

BFI Elected Members Forum

Minutes of the meeting held on 10 July 2025

Contents

1. Apologies for absence and welcome	2
2. Strategy periods and climate change scenarios	2
3. Socioeconomics scenarios	5
4. Smart objectives	6
5. Any other business	8
6. Date of next meeting	8

Present

Jan Davis- Broadland District Council (Chair), Harry Blathwayt- North Norfolk District Council, Richard Elliot- South Norfolk Council, Andrée Gee- East Suffolk Council, Noel Galer – Great Yarmouth Borough Council, Tony Grayling- Broads Authority, Kevin Maguire- Norwich City Council, Richard Price- Norfolk County Council, James Reeder- Suffolk County Council

In attendance

Giles Bloomfield- Great Yarmouth Borough Council, David Cobby- Jacobs, Peter Doktor - Environment Agency, Kellie Fisher- Environment Agency, Catherine Harries- Environment Agency, Mairi MacArthur- Environment Agency, Rob Rogers- Broads Authority, Marie-Pierre Tighe- Broads Authority, Kylie Moos - Broads Authority (minutes).

1. Apologies for absence and welcome

The Chair welcomed everyone to the meeting and new member James Reeder who represents Suffolk County Council.

All Local Authorities are represented, either by their nominated representative or substitute.

The Chair presented the purpose of today:

- To share and get agreement to how the 100-year strategy life is divided into shorter periods, and the climate change scenarios to be considered.
- To share and get agreement that we sensitivity test the appraisal results against different future socioeconomic scenarios.
- To share for information the progress to date on making our appraisal objectives SMART (Specific, Measurable, Achievable, Relevant and Time-bound).

2. Strategy periods and climate change scenarios

In developing an adaptive approach to managing flood risk, there is a need to decide how frequently during the 100 year timeframe of the strategy we test how well the flood risk management (FRM) actions are performing, so that we can decide whether to continue with a pathway or if an alternative should be adopted. Previously the periods of time have been referred to as 'epochs' however there is a chance that this could be confused with the Shoreline Management Plan (SMP) epochs. A suggestion is to use either 'term' or 'period' to define the duration.

There are a number of considerations to determine the frequency of action testing and period duration:

- Time or physical change- a lot of the decisions will be based on physical changes such as sea level rise or an increase in peak flow.
- Rate of climate change – if the rate of change is happening quickly, then shorter periods will be required, similarly if there is a period of time with little change, checks will not need to take place as frequently.

- Certainty of decision making- longer term decisions will be made in the future, when socioeconomic priorities may be different to today, meaning length and timing of periods are less certain.
- Lead in time for FRM actions- FRM actions are assumed to provide benefits throughout an entire period, but those with long lead times may not be implemented at the start of a period.
- Resources needed- every model and test will require time and resources from the strategy budget.

Considering all the above, the recommendation from the BFI project team is to divide the 100 year planning horizon into three time-based periods:

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

It is important to test how well the FRM actions perform with different amounts of climate change expressed as sea level rise and increases in peak river flows. There are a number of choices of emissions assumptions and percentiles, but in terms of planning and FRM actions the government guidance assumes a high emissions scenario known as Representative Concentration Pathway (RCP) 8.5. RCP 8.5 describes a world where global warming will be 4.3°C above what it is now by 2100. Three climate scenarios will be used in the development of a long-term FRM strategy. These are defined separately from the BFI time periods but are applied as uplifts to the modelling within each period for the following purposes:

- Design scenario for baseline and all actions to compare their performance.
- Severe scenario for the sensitivity of leading actions.
- Extreme scenario for stress testing preferred actions.

The increasing amounts of sea level rise and increase in river flows for each of the above scenarios over the 100-year timeframe and periods of the strategy were shown in graphs.

Decisions required from elected members

- Agree the terminology to be used for the strategy periods.
- Agree the frequency of action testing and so period durations.
- Agree the climate change scenarios to be used.

Rob Rogers (RR) commented that the average reading age in the UK for adults is typically cited as being 9-11 years old. The term 'epoch' could be replaced with 'time' or 'period' to ensure that the BFI plan reaches a diverse and wide public audience. A member agreed that using epochs will likely be confused with SMP epochs which have already been set and do not align with the BFI. Regarding the terminology, a member questioned if there is an easier way to describe the high emission pathway.

