

Broadland Futures Initiative

Minutes of the meeting held on 23 June 2025

Contents

1. Apologies for absence and welcome	2
2. Update on technical work	2
3. Update on communications and community engagement	6
4. Update on Elected Members Forum	6
5. AOB	7
6. Date of next meeting	7
Summary of progress	7

Attendees

Marie-Pierre Tighe (Chair)- Broads Authority, Bryony Barron- Jacobs, Giles Bloomfield- Great Yarmouth Borough Council, Rebecca Bromley- National Trust, David Cobby- Jacobs, Peter Doktor- Environment Agency, Kellie Fisher- Environment Agency, Vanessa Gouldsmith- Natural England, Catherine Harris- Environment Agency, Dan Hoare- Broads Authority, Andrea Kelly- Broads Authority, Andrew Marsh- Historic England, Phil Pearson- RSPB, Matthew Philpot - IDB, Hannah Purkis- Suffolk County Council, Rob Rogers- Broads Authority, Kylie Moos – Broads Authority (minutes).

1. Apologies for absence and welcome

Marie-Pierre Tighe (MPT) welcomed everyone to the meeting and introduced new Initiative Project Team (IPT) member Andrew Marsh (AM) who is representing Historic England.

Apologies received from Wendy Brooks, Hannah Gray, Kevin Hart, Sarah Luff, Rob Wise.

2. Update on technical work

Peter Doktor (PD) introduced the three products that are going to be covered during today's meeting:

- Epochs and climate change scenarios (Product 29)
- Socioeconomic scenarios (Product 30)
- Wellbeing assessment methodology (Product 32)

Product 29 and 30 have been out with the IPT for three weeks for comment and today is a chance to provide final comments on the reports. Product 32 will be shared with the IPT towards the end of this week.

Epochs and climate change scenarios (Product 29)

With a 100-year time horizon it is unlikely that one Flood Risk Management (FRM) action will manage risk over the whole time period, instead the BFI plan will be divided into a series of epochs. Modelling, appraisal, and a plan of actions will take place at the start of each epoch which will take time and resources, so a proportional approach is required. The BFI plan will remain flexible and follow an adaptive approach, with a review taking place every 10 years or so to coincide with updated climate predictions.

There are a number of considerations for defining the epochs which include:

- Time or physical change - a lot of the decisions will be based on physical change like sea level rise.
- Rate of climate change - if the rate of change is happening rapidly than shorter epochs may be required.

- Certainty in decision making - longer term decisions will only be made in the future, when socio-economic priorities may be different to today, meaning length and timing of these epochs are less certain.
- Lead time for FRM actions - FRM Actions are assumed to provide benefits throughout an entire epoch, but those with long lead times may not be implemented at the start of an epoch.

Taking into account all the above considerations, the recommendation is to divide the 100 year planning horizon into three time-based epochs:

- Present Day: 2030-2039 (10 years)
- Mid Century: 2040-2069 (30 years)
- End of Century: 2070-2129 (60 years)

Shorter epochs in the near future focus on smaller lower cost actions with shorter lead times that align with funding rules which are likely to align with funding rules of the present day. The shorter duration also provides more certainty in the first step of implementing the BFI plan. Longer epochs for the remainder of the plan allows for increasing uncertainty regarding the timing of climate change and implementing FRM actions.

The flood and coastal risk projects, schemes, and strategies: climate change allowances guidance recommends the use of three overall climate scenarios (design, severe and extreme) to be used in the development of a long-term FRM strategy. These are defined separately from the BFI epochs but are applied as uplifts to the modelling within each BFI epoch.

Basis for Epoch Definitions:

- Defined by increments of sea level rise (per Environment Agency guidance)
- Tidal conditions assumed constant for first two epochs, final epoch allows for variation due to greater sea level change.
- Fluvial conditions assumed constant within each epoch.

