

# Broadland Futures Initiative

## Minutes of the meeting held on 09 September 2024

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## Attendees

Marie-Pierre Tighe (Chair)- Broads Authority, Rebecca Bromley- National Trust, Wendy Brooks- Norfolk County Council, Libby Bush- Jacobs, David Cobby- Jacobs, Peter Doktor- Environment Agency, Catherine Harris- Environment Agency, Kevin Hart- Norfolk Wildlife Trust, Dan Hoare- Broads Authority, Fiona Johnson – Norfolk County Council, Jon Nichols- Jacobs, Adam Marsden – Environment Agency, Ian Robinson- RSPB, Tom Say- Environment Agency, Oliver Seville- Jacobs, Yvonne Smith- Coastal Partnership East, Kylie Moos (minutes).

## 1. Apologies for absence and welcome

Marie-Pierre Tighe (MPT) welcomed everyone to the meeting.

Apologies received from Fiona Hinds, Kellie Fisher, Hannah Gray, Andrea Kelly, Rob Kelly, Charlotte Rivett, Rob Wise.

## 2. Update on technical work

### Overview of technical work

Peter Doktor (PD) provided an overview of the technical progress.

### Hydraulic model deliverables

- Early draft deliverables for the Broads hydrological model have been reviewed; those for standalone watercourses and coastal models are being received for review.
- Final model handover is currently June 2025; however, the project team are keen to work with the Broads and coastal models as soon as possible.
- The technical report which provides the results from using the Broads model to test the impact of capital dredging on the River Bure is being finalised, with checks under way on technical data. The date of the public release of the report is still to be confirmed.

### Possible flood risk management actions (Product 21)

- Interim report shared in May considering how BFI will move from individual actions to combinations for appraisal. A further update will be provided by David Cobby in today's meeting.
- Jacobs have produced a series of appendices which provides more background information on the 16 individual flood risk management actions in the toolkit.

The report is over 100 pages, and the Initiative Project Team (IPT) were asked if they still want to receive all the reports, including those that are for information only. The IPT agreed that they would like to continue to receive the reports. Catherine Harris (CH) agreed, and added, the Broads is unique and so many spaces are protected by multiple assets, by different organisations with different requirements. Input from the IPT will help in the future with finding pathways through future scenarios. Tom Say (TS) added, they have requested a BFI SharePoint site for sharing items with the IPT and storing previous reports.

### Methodology for use in appraisal - completed

- Reporting units (Product 20)
- Key decisions for economic appraisal (Product 26)
- Historic environment (Product 25e)
- Landscape (Product 25f)
- Water Framework Directive assessment (Product 25g)
- Climate change scenarios (Product 30) [to be reported with socio-economic scenarios] looking at present day, to 2040 and in 100 years. A range of climate change scenarios will be considered, including sea level rise scenarios up to 2.8 meters which represents the very extreme long term viability test. Fluvial flows going up to an increase of 45% will also be tested.

### **Methodology for use in appraisal – in progress**

- Assessment of designated nature conservation sites (Product 25a). The period for commenting for the IPT has just closed. The importance of designated areas between sites has been fed back from the IPT.
- Natural capital (Product 25b). A further update will be provided by Oliver Seville in today's meeting.
- Salinity modelling (Product 25d)
- Environment and recreation economics (Product 26a)
- Individual's wellbeing (Product 32)
- Socio-economic scenarios (Product 29)
- Scenarios for the coastal boundary (Product 31)

Wendy Brooks (WB) asked for a timeline for the outstanding products and when they will be shared with the IPT for comment. Yvonne Smith (YS) asked if the timeline can include all the previous reports that have been shared with IPT. PD agreed to complete the timeline.

### **Natural capital assessment methodology**

Oliver Seville (OS) provided an update of the development of the natural capital assessment methodology which will be incorporated into the appraisal later. HM Treasury Green Book refers to natural capital as “the stocks of elements of nature that directly or indirectly produce value to people through flows of ecosystem services,”

### **Work to date**

- Baseline natural capital assessment. Regional-scale assessment of BFI plan area to scope out opportunities for environmental enhancements- completed.
- Natural capital opportunities report. Recommendations for how the natural capital opportunity mapping for the Environment Agency's Eastern Hub, in combination with

the baseline assessment, could be used with long-list BFI plan area flood risk management interventions – completed.

