

# Planning Committee

05 January 2024

Agenda item number 12

## Local Plan – Preferred Options- Bitesize pieces

Report by Planning Policy Officer

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### Summary

This report introduces some new or amended policies that are proposed to form part of the Preferred Options version of the Local Plan. The policies are relating to flood risk, Brundall, Potter Heigham Bridge, dark skies (policy and topic paper), agricultural development and retrofit way forward.

### Recommendation

Members' comments on the policies are requested.

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## 1. Introduction

- 1.1. The first stage of the production of the Local Plan is the preparation of the Issues and Options. The production stages of the Issues and Options are now complete, and work has begun on the Preferred Options version, which will contain proposed policies. The Preferred Options are presented to members in "bitesize pieces".
- 1.2. This report introduces some amended or new policies for Members to consider for inclusion in the Preferred Options version of the Local Plan.
- 1.3. It is important to note that until such time as the Local Plan is adopted, our current policies are still in place and will be used to guide and determine planning applications.
- 1.4. Members' comments are requested on the policies and amendments. The policies considered in this report at this Planning Committee are relating to flood risk, Brundall, Potter Heigham Bridge, dark skies (policy and topic paper), agricultural development and retrofit way forward.

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Date of report: 28 November 2023

Appendix 1: [Flood risk section](#)

Appendix 2: [Brundall policies – BRU1 and BRU2](#)

Appendix 3: [Potter Heigham Bridge area](#)

Appendix 4: [Dark skies topic paper](#)

Appendix 5: [Light pollution policy](#)

Appendix 6: [Agricultural development](#)

Appendix 7: [Energy efficiency of the existing housing stock](#)



**Local Plan for the Broads - Review  
Preferred Options bitesize pieces  
January 2024**

**Flood risk section of the Local Plan**

1 **Information for Members**

2 Members will be aware that as part of proposals to amend the Planning System, the  
3 Government have proposed to remove Supplementary Planning Documents (SPDs) and  
4 replace them with Supplementary Plans. It seems that the process for producing a  
5 Supplementary Plan is more akin to that of a Local plan.

6 Given that we are reviewing our Local Plan, it seems prudent to see what parts of the Flood  
7 Risk SPD can become part of the Local Plan.

8 The following section now includes parts of the SPD that we think are important to be kept.  
9 The supporting text to DM5 is therefore much longer than it was and there are some  
10 appendices as well.

This is a proposed draft section/policy for the Preferred Options Local Plan. Member's comments and thoughts are requested. This policy is already in the local plan, but some amendments are proposed.

Amendments to improve the policy are shown as follows: ~~text to be removed~~ and added text.

There is an assessment against the UN Sustainable Development Goals at the end of the policy.

The proposed Sustainability Appraisal of the policy is included at the end of the document. This would not be included in the Preferred Options Local Plan itself; this table would be part of the Preferred Options Sustainability Appraisal, but is included here to show how the policy and options are rated.

The currently adopted policy remains in place – these are proposed amendments and this section will form part of the Preferred Options version of the Local Plan.

11 **Policy POSP2: Strategic flood risk policy**

12 1. All new development:

13 a) Will be located to minimise flood risk, mitigating any residual risk through design and  
14 management measures, and ensuring that flood risk to other areas is not materially  
15 increased; and

- 16 b) Will incorporate appropriate surface water drainage mitigation measures, and will  
 17 implement sustainable drainage (SuDS) principles, to minimise its own risk of flooding  
 18 and to not materially increase the flood risk to other areas.
- 19 2. Particular care will be required in relation to habitats designated as being of  
 20 international, national, regional and local importance in the area and beyond which are  
 21 water sensitive.
- 22 3. Development proposals which would have an adverse impact on flood risk management  
 23 will be refused.