A member felt that epochs suggest a long period of time, but in reality, things are happening much more quickly. Another member supported the use of 'period.' The word is often used to describe a length of time and is commonly used in school timetables. Elected members agreed to use the word 'period' for the strategy periods.

A member commented that there was no reference to pluvial uplift and suggested that it should be included, especially with the flooding in Texas that is currently taking place following a period of heavy rainfall. As the Broads rivers cease to drain into the sea, this uplift will become more of an interest.

Giles Bloomfield (GB) recently attended a meeting regarding the next steps for the national SMP and its move to epoch 2. There was feedback that there is already confusion between the SMP and existing 100 year plans such as the Thames Estuary 2100. An alternative could be to use a 100 year rolling plan so that everything comes back into phase.

With 1 in a 100 year events happening more frequently, a member asked if the BFI should be working towards the extreme scenario.

A member suggested including flash points in the sea level and fluvial uplift graphs to add focus, for example river levels at Potter Heigham bridge.

The Chair supported the frequency of action testing and period durations commenting that there still needs to be flexibility within the approach, but periods are required to plan the strategy. Peter Doktor (PD) advised that the strategy periods are separate to the frequency at which the plan might be reviewed. For example, the Thames Estuary 2100 has just undertaken its first 10 year review.

Members discussed if the criteria to determine the frequency of action testing and period duration should include events caused by the impacts of climate change and the response of the public. For example, the east of England is currently in its third heatwave of the year and each event could jolt the BFI into certain decision making regarding the actions that are taken. Quite often after a major event has taken place everything is reviewed, regardless of when the periods of review are planned. David Cobby (DC) clarified that the presentation today is regarding the planning of the BFI strategy and how the modelling and analysis will be framed, which is currently set out as four points over the 100 year period. There will be a separate conversation about the review of the strategy but today is about how the strategy is developed in the first instance.

Regarding the three climate change scenarios, GB asked if the plan is to model all three of the predictions to provide a suite of comparison maps to understand the economic commitment, or just the one scenario which would be the basis of decision making. DC responded the government guidance states that the economics needs to be completed to promote schemes in the future and this will be carried out by modelling the design scenario. Testing against the severe and extreme scenarios will be used to inform how the preferred actions may perform, but it will ultimately come down to resources. GB added, in 10 years time when the next IPC data set has been published the design line may have moved to the severe line.

Elected members agreed with the frequency of action testing and period durations as well as the climate change scenarios list that was provided in today's presentation.

3. Socioeconomics scenarios

As well as testing different climate change scenarios there is an option to test if the FRM actions would be different in different future socioeconomic scenarios. In uncertain times actions that perform well against a wide range of socioeconomic circumstances may be favoured, also known as 'no regrets' options. Sensitivity testing can be carried out by weighting the BFI objectives used to choose actions that might change in different socioeconomic scenarios. This is also based on an overarching assumption for the BFI that the goal is an equitable and sustainable future as defined by our objectives.

The Met Office and other organisations have completed a piece of work on [UK Shared Socioeconomic Pathways \(SSPs\)](#) which describe alternative trajectories for societal development linked to climate change mitigation and adaptation. The SSPs have been mapped into five different scenarios:

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

It is not the role of the BFI to determine what the futures are, but how the BFI may respond to them. It is estimated that the UK is currently around SSP2. An example of the recommended weighting of objectives under different SSPs was shared with elected members.

Decisions required from elected members:

- Agree that we will sensitivity test the appraisal results against different future socioeconomic scenarios.
- Agree that the SSPs provide a sufficient range of scenarios.

Several members commented that the UK is a combination of SSP2 and SSP4 particularly with political change and an upcoming change of boundaries. Financial struggles between boundary areas can also lead to disruption, this was demonstrated with the end of Coastal Partnership East. PD responded that today's position of the UK is not the critical part of the discussion, what is important is that members are content with the range of scenarios to be used in sensitivity testing, and if the BFI should look at more extreme scenarios.