- Next steps- how do we consider natural capital for each of the actions within the toolkit?

PD agreed to share the natural capital opportunities summary with the IPT.

### **Purpose and scope**

Develop a methodology to conduct a natural capital assessment of the options within the toolkit of actions to reduce flood risk.

Natural capital assessment of the toolkit actions will help to achieve the following:

- Identify the hidden benefits and disbenefits of National Flood and Coastal Erosion Risk Management (FCERM) actions in terms of ecosystem service impacts.
- Identify the potential trade-offs in terms of ecosystem services for more informed decision-making.
- Identify the wider benefits associated with environmental enhancements to maximise outcomes from Biodiversity Net Gain (BNG) and ecological mitigation.
- Support consenting by demonstrating alignment with local strategies for nature, such as the Water Resources East (WRE) Natural Capital Plan.
- Enable the inclusion of natural capital benefits and disbenefits within the partnership funding calculation process to support FCERM grant-in-aid (GiA) funding applications.
- Contribute to the BFI and the Environment Agency's vision for the mainstreaming of natural capital approaches in decision-making.

### **Key principles**

- Methodology will look to build upon the natural capital baseline developed for the BFI; however, improvements will be required to the granularity of the data to suit evolving needs of the project.
- Assessment approach will look to assess the change in ecosystem service benefits resulting from a given intervention, based principally on associated changes in habitat (natural capital assets).
- The approach will align with the Environment Agency's Environment and Historic Environment Outcomes Valuation (EHOV) guidance.

### **What is the EHOV guidance?**

EHOV is supplementary natural capital assessment guidance to FCERM appraisal guidance and is relevant to all FCERM projects. EHOV should only be used if the value of the impacts will be a significant part of the project.

## EHOV Methods

### EHOV Level 1

- “Expected to be sufficient for vast majority of projects.”
- MS Excel-based tool which calculates indicative values (£) for a small set of ecosystem services common to FCERM impacts.

### EHOV Level 2 (bespoke) natural capital assessment methodology

Level 2 is to be used where Level 1 underestimates or excludes significant benefits or values are likely to be significant and affect the choice of the preferred option. Level 2 Repackages the Enabling a Natural Capital Approach (ENCA) guidance for an FCERM context (bespoke, detailed assessment).

#### Natural assets

1. Develop a natural capital asset register within scheme footprint based on CEH land cover map or equivalent (good resolution).
2. Repeat register for post-intervention scenario based on design assumptions.

#### Ecosystem service benefits

3. Quantify and monetise, where possible, ecosystem service benefits using a value transfer approach;
  - Valuation evidence to be taken from verified sources only, principally EHOV and ENCA guidance.
  - Methods will be transparent with assumptions outlined, clearly.
  - The process will follow the ENCA- and government-endorsed value transfer guidelines.
  - Key valuation principles set out in the FCERM appraisal technical guidance and HM Treasury Green Book will be aligned with;
4. Qualitative assessment of all ecosystem service benefits using the environmental benefits from nature tool where quantitative approaches cannot sufficiently capture all, key ecosystem service benefits.

## Outcomes

- Support decision-making
- Support consenting by demonstrating alignment with strategies e.g. WRE East of England Plan.
- Benefits used in OM1/4 outcomes.
- Outputs included as part of more comprehensive appraisal.

MPT asked what collaborative work has been done with WRE. DC responded, they are aware of the detailed natural capital assessment that both WRE and the UEA have carried out but neither of them focus on the BFI area.

## Moving from longlist of individual flood risk management actions to combinations of actions

David Cobby (DC) introduced the final presentation for the update on technical work and advised that the IPT will be asked for their input on three questions towards the end of the update.

