# Adapting to a Changing Climate in the Broads

Report by Head of Strategy and Projects

# **Summary:**

This paper brings Forum members up-to-date with ideas for a revised Climate Change Adaptation Plan for the Broads. The intention is to follow the previously agreed methodology of identifying the special qualities and assets of the Broads and assessing their vulnerability. From that assessment, the greatest risks will be explored in more depth to consider adaptation options, and a revised action plan will be drafted. The document is likely to be available for wide consultation in the Autumn. Responses will be incorporated into a final revision with the intent to approve the Plan around the end of 2014 and submit it to Defra to help inform the National Adaptation Programme. The paper also takes the opportunity to update Forum members on recent communication processes.

# 1 Update on Revising the Broads Climate Change Adaptation Plan

- 1.1 A preliminary draft climate change adaptation plan for the Broads was produced and submitted to Defra in 2011. This was followed by discussions with differing interests in the Broads, including the Broads Forum, to scope key issues and concerns. From this work, it became clear that people want more detail to help them understand more fully the key issues and potential adaptation options before contributing their views. The Climate Change Adaptation Panel has therefore agreed to produce a revised climate change adaptation document with a suggested way forward, and publish it for a period of public consultation.
- 1.2 Gathering a range of opinions will strengthen the adaptation plan and help build towards a consensus on short term and longer term steps to seek to get the best for the Broads in the facing of environmental change influenced by a changing climate. The more people that endorse the way forward, the easier it will become to influence the reactions and commitments from those affected, be it key organisations, local landowners or local communities.
- 1.3 A summary of the proposed methodology and main consultation points for the revised draft plan is shown in Appendix 1. Although the methodology broadly follows that agreed by the English National Parks, the creation of a spatially based adaptation plan (rather than a business continuity plan) does mean there are limited other examples to follow. This means the process and content are likely to be unique and there will need to be flexibility to allow it to develop as the process moves forward. It also likely to mean revisions of the adopted plan over time will be vital as understanding and experience evolve.

- 1.4 The detailed work to produce the revised draft plan will be led by Broads Authority officers with the help of the partner organisations. There will be a chance for others to be involved through the 'Broads Community' reference group. If any Broads Forum members particularly wish to contribute at this development/drafting stage, they are encouraged to contact the Head of Strategy and Projects as soon as possible. Similarly, any advice from Broads Forum members about effective ways to undertake the consultation, and especially offers on ways to foster that work through their own contacts, will also be welcome.
- 1.5 The draft timetable is to produce the revised draft plan for consultation in the Autumn with feedback used to revise the plan by the end of the year. The structure and timetable is due to be reviewed by the Adaptation Panel on 10 April and any suggested modifications will be reported verbally at the meeting. This will allow the partner bodies to agree the final document and send it to Defra early in 2015 to inform the process for the next stages of the National Adaptation Programme.

# 2 Update on Recent Communication Events

- 2.1 Since the last meeting of the Broads Forum, presentations about adaptation planning have been made to a Norfolk Association of Local Councils seminar in Scratby and to the Strategic Forum of the Norfolk Water Management Partnership. Both presentations were well received and the forward planning in partnership was welcomed. Other similar opportunities will be taken as well as involvement in some forthcoming workshops looking at how European funding and learning can be sought.
- 2.2 At the start of Climate Week, the Broads Authority hosted a Broads Community workshop for young adults at How Hill. This proved very positive with some pleasing feedback from the participants. One of the reports submitted by a participant has been incorporated in the latest Broads Authority Bulletin and another is attached as Appendix 2. Further reference to the needs for such forward planning and the steps taken so far was also incorporated in the very successful biodiversity and water forum held in Norwich by the Broads Authority on 4 March 2014.
- 2.3 As part of the workshop at How Hill a team of writers, directors and performers from UEA developed some drama to help explore how issues around the changing Broads can be disseminated. This was a novel way to develop involvement in considering climate impacts from differing perspectives. The conclusions were that such work should continue to develop and if any Broads Forum member feels this might create interest among their contacts then again get in touch. The lead writer from the UEA team is using external funding for his own project exploring environmental change in the Broads and in Mongolia, and there will be opportunities to hear the outcome of this work later in the year.

Background papers: None

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Broads Plan Objectives: CC2, CC3, CC4

Appendices: APPENDIX 1 – Draft methodology for the Broads Climate

Change Adaptation Plan revision

APPENDIX 2 – A report on the Climate Change workshop for Young Adults at How Hill 1& 2 March 2014 by Rachel Ayers.

Draft methodology for the Broads Climate Change Adaptation Plan revision Subject to review and agreement by the Adaptation Panel on 10<sup>th</sup> April 2014

Broads Climate Change Adaptation Approach – Revised Draft Content

#### The Broads - an overview

The Broads; The Broads Authority; Map of area

## The Adaptation Approach

- I. Why produce a climate change adaptation plan and how it fits with the Broads Plan
- 2. The process so far (preliminary plan, who was/is involved)
- 3. Core principles in its creation
- 4. **Methodology** (in outline with diagram)

Consultation Question: are you content with this methodology? If not, how can this be improved?

- 5. Content assumptions
- 6. Landscape types and special qualities

Consultation Question: does this adequately cover the special qualities of the area? If not, how can it be improved?