Elected members agreed with the range of scenarios and sensitivity testing.

It was also agreed that members could provide any additional feedback on the objectives and weightings by the next meeting.

A member requested more information on how the SSPs have been developed. PD offered to share the socioeconomics scenarios technical report which explains in more detail how the table with weighting outcomes was developed. Regarding the technical report, GB recommended that the weighting for SSP3 in a regional context is revisited, particularly the objectives around agriculture and water use. For example, an increase in food production would not be sustainable and farming would become more intensive. Self reliance does not necessarily mean a sustainable scenario.

4. Smart objectives

DC presented the progress to date on making the appraisal objectives SMART and decisions that will need to be made for the remainder of the project. PD emphasised the material presented today is for early information and discussion, and this topic will be taken to a future EMF for endorsement.

Anticipated uses of objectives

1. To rank and choose FRM action pathways to include in the BFI Plan
2. To inform the Sustainability Appraisal / Strategic Environmental Assessment of the BFI Plan
3. To inform monitoring and review of the BFI Plan

Outstanding tasks to finalise objectives

1. Make them SMARTer (Specific, Measurable, Achievable, Relevant and Time-bound)
 - Clarify wording and relevance to distinguish between FRM action pathways that are better defined.
 - Through development of measurable indicators/criteria for each objective
 - Incorporate IPT feedback on draft indicators.
 - Outcome: 13 original objectives refined to 10 updated objectives
2. Confirm use of objectives in appraising FRM action pathways
 - Align with appraisal guidance as far as possible.
 - How economic (monetized) and non-economic (non-monetized) objectives are best used together.
 - Outcome: Longlist and shortlist stages use objectives differently

The words 'enhancement' and 'enhancing' has been removed in the proposed updated objective, a member commented that they would like the words to remain, particularly for those objectives relative to nature and cultural heritage. The membership of the EMF is made up of a number of public bodies whose biodiversity duty is to think about not only conservation, but how to enhance biodiversity. A member commented that there are different

adaptation actions that can be taken that have different consequences for whether nature is degraded or enhanced. DC agreed.

Use of objectives in development of BFI plan

Longlist FRM action pathways

- The four pathways are ranked using Multi-Criteria Decision Analysis (MCDA).
- Use all updated objectives, both monetised and non-monetised.
- Tweak existing objective weights.
- Criteria should be independent and helpful to differentiate choices.

Shortlist action pathways

- Identify the preferred pathway.
- Cost benefit analysis (monetised objectives) supported by MCDA (non-monetised objectives).
- An opportunity to refine criteria and monetise any important outstanding aspects.
- A re-weighting of objectives retained for the MCDA may be required.

BFI Plan

- The final step is to assess whole BFI Plan
- Sustainability Appraisal / Strategic Environmental Assessment

Summary

- Thirteen original BFI Objectives have been streamlined into ten.
- Twenty-two criteria have been defined to measure the fulfilment of the objectives by the FRM action pathways.
- Each criterion has a scoring guide, using similar scoring to Sustainability Appraisal / Strategic Environmental Assessment.
- Review of guidance has steered towards:
 - Longlist scoring of pathways based solely on MCDA, informed by all criteria.
 - Shortlist scoring of pathways based primarily on economics, supported by MCDA informed by non-monetised criteria.

The Chair commented that there is a lot to consider and would like members to have the opportunity to review the information in their own time before it is presented at a future meeting. They added that one of the reasons the monetization of the short list is being looked at in detail is because of the importance of being able to submit funding bids whilst trying to

include non economic criteria. DC agreed and added that this is why the BFI is following an adaptive plan, options can be ranked instead of excluded.

5. Any other business

Marie-Pierre Tighe (MPT) commended elected members for engaging with the technical presentations received today and noted that all local authorities were present, which was very good.

MPT announced that following a reorganisation at the Broads Authority, today will be their last meeting, RR will take on the BFI role going forward. On behalf of elected members, the Chair thanks MPT for everything that they have done on the BFI and wished them well in the future.

A member gave the heads-up about an item they will want to raise at the next NSFA meeting on 17 July, about the Bure training wall report.

6. Date of next meeting

10.00am-12.00pm 23 October 2025