### Overview of developing combinations of flood risk management actions

Reminder of baselines

- This presentation relates to ‘Do Something’ future actions.
- A separate set of baselines are being developed, modelled, and appraised to compare future changes to:
  - Do-nothing to manage flood/erosion risks – this assumes you no longer provide FCERM interventions and is a baseline against which other options are considered.
  - Do-minimum to manage flood/erosion risks – the least that would be done for FCERM, which must be realistic and reflects typical action during flood or erosion incidents.
  - Sustain current standard of service – allows the continuation of the current levels of service provided by FCERM.

### What do we want to achieve by combining flood risk management actions?

To move from a generic toolkit of individual actions to specific combinations of the actions which we can model, refine, and appraise. Combinations are the starting point for modelling and refinement and not the final answer.

Considerations:

1. Large geographical scale of BFI area => requirement for multiple flood risk management actions.
2. 100-year temporal scale of BFI plan => anticipate changes through time.
3. Adaptive basis for plan => keep future options open.
4. Achieve multiple objectives => only a mix of actions will achieve this.

### Progress in applying method

- What we want the BFI Plan to achieve-complete

- Individual flood risk management actions we can use:
  - Types agreed through public consultation - complete
  - Scale, location & timing- underway but not complete
- Alternative futures we should plan pathways for:
  - Workshopped longlist of possible futures based on EA National Strategy- complete.
  - Chose three distinctive futures to begin investigations - complete
- For each future, specify individual actions across BFI area and sequence in time.
  - To fulfil BFI objectives – underway but not complete
  - To achieve a relative level of flood risk management- underway but not complete.

These are starting points; final combinations will inevitably be a mix to suit local characteristics.

### **Next steps and steer required**

1. Develop plausible maximum scales, location, and timing of actions for each combination.
  - Begin with long-term protect followed by medium-term protection and long-term placemaking.
  - Modelling action combinations will refine and confirm the flood risk management benefit provided.
  - Understand the maximum flood risk management benefit achievable. Scale can typically be reduced if required.
2. Agree how above fits into wider plans for engagement (see next section)
3. Agree how coastal realignment should be incorporated into BFI (see final Section)

Question: Do you agree with the process to combine individual FRM actions to achieve the possible future outcomes?

MPT asked if affordability has been considered with long term protection and is there a risk of not managing expectations by providing a pathway to something that cannot be delivered. DC agreed that it is a risk, and a protect pathway with significant investment may not be affordable. Other pathways will also be considered that are more affordable but may have to compromise on the amount of flood risk management benefit. MPT added, any documents that are published under long term protection will need to have the above context set out clearly. YS commented, long term maintenance and repair costs also need to be considered as well as any capital costs. DC confirmed that both capital and maintenance implications will be included in the costs.

Wendy Brooks (WB) suggested that coastal realignment is incorporated alongside coastal choices, which are key for the bigger picture.

Kevin Hart (KH) requested that the IPT could review each of the drafts before they are ready to be published.

### **Timing of Communication & Engagement**

#### Conceptual Design of Actions

- Actions must be conceptually designed to the extent that they can be represented in the model and appraised according to multiple criteria based on BFI objectives.
- They will be in specific locations, have a particular scale, and implemented at a particular time in the future.
- Desire that decision makers are comfortable that the BFI is engaging at the best time, and with an appropriate level of information.

#### **Two Possible Approaches to Engagement** (both with pros and cons)

1. Undertake modelling/appraisal to refine action combinations internally, following which we engage on firmer proposals.
2. Engage key stakeholders prior to confirming initial combinations, following which we model and appraise refined concepts.

Question: Would you advise the project to engage with stakeholders/landowners before or after refinement of action location/details, which will be done through modelling and appraisal?

WB suggested listening to people first and responding to what they may want. Simple messaging about the future of the Broads could also be included with early engagement.

KH suggested a combination of the two approaches. Sharing the concepts early on would be an opportunity to stimulate ideas, thoughts, and discussions, however the information does not need to be too specific.

YS agreed that the engagement should take place earlier, but it also depends on who the engagement is taking place with. YS agreed to take the question back to the Coastal Partnership East engagement team and feedback to PD.

