a need to build individual and collective capacities to engage with mental health impacts and discuss emotionally unsettling issues.
- There is value in working collaboratively with community stakeholders to recognise and factor in emotions and mental health.
- Many people feel less connected to climate change issues than flooding, coastal erosion, or other challenges that directly affect their day to day lives and mental health.











### Challenge #4: Place attachment, culture & identity













### Challenge #4: Place attachment, culture & identity

- People relate to the places and communities they live in a range of different ways. To develop a fuller understanding of a place and community, it is helpful to capture and engage with these nuances.
- Understanding what people value about their place and community, and what they are concerned about, can identify priorities and possibilities for collaboration.
- Development planning tends to attract particularly strong emotions, often linked to concerns about flooding and/or coastal change management.
- Often, there is no single 'community view'.











### Challenge #5: Power, politics and conflict















### Challenge #5: Power, politics and conflict

- FCERM and climate adaptation are complex consider how stakeholders' understanding can be built about how these systems work.
- There are some genuinely difficult trade-offs to negotiate in this work. Often, it
  is more helpful to name these explicitly and to work through them together
  than to wish them away.
- These trade-offs include tensions between different values that are important to collaboration and engagement, e.g. a desire for continuity and building relationships of trust versus demands for openness and inclusion.
- It is worth considering how to build capacities for constructive conflict engagement among all stakeholders.





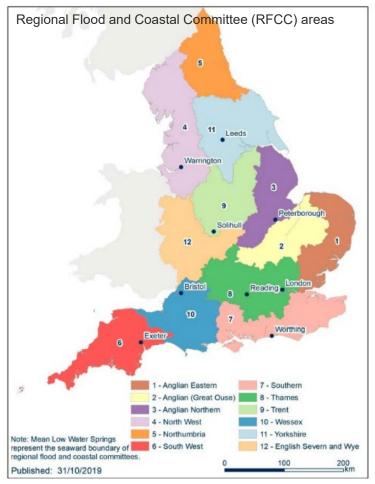






#### **Challenge #6: Questions of scale**















#### **Challenge #6: Questions of scale**

- People who have been directly affected by flooding or coastal erosion often understandably express a sense of urgency in finding ways to minimise their exposure to risk. Adaptation to longer-term climate change projections can feel like an unwelcome distraction from the here and now.
- While it is helpful to combine interventions with shorter and longer-term benefits where possible, sometimes these are genuinely in tension.
- It can be difficult to negotiate the tensions that can arise when people work
  at different geographic scales. Developments at larger scales will often have
  an influence on more local, smaller scales.
- There are no easy answers to these challenges, but it is helpful to open up honest conversations about them.











### Engagement tools for responding to the challenges

- 1. Partnership readiness assessment
- 2. Community readiness assessment
- 3. Simulation
- 4. Scenario development



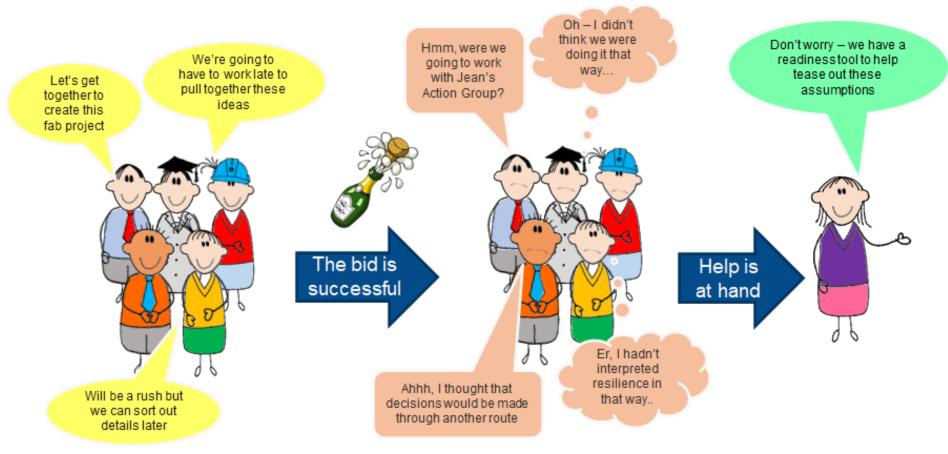








### **Tool #1: Partnership readiness assessment**













### **Tool #1: Partnership readiness assessment**

- Partnership readiness assessing how prepared a group or partnership is to start engaging with the topic of climate adaptation and with stakeholders.
- A self-assessment process designed for group members or partners to consider their readiness and instigate discussion about how to progress readiness.
- Independent facilitation to help explore readiness in an impartial and objective way.