24 **Reasoned Justification**

25 Flooding can cause damage to property and infrastructure. Tidal flooding can be particularly  
 26 damaging. The threat of flooding can also cause fear and distress to people and in some  
 27 cases, flooding can lead to injury<sup>1</sup> and even loss of life. Risks relate not just to property but  
 28 also to essential infrastructure and utilities required to support development. Flooding can  
 29 also precipitate pollution, which could have a significant and detrimental impact on the  
 30 nature conservation interest of the Broads, and the duty of the Authority to protect this  
 31 resource is an important consideration. Inappropriate flooding can also harm the important  
 32 habitats and species who rely on/live in the Broads. This can have long term consequences  
 33 for site maintenance and achieving conservation objectives. On the other hand, flooding is  
 34 also a natural process within a floodplain and in some circumstances it can be beneficial to  
 35 wildlife.

36 Approximately 82.5% of the Broads Authority Executive Area is covered by flood zone 3 (3,  
 37 3a & 3b). This equates to 25,472 hectares. The Broads Authority boundary is tightly drawn  
 38 around the edge of the floodplain. The extent and nature of flood risk, with significant areas  
 39 of ‘functional floodplain’, mean that flood risk is a major constraint on development in the  
 40 Broads.

41 The flood risk in the Broads is mainly from both fluvial and tidal sources, and the whole  
 42 character and development in the Broads over many hundreds of years has been closely  
 43 associated with the water environment and flood risk. Much of the area is defended by  
 44 flood defence embankments, maintained by the Environment Agency. The flood defences,  
 45 where they exist, only reduce the risk of flooding and will never eliminate it, and the risk of  
 46 overtopping or a breach of defences remains.

47 **Reasonable alternative options**

- 48 a) No policy

49 **Sustainability appraisal summary**

50 The options of no policy and having a policy have been assessed in the SA. The following is a  
 51 summary.

A: Having a policy	4 positives. 0 negatives. 0 ?
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<sup>1</sup> There is a residual risk from all water, especially if it is moving. A flood, at certain velocity and above 4-6cm in depth, could sweep people and things before it.

	Overall, positive.
B: No policy	0 positives. 0 negatives. 4 ?

52 **How has the existing policy been used since adoption in May 2019?**

53 According to recent Annual Monitoring Reports, the policy has been used and schemes have  
54 been permitted in accordance with the policy.

55 **Why has the alternative option been discounted?**

56 Flood risk is such an issue in the Broads. Having a policy is therefore favoured.

57 **UN Sustainable Development Goals check**

58 This policy meets these [UN SD Goals](#):

**3** GOOD HEALTH  
AND WELL-BEING



**11** SUSTAINABLE CITIES  
AND COMMUNITIES



**13** CLIMATE  
ACTION



59 **Policy DM5: Development and flood risk**

- 60 1. Development within the Environment Agency's flood risk zones<sup>2</sup> will be acceptable only  
61 when:
- 62 a) It is compatible with national policy and when the sequential test and the exception test,  
63 where applicable, have been satisfied;
  - 64 b) A site-specific Flood Risk Assessment, where required, demonstrates an acceptable flood  
65 risk and/or suitable flood protection mitigation measures are incorporated into the  
66 proposals, where necessary, which can be satisfactorily implemented;
  - 67 c) A flood response plan, where required, has been produced that is appropriate and  
68 deliverable; and
  - 69 d) It would not affect the ability for future flood alleviation projects to be undertaken;
  - 70 e) It has been informed by an assessment of and respond to existing and proposed ground  
71 conditions, groundwater; and
  - 72 f) They demonstrate how the design of buildings and the surrounding environment  
73 (including pavements, highways, parking areas, driveways, gardens, public green spaces,  
74 planting and drainage) has been planned to be resilient to the ongoing and predicted  
75 impacts of climate change, including the design of road surfaces and drainage systems to  
76 cope with more frequent episodes of extreme heat and rain.