MPT requested that the question is brought back to the IPT as a more defined proposal including today's comments, and to allow other IPT members who are not at the meeting today to provide their feedback.

### **Alternative alignments of coastal structures in the Upper Thurne**

Upper Thurne Working Group was held on 25 April to discuss impacts of long-term Shoreline Management Plan (SMP) policies. Outcomes from Upper Thurne Working Group:

- Resulted in possible futures to consider:



- Raised coastal wall along current alignment
- Variations on set back structures
- Type (e.g. wall or embankment), scale (decreasing height with distance from shore) and location (around key features) could be conceptualised to facilitate modelling and appraisal.

### **Steer required on BFI relationship with the SMP**

Combining SMP, Great Yarmouth and inland strategies is a primary purpose of BFI. The BFI will not change SMP policy of hold the line or conditional hold the line beyond 2055 but is providing supporting information.

The coastal environment suggests additional sensitivities when engaging with stakeholders.

Two possible options:

1. Alignments are incorporated into the action combinations, modelled and appraised as all other BFI actions.
2. Treat possible alignments as ‘boundary conditions’ to the BFI; do not conceptualise, cost, appraise etc but simply modify in/outflows as required.

Question: Are you comfortable with us including the impacts of long term changes in the alignment of coastal structures, cited within the SMP?

YS asked if sediment flows and processes have been considered as a result of hard boundaries and how that could impact the rest of the coast. Resilient Coasts are currently doing a lot of work on coastal processes by modelling sediment flows which may be useful to BFI in the future. This was noted, DC added the [Coastal Processes Within the Plan Area report](#) was produced in phase A of BFI which looked at the current operation of the coast.

CH commented, the preferred option is option 2 for them. BFI is looking ahead to 2125, but it is not clear how the SMP will affect BFI from 2055. For example, what if coastal processes change or it is not possible to ‘hold the line’ with hard defences. Changing coastal processes demonstrate the flexibility that is being incorporated into the BFI whilst keeping it achievable and realistic. KH agreed and noted that this section of the coastline could alter all the Upper Thurne section, but the SMP is a separate entity with its own drivers and constraints. KH added, if option 2 is taken, the communication and explanation will be important because there are a lot of interested landowners and stakeholders who will want as clear explanation as to the level of detail in the BFI.

MPT asked, if option 2 is selected, can it be made clear who is doing the detailed modelling and appraisal. CH responded, if there was a change in SMP policy, then the SMP appraisal process would have to be followed. To futureproof BFI, a change in SMP policy needs to be considered whilst making clear that the BFI will not change SMP policies.

MPT requested that when the item is presented to the Elected Members for decision, they are given more information about the implications for each option.

### 3. Update on communications and community engagement

Tom Say (TS) provided an update on communications and community engagement.

- Content for Harnser and the monthly newsletter is being finalised.
- TS is working on the engagement strategy which is due to be completed in the next few days. A supporting engagement plan is being produced which will be broken down into products and geographic areas.
- A request has been submitted for a BFI SharePoint page which TS and Mareth Bassett will update.

### 4. Update on Elected Members Forum

The election of Chair and Vice Chair will take place at the next Elected Members Forum on 14 October at Dragonfly House. The agenda will include an item on moving from the longlist of individual flood risk management actions to combinations of actions, which was discussed today.

Since the last Forum there have been two new appointments:

- Councillor James Bensley will represent Norfolk County Council
- Councillor Andrée Gee will represent East Suffolk Council

### 5. AOB

Rebecca Bromley has recently joined the National Trust as a Coast and Marine Advisor covering Norfolk, Suffolk and Essex and will be supporting Victoria Egan on the BFI.

MPT thanked Dan Hoare (DH) for their input into the BFI IPT over the last six months.

### 6. Date of next meeting

The next meeting of the Broadland Future Initiative is 11.30am-1.00pm 4 November 2024.

### Summary of progress

Outstanding actions	Meeting date	Assigned to
Produce a timeline for the IPT which includes all the products that have been previously shared and future products that will need to be reviewed.	09.09.2024	PD
Share the natural capital opportunities summary with the IPT.	09.09.2024	PD