## 7. Vulnerability assessment

This will be repeated using a pool of primarily partnership / panel organisation officers but checked with people who have been involved in the overall work on this from different backgrounds (e.g. reference group members)

## 8. Summary of vulnerabilities

Consultation Question: does this seem realistic? The assessment has been done for different time epochs (relating to expected changes in the climate over time) but summarised to determine priorities. Are you content with this approach? If not, how can it be improved?

- 9. **Adaptive options** (systematic assessment of differing ways of tackling the issue)
- 10. Adaptation options overview (overview of the main matters that will need to be addressed) Consultation Question: Is this an appropriate summary? If not, how can it be improved?

# II. Assessment of possible main scenarios to deal with the important element of flooding

Assuming flooding still comes out as the most significant issue, this would outline the three possible scenarios for tackling the issues – giving examples of what that might look like.

It is likely that we will also need to relate to saline intrusion — do we think there will need to be something here outlining thinking about barriers? I could envisaged having something in the action plan that seeks to review the previous work on barriers, brought up to date in terms of changes to the locality and refreshed pricing. It may be relevant to have an overview section on this issue at this point as well.

Consultation question: Are these scenarios realistic? Which general direction for dealing with flooding would you favour and why?

Possibly a question over 'what do you think about a fresh review of the options around a barrier and associated changes to control saline intrusion?'

### 12. Actions to take the plan forward

This would suggest a range of actions needed to take forward the preferred priorities. Should this have some content within the consultation draft, or being developed <u>after</u> responses have been received?

I would envisage the action plan being a mix of policy development (review), research, consultation/dialogue, developing suggestions for small scale adaptation choices (Exemplars? Case studies? Real projects?)

### 13. Conclusions and recommendations

**Appendices** 

Appendix I – Methodology of the Adaptation Plan

Appendix 2 – Special qualities and climate change impacts

Appendix 3 – Summary of high priority vulnerabilities

### Report on the climate change workshop for young adults by Rachel Ayers

### Simple summary of what attracted you to attend

I was made aware of this event through my Environmental Studies teacher and was interested in what it may have to offer. The main reason that I decided to attend this event is I want to study Meteorology and Climate Science at university and thought that this event would give me the opportunity to develop my knowledge in the Climate Change area of this subject. Additionally I have done a project titled 'How does age affect society's perception of the impacts of Climate Change?' and used The Broads as a focus in a part of the questionnaire, so felt that by attending this event I might be able to expand on my knowledge.

A commentary on what went on – the various sessions and what they covered On the first day we started by briefly looking at the history of the Broads and how climate change may impact them. This was so we all started the event with some background knowledge. We then went on to do a workshop called 'Understanding Biodiversity: Winners and Losers', which involved us splitting into groups of three to look at different species of plants and animals that are found in the Broads, and assessing whether they would be classed as winners or losers from the impacts of climate change. I really enjoyed this workshop as it was an opportunity to look at the impacts of climate change on specific flora and fauna. In the afternoon we went and did some peat coring to look at the formation of peat and how it can show us what the environment was like thousands of years ago. This was a great activity as it was an opportunity to see a visual representation of how our climate has changed in the past. We then participated in another workshop called 'Understanding risk', which was about what the risks are going to be to our everyday lives with the effects of climate change. Our task was to take situations and see how we could reduce the risk e.g. of flooding. This was a great way of looking at climate change from a completely different angle as the leader of this workshop worked for Aviva therefore wasn't so focused on the environmental impacts so brought a different view point to our discussions.

On the second day we were joined by some drama students from the UEA and throughout the day they performed 'pop up' monologues based on climate change and the effects it would have on different groups in society. I thought that these were great opportunities to highlight certain types of people and look at how they would be impacted by climate change. The first workshop of the day was called 'Tourism investment- opportunity or resilience?', this involved a 'Dragon's Den' style activity in which we were given a holiday village and we had to modify it with money from a potential investment to help it survive the effects of climate change. This exercise was really good as it made us think of areas of society that we may not previously have thought about as being a major concern of climate change. The next workshop was called 'Exploring flood and how probable it is' where we looked at the chances of flooding

occurring and how it could impact society. We were given three different methods of managing the impact of flooding and asked to assess these in groups. This was interesting as living by the coast flooding is of major concern to my family and me so I found this workshop enjoyable on a personal level as understanding the risks the town I live in faces due to climate change. The final part of the day was a drama session led by the group from the UEA. In this we were presented two different drama pieces about different situation related to climate change and how different types of people may suffer from the impacts. We were then asked to try and alter the outcome of a situation by changing what was said and done. This made me realise how we can deal with the impacts of climate change in a variety of ways but it depends on what resources are available to how we can cope with the situation.

# Reflection on the things that were memorable (and why?)

I really enjoyed this event as it gave me the opportunity to look at the effects of climate change from a different angle. The most memorable part of this two day event was the drama event and the workshop 'Tourism investment-opportunity or resilience?' as these highlighted extremely important points that that many people in the general public may not have considered as problems of climate change.

Looking back, how has it helped you in terms of understanding climate change and what it may mean you would do

I think that this event has helped me look at climate change from a variety of different perspectives. I think that I have increased the knowledge that I have regarding climate change and its impacts on a variety of people in society and on the environment.

### Any other observations or conclusions

Overall I think that this event was extremely well planned and organised and I think that many people will benefit from these types of events in the future.