### Tool #2: Community readiness assessment

## "VILLAGE ""FUTURE

We want to hear your views...

We are doing a survey of local residents and businesses to help plan for the future in Hemsby. We want to know what you think about living or working in Hemsby; what issues are important to you; and what you know and think about how a potential increase in coastal erosion or flooding, as a result of climate change, might affect Hemsby. The survey takes about 15-20 minutes to complete, and your responses will help prepare the village for the 21st Century.



You can complete the survey in one of two ways:

- 1. YOU CAN COMPLETE THE SURVEY ONLINE it's easy to do, simply type https://www.smartsurvey.co.uk/s/Hemsby/ into your browser to access the survey now.
- OR, YOU CAN FILL IN A PAPER COPY call Karen Saunders on 0800 0448146 and she will arrange for a copy to be delivered to you.

Please help plan for the future of your village by completing the survey and encouraging your family, friends and neighbours to do so as well – we'd love to hear from anyone aged 13 or over.

As a little thank you for helping, you could win a £50 One4all gift card. These cards are ready to spend with 1000s of different shops. We have three gift cards to give away for fully completed surveys.













### **Tool #2: Community readiness assessment**

- Community readiness assessing how ready residents are to engage on climate adaptation; learning about their knowledge and understanding on the topic; exploring their sense of place and how that affects how they will engage
- Insights using the assessment findings to inform engagement planning and delivery
- Engagement opportunity can contribute to initiating engagement with the community



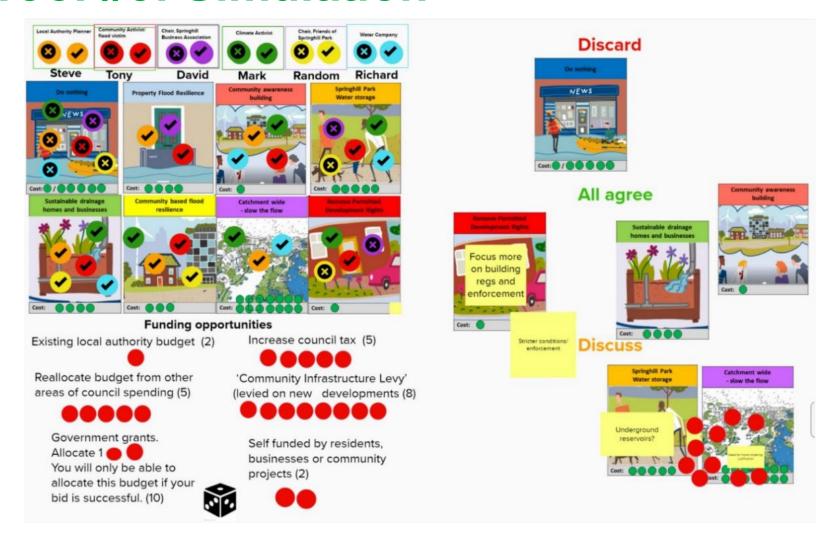








#### **Tool #3: Simulation**













#### **Tool #3: Simulation**

- Simulation a participatory engagement tool to help increase understanding of and planning for flood risk and climate adaptation among stakeholders
- Short group exercises run by a professional facilitator
- **Exploring** the issues, options and potential areas of disagreement and tensions in a safe, supportive environment
- Transferring the learning the experience of and learning from participating in a simulation can be used by participants when engaging with issues in their own local area











#### **Tool #4: Scenario development**

#### FAST/ SEVERE

Rock berm built quickly and provides short breathing space but other adaptations needed sooner than anticipated.

CLIMATE CHANGE IMPACTS

Takes time to build berm but delay causes significant problems and raises questions about protection the berm will offer.

**FAST** 

FUNDING/ BERM CONSTRUCTION

SLOW

Rock berm built quickly and creates breathing room for slow adaptation.

Takes time to build berm. Though there is time for adaptation, other conditions can change too.

SLOW/ MODEST











### **Tool #4: Scenario development**

- Scenario development bringing people together to develop scenarios and using them to inform good conversations
- Possible futures scenarios help to imagine likely social, economic or environmental developments – what might plausibly happen – in a particular place, taking existing trends and contextual information as a starting point
- Collaboration a collaborative process of scenario development can help groups of stakeholders to anticipate and plan for possible futures and engagement needs













Research project FRS17192
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Project webpage: Working together to adapt to a changing climate - flood and coast - GOV.UK (www.gov.uk)

For queries please contact the FCERM Research and Development Programme: <a href="mailto:fcerm.evidence@environment-agency.gov.uk">fcerm.evidence@environment-agency.gov.uk</a>