The BFI project team have been discussing the use of the word 'epoch' and which terminology should be used to describe the different time periods. The Shoreline Management Plan also uses epochs and as questioned by an Elected Member at a previous meeting, having two epochs with different timescales could be confusing for partners and stakeholders. The Norfolk Strategic Flooding Alliance have also recommended that a different word is used that will be more suitable for engagement with the general public. The IPT suggested using the following: period, interval, term, duration, phase, and short, medium and long term. PD agreed to review the options and present an alternative terminology to 'epoch' at the next Elected Members Forum (EMF).

In a chart that represents the 100 year timeline, the last epoch has been labelled 'end of century' for the time 2070-2129. David Cobby (DC) confirmed that this wording was selected

because the end of the century takes place during this period. 2070 is when the modelling will begin. Keeping the colours of the boundaries between epochs the same may be less confusing.

Andrea Kelly (AK) commented that the BFI appraisal epochs and modelling uplifts chart is a fantastic way to convey the information about percentage change associated with both fluvial and tidal uplifts, both of which are important to the BFI.

The presentation today mentions that a planned review of BFI plan will take place every 10 years or so to coincide with updated climate projections. Phil Pearson (PP) asked if this language is suitable and if BFI can guarantee that it hits the 10 year review period, and how does the BFI set up between now and year 10 to ensure it takes place. For example, what monitoring needs to take place, and how should the data be captured? Matthew Philpot (MP) agreed and has already provided similar comments in their feedback. MP asked if there will be a build up of data being recording ready for the decision points. For example, which of the following will be included in the monitoring and how will they be weighted; salinity events, fish kills, fish populations, habitat change, flora and fauna changes, flood events. DC responded, they have not got to the point of defining the monitoring strategy yet, but they anticipate that it will be a combination of physical observations such as flood and salinity events, and updated model predications of flood risk. Catherine Harris (CH) added, people will want clarity in their investment decisions going forward and that will need to be based on physical data that has been monitored.

MPT asked if there is a point where the monitoring plan will become a BFI deliverable product. PD responded, yes, the adaptive approach is predicated on reviewing data, understanding key decision points, and monitoring is fundamental to this.

Phil Pearson (PP) commented, a workshop hosted by the Broadland Catchment Partnership took place last week which was looking at monitoring within the catchment. Given that the BFI is considering the type of modelling which is required, it would be a good time to see if the work could align.

Socioeconomic scenarios (Product 30)

As well as testing different climate change scenarios, this product considers stress testing the appraisal results with different socioeconomic scenarios. [UK Shared Socioeconomic Pathways \(SSPs\)](#) describe alternative trajectories for societal development linked to climate change mitigation and adaptation. The SSPs have been mapped into five different pathways:

- SSP1: Sustainability
- SSP2: Middle of the Road
- SSP3: Regional Rivalry
- SSP4: Inequality
- SSP5: Fossil-fuelled Development

For each of the SSPs 25 quantitative and 50 semi-quantitative indicators have been identified and their assumed trends through to 2100. Under different SSPs some appraisal objectives may have more relevance than others to keep the BFI on an equitable and sustainable trajectory. The proposed approach is to weight the BFI objectives for different SSPs.

Next steps

- The BFI can test how robust the appraisal results and therefore the strategy option choices that would be available under different SSPs.
- In uncertain times actions may be preferred that perform well in a wide range of socio-economic circumstances.
- There is a possible alternative approach where objective weights reflect the 'ideology' of the SSPs e.g. if greater emphasis on resource exploitation less weight on objectives that conserve resources.
- Seek EMF agreement to 'stress test' for different SSPs and that the overarching goal is for an equitable and sustainable future.

MPT noted that this is a complex product, especially for those that do not normally deal with these scenarios. Thought needs to be given as to how this will be explained to the EMF at the next meeting.