77 **Site-Specific Flood Risk Assessment**

- 78 2. The Site-Specific Flood Risk Assessment will need to meet the requirements of the NPPG  
79 and include, demonstrate or assess:
- 80 a) That the development is safe for its lifetime, taking into account the vulnerability of its  
81 users and climate change;
  - 82 b) Whether the proposed development will make a significant contribution to achieving the  
83 objectives of the Local Plan;
  - 84 c) Whether the development involves the redevelopment of previously developed land or  
85 buildings and would result in environmental improvements over the current condition of  
86 the site;
  - 87 d) Whether appropriate measures to ensure resilience to potential flooding have been  
88 incorporated into the development;
  - 89 e) Whether appropriate, measures to reduce the risk of flooding (on and offsite), including  
90 sustainable drainage systems, have been incorporated;
  - 91 f) Where the proposal involves the replacement of an existing building, whether the  
92 replacement building is located and/or designed without increasing flood risk and,  
93 where possible, to reduce the risks and effects of flooding;
  - 94 g) Whether ~~an~~ acceptable flood risk and/or suitable flood protection mitigation measures  
95 are incorporated into the proposals, where necessary, which can be satisfactorily  
96 implemented;
  - 97 h) Whether the risk of flooding is not increased elsewhere and, wherever possible, is  
98 reduced;
  - 99 i) That the integrity of existing coastal and river defences are not undermined;
  - 100 j) That the development does not reduce the potential of land used for current or future  
101 flood management;

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<sup>2</sup> Proposals need to use the latest Flood Risk maps approved by the Environment Agency or LPA, including predictions for climate change and use the latest surface water flood risk map approved by the Environment Agency or LPA.

- 102 k) Compatibility with the appropriate Catchment Flood Management Plan or Shoreline  
103 Management Plan;
- 104 l) Use of development to reduce the risk of flooding through location, layout and design  
105 and incorporate sustainable drainage systems to minimise surface water run-off and  
106 avoid pollution (see DM6);
- 107 m) That sites at little or no risk of flooding are developed in preference to areas at higher  
108 risk;
- 109 n) There is safe access and egress from the site;
- 110 o) There are management and maintenance plans for flood protection/mitigation  
111 measures, including arrangements for adoption by any public authority or statutory  
112 undertaker and any other arrangements to secure the operation of the scheme  
113 throughout its lifetime;
- 114 p) That the development would not negatively impact on water quality of surface water  
115 and ground water; and
- 116 q) There is an adequate, deliverable and appropriate Flood Response Plan (FRP) – see  
117 template and guidance at Appendix 1.
- 118 3. For minor development<sup>3</sup>, a Local Flood Risk Tick Sheet has been produced – see  
119 Appendix 2 to assist applicants in producing a flood risk assessment for minor  
120 developments.

#### 121 Relocation to a lower probability of flooding

- 122 4. The relocation of existing development to an undeveloped site with a lower probability  
123 of flooding will be permitted where:
- 124 a) The vacated site would be reinstated as naturally functioning flood plain;
- 125 b) The benefits of flood risk reduction outweigh the benefits of leaving the proposed new  
126 site undeveloped; and
- 127 c) The development of the proposed new site is appropriate when considered against the  
128 other policies of the Local Plan.

#### 129 Replacement of an existing residential property in flood zone 3a

- 130 5. In the case of the replacement of an existing residential property in flood zone 3a, the  
131 replacement dwelling must be on a like-for-like basis, with no increase in the number of  
132 bedrooms, on the same sized footprint<sup>4</sup> and wherever possible being relocated in a less  
133 vulnerable part of the site.

#### 134 Sequential test requirements

- 135 6. A site is considered to be reasonably available if all of the following apply. It should be  
136 noted that there is some guidance in the NPPG<sup>5</sup> and the following criteria add to what  
137 the NPPG says.

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<sup>3</sup> Please note that this is minor development in relation to flood risk rather than other definitions of minor development:  
<http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/what-is-meant-by-minor-development-in-relation-to-flood-risk/> Flood risk and coastal change - What is meant by "minor development" in relation to flood risk? ([www.gov.uk](http://www.gov.uk))

<sup>4</sup> The "footprint" is the aggregate ground floor area of the existing on site buildings, including outbuildings which affect the functionality of the floodplain but excluding temporary buildings, open spaces with direct external access between wings of a building, and areas of hard standing.

<sup>5</sup> [Flood risk and coastal change \(www.gov.uk\)](http://www.gov.uk)

- 138 a) The site is available to be developed (including considering site ownership or whether  
139 the owners of sites have any intention of them being developed); and  
140 b) The site is within the agreed area of search; and  
141 c) The site is of comparable size in that it can accommodate the requirements of the  
142 proposed development; and  
143 d) The site is not safeguarded in the relevant Local Plan (including Minerals and Waste) or  
144 Neighbourhood Plan for another use; and  
145 e) It does not conflict with any other policies in the Local Plan.

146 7. A site is not considered to be reasonably available if they fail to meet any of the above  
147 requirements or already have planning permission for a development that is likely to be  
148 implemented.

149 8. The **area of search** should be guided by the requirement for the proposed development  
150 in a particular area and should be discussed with the Broads Authority at the pre-  
151 application stage.

152 9. The Authority considers the following areas of search to be reasonable. It should be  
153 noted that there is some guidance in the NPPG<sup>6</sup> and the following criteria add to what  
154 the NPPG says.

- 155 a) The rest of the particular district within the Broads Authority Executive Area  
156 b) Within the entire Parish (including the part that may be out of the Broads)  
157 c) Other settlements/parishes that are nearby (that may be out of the district)  
158 d) Or a wider/another area as appropriate and subject to agreement with the Broads  
159 Authority

160 **Exceptions test requirements**

161 10. To prove that a development will provide wider sustainability benefits to the community  
162 that outweigh the flood risk, the Authority will use the most **up to date Local Plan**  
163 **Sustainability Appraisal Objectives** as well as guidance in the NPPG<sup>7</sup>. The current  
164 objectives are set out at Appendix **x**.

165 11. The following will also be applied as part of the Exception Test:

- 166 a) The development must not compromise future flood alleviation or flood defence  
167 schemes;  
168 b) The Flood Risk Assessment must demonstrate how resilience to flooding has been  
169 incorporated through a design which does not detract from the character **and**  
170 **appearance** of the locality;

<sup>6</sup> [Flood risk and coastal change - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/flood-risk-and-coastal-change-the-sequential-approach-to-the-location-of-development) Flood risk and coastal change - The sequential approach to the location of development (www.gov.uk)

<sup>7</sup> [Flood risk and coastal change - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/flood-risk-and-coastal-change-how-can-it-be-demonstrated-that-wider-sustainability-benefits-to-the-community-outweigh-flood-risk) Flood risk and coastal change - How can it be demonstrated that wider sustainability benefits to the community outweigh flood risk? (www.gov.uk)



- 171 c) The site-specific Flood Risk Assessment must demonstrate how the development will be  
172 compatible with the nature of flooding in the Broads, considering climate change and  
173 sea level rise over the planned life of the development (see section 6.5 on Climate Smart  
174 Thinking); and  
175 d) In the case of the replacement of a residential property, a residential development must  
176 be on a like-for-like basis, with no increase in the number of bedrooms, on the same  
177 sized footprint<sup>8</sup>, potentially being relocated in a less vulnerable part of the site.

## 178 Flood Defences

179 12. Any required additional or enhanced flood defences should not conflict with the  
180 purposes and special qualities of the Broads.

## 181 **Reasoned Justification**

182 National Planning Practice Guidance (NPPG) states that ‘flood risk’ is a combination of the  
183 probability and the potential consequences of flooding from all sources – including from  
184 rivers and the sea, directly from rainfall on the ground surface and rising groundwater,  
185 overwhelmed sewers and drainage systems, and from reservoirs, canals and lakes and other  
186 artificial sources.

187 Flood alleviation and preparing for the impact of climate change are key issues in the  
188 Broads, and a number of approaches could address this. It will also be essential to ensure  
189 that measures to minimise the risk of flooding from all sources of flood risk to new  
190 development do not themselves lead to development which, by virtue of its scale, layout or  
191 design, is visually damaging to its surroundings. Therefore, even though the principle of  
192 development may be acceptable, acceptability in terms of design, landscape character, and  
193 impact on the environment must also be addressed.

194 All developments should be located in areas identified as being at the lowest risk of  
195 flooding.

196 Given the importance and relevance of flood risk issues to the Broads applicants should, in  
197 developing proposals, have regard to national flood risk guidance and policy, as set out in  
198 the NPPF and NPPG.

199 The Government also states in the NPPG that ‘*Local authorities and developers should seek*  
200 *opportunities to **reduce the overall level of flood risk in the area and beyond***’. The policy  
201 seeks opportunities to reduce the overall level of flood risk.

## 202 Flood zones

203 Flood Zones refer to the probability of river and sea flooding, ignoring the presence of  
204 defences. They are shown on the Environment Agency’s Flood Map for Planning (Rivers and

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<sup>8</sup> The “footprint” is the aggregate ground floor area of the existing on-site buildings, including outbuildings which affect the functionality of the floodplain but excluding temporary buildings, open spaces with direct external access between wings of a building, and areas of hardstanding.

205 Sea)<sup>9</sup> and defined in the NPPG. They are also shown in a Strategic Flood Risk Assessment  
206 (see later text).

### 207 **Flood Risk Advice**

208 The Authority takes advice from the Environment Agency (EA) and Lead Local Flood  
209 Authorities (LLFA) on flood related issues concerning development. The EA is responsible for  
210 flood defence and has permissive powers to carry out work to construct and improve flood  
211 defences.

### 212 **Causes of Flooding in the Broads**

213 The causes of flooding in the Broads are complex and flooding will continue to be a  
214 significant risk in much of the area into the foreseeable future. Developers should be aware  
215 of this situation. The risk of flooding must continue to be a material consideration in dealing  
216 with Broads' planning applications and may be a reason for refusal of planning permission in  
217 some cases. In the uncertainty about the nature and extent of flood risk in the Broads, it is  
218 open to developers to commission their own risk assessment of the potential for flooding at  
219 a particular site. Risks relate not just to property but also to essential infrastructure and  
220 utilities required to support development, and to the emergency services' ability to respond  
221 to an event. Inappropriate flooding can also harm the important habitats and species for  
222 which the Broads are important, which can have long term consequences for site  
223 maintenance and the achievement of conservation objectives.

### 224 **Site-Specific Flood Risk Assessments**

225 The EA says that 'a Flood Risk Assessment (FRA) is required for all development:

- 226 • within flood zones 2, 3 or 3b
- 227 • within flood zone 1 with a site area of 1 hectare or more
- 228 • within areas with critical drainage problems
- 229 • within flood zone 1 where your LPA's SFRA shows it will be at risk of flooding from  
230 ivers or the sea in future
- 231 • that increases the vulnerability classification and is in flood zone 1 where  
232 your LPA's SFRA shows it is at risk from other sources of flooding'.

233 ~~Development proposals of one hectare or greater, and all proposals for new development in~~  
234 ~~Flood Zones 2 and 3, will be accompanied by a site-specific Flood Risk Assessment (FRA).~~ The  
235 FRA should demonstrate how flood risk from all sources of flooding to the development  
236 itself, and flood risk to others, would be managed. It will also be expected to take climate  
237 change into account, identify flood reduction measures that will be incorporated into the  
238 development, including the use of Sustainable Drainage Systems, and provide an  
239 assessment of any residual risk. The FRA should be proportionate to the level of risk and the  
240 scale, nature and location of the development. The checklist set out in the NPPG<sup>10</sup> should be  
241 used to produce an FRA, but the FRA should also address the additional considerations set  
242 out in the policy.

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<sup>9</sup> See the flood maps here: <https://flood-map-for-planning.service.gov.uk/> Flood map for planning (flood-map-for-planning.service.gov.uk)

<sup>10</sup> ~~NPPG: [planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/site-specific-flood-risk-assessment-checklist/](https://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/site-specific-flood-risk-assessment-checklist/)~~ Flood risk and coastal change - Site-specific flood risk assessment: Checklist ([www.gov.uk](https://www.gov.uk))

243 To help the preparation of FRAs for householder development and other minor extensions  
244 in Flood Zones 2 and 3 the Broads Authority and Environment Agency have produced a  
245 Ticksheet template [See Appendix x<sup>11</sup>. This will assist applicants in producing a flood risk](#)  
246 [assessment for minor developments. It is in conformity with the NPPG FRA guidance and is](#)  
247 [designed to be user friendly for the applicant yet provide the information the BA needs to](#)  
248 [determine applications.](#)

249 [If you are carrying out an FRA for a development, you need to follow the Environment](#)  
250 [Agency’s standing advice<sup>12</sup> as follows:](#)

251 [Follow standing advice for vulnerable developments for developments \(including change of](#)  
252 [use\) in flood zone 2 and have a vulnerability classification of:](#)

- 253 • [‘more vulnerable’ \(except for landfills, waste facility sites, caravan or camping sites\)](#)
- 254 • [‘less vulnerable’ \(except for waste treatment sites, mineral processing sites, water](#)  
255 [treatment plants and sewage treatment plants\)](#)
- 256 • [‘water compatible’](#)

257 [Use the advice for minor extensions to complete an assessment for a minor extension in](#)  
258 [flood zone 2 or 3. A minor extension is a household or non-domestic extension with a floor](#)  
259 [space of no more than 250 square metres.](#)

260 [If your development is not covered by the standing advice in this guide:](#)

- 261 • [read flood risk assessment for planning applications and the flood risk assessment](#)  
262 [check-list](#)
- 263 • [consider asking the Environment Agency for pre-application advice on flood risk.](#)

### 264 **[Safe access and egress](#)**

265 Part (n) requires the FRA to demonstrate safe access and egress from the site. Where it has  
266 been demonstrated that this would not be possible due to unsafe flood depths on or  
267 surrounding the site, the safety of occupants will need to be managed through a Flood  
268 Response Plan (FRP) (see Dry Island section below). The FRP should demonstrate that  
269 occupants will be kept safe and not exposed to flood hazards. This may be through  
270 evacuation in advance of a flood and/or remaining in situ within an appropriate refuge. The  
271 Authority has produced a Flood Response Plan template<sup>13</sup> for applicants. The acceptability  
272 of the plan and its ability to keep occupants safe will be assessed as part of the planning  
273 application.

### 274 **[Replacement Dwellings](#)**

275 Replacement dwellings in flood zone 3a are required to be on a like-for-like basis, as any  
276 increase in size is likely to expand into functional floodplain (flood zone 3b), thus putting

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<sup>11</sup> Broads Authority’s Flood Risk Tick Sheet: [www.broads-authority.gov.uk/\\_data/assets/word\\_doc/0006/917862/Appendix-F-Flood-Risk-Assessment-Tick-Sheet.doc](http://www.broads-authority.gov.uk/_data/assets/word_doc/0006/917862/Appendix-F-Flood-Risk-Assessment-Tick-Sheet.doc) [Appendix F - Flood Risk Assessment Tick Sheet \(MS Word | broads-authority.gov.uk\)](#)

<sup>12</sup> <https://www.gov.uk/guidance/flood-risk-assessment-standing-advice> [Preparing a flood risk assessment: standing advice - GOV.UK \(www.gov.uk\)](#)

<sup>13</sup> Flood Response Plan Template: [www.broads-authority.gov.uk/\\_data/assets/pdf\\_file/0007/917863/Appendix-D-Flood-Response-Plan-Guidance-and-Structure.pdf](http://www.broads-authority.gov.uk/_data/assets/pdf_file/0007/917863/Appendix-D-Flood-Response-Plan-Guidance-and-Structure.pdf) [Appendix D - Flood Risk Response Plan Guidance and Structure \(MS Word | broads-authority.gov.uk\)](#)

277 more property and possibly more people at risk of flooding. The change to the functional  
278 floodplain could increase flood risk elsewhere.

279 **Sequential and Exceptions Tests – general**

280 In accordance with national policy, development in Environment Agency Flood Zones 2 and  
281 3 will only be permitted when the Sequential Test and the Exception Test, where applicable,  
282 have been satisfied. The Sequential Test will be carried out by the Authority, drawing upon  
283 information submitted by the applicant.

284 **Sequential test**

285 Although the sequential test must be applied, due to the limited availability of sites in Flood  
286 Zone 1, the main objective, as applied to the Broads, is likely to be to reduce flood risk to  
287 new development through the application of the sequential approach and to maximise  
288 opportunities to build in resilience both at the site and buildings level through design. The  
289 improvement of safety and management of risk, including response to risk, must be  
290 addressed at the design