Giles Bloomfield (GB) questioned if the regional uncertainty narrative in SSP3 is relevant for Broadland. If there was civil unrest on a global scale the region would be looking at more intensification for growing food, and the threat to sustainability would be different to what is set out in the pathway. Not enough thought has gone into thinking about how the land may need to be used and water required for food production in a protectionist society. Bryony Barron (BB) responded, five indicators have been chosen to represent each SSP and the impact on Broadland, but there are 75 in total. Five were chosen to be proportionate, but they may need to be reviewed or increased.

Based on the current pathway of SSP2, the scoring indicated that the objective BE1: Built Environment could have a higher weighting. MPT asked how this would materialise and is it something that the BFI needs to consider now. BB responded, there is an assumption in SSP2 that there will be more development, greater levels of urbanisation, rail, and road infrastructure, all of which increases the weighting on the Built Environment objective.

Matthew Philpot (MP) questioned the value of this product which is very theoretical and considers possible global cultural changes and things that might happen in the future. In reality there will be policy and funding changes from government with global cultural changes which would result in the BFI re-strategising. PD responded, the product does not define the future, instead the five scenarios are used as a stress test to understand how robust the objectives are under the different scenarios. PD agreed that government guidance and rules will change, but this is an opportunity to think about what are the types of actions that can see the BFI through a wide range of scenarios. PD added, at this stage it is an innovative piece of work, and it is not yet clear how much difference it will make, it is a methodology and not the answer at this

stage. DC added, the adaption pathway planning process is planning despite future uncertainty. Product 29 set out how the pathways would be developed according to climate and physical uncertainties which can be predicable compared to the uncertainties listed in product 30. This is an opportunity to consider these uncertainties within the pathways.

PP asked if the weightings would have an impact on resources. For example, in the short term, upfront investment may be required to meet the sustainable scenario. MP has raised similar concerns and asked if this work would distract from the ongoing day-to-day maintenance of existing assets where funding is already tight. DC added the stress testing is part of the information that the BFI will use to choose which pathway is sensible to pursue in the future, but it should not detract from the works that are currently needed to keep going. The first 10 year epoch is unlikely to be radically different from today, changes regarding both planning and funding all take time.

Wellbeing assessment methodology (Product 32)

This is an innovative piece of work to try and understand how the 16 different FRM actions will affect wellbeing i.e. life satisfaction. The technical report will be shared with the IPT to review by the end of the week. The report will include a large literature review and a wellbeing assessment of FRM actions.

The UK government measure life satisfaction on a scale of 0 to 10 and any intervention can result in a positive or negative impact on the score. For example, some of the interventions may reduce anxiety, improve opportunity for exercise, or increase community cohesion.

PP commented, the physical presence of new storage structures should be included. For example, people have raised concerns about their property when a new reservoir has been built nearby.

PD agreed to share an updated 'summary of products' which includes all of today's products with the IPT.

3. Update on communications and community engagement

The recruitment of a dedicated communications and community lead is taking place; this role will be key as the BFI moves forward into the appraisal process.

CH and PD will be at the Norfolk Show this week to talk about BFI.

4. Update on Elected Members Forum

The EMF met on the 8 May and received a detailed presentation on Product 21, flood risk management actions and pathways. After a good discussion, the members endorsed the four pathways which the IPT had discussed at the end of April.

The next meeting is on the 10 July and members will receive presentations on products 29 & 30 that have been discussed at today's IPT.

5. AOB

The [reforming our approach to floods funding](#) consultation is now open for comment. The Environment Agency cannot respond and because the Agency is a key stakeholder in BFI, it is also unable to submit a response. IPT partners are encouraged to send a response on behalf of their organisation.

MPT announced that following a reorganisation at the Broads Authority, today will be their last IPT meeting. Rob Rogers (RR) will take on the BFI role going forward. Kellie Fisher (KF) thanked MPT for all their hard work, for chairing the meetings and being a fantastic advocate of BFI.

6. Date of next meeting

The next meeting of the Broadland Future Initiative is 9.30am-11.00am 11 August 2025.

Summary of progress

Outstanding actions	Meeting date	Assigned to
Update the 'summary of products' table and share with the IPT	23.06.2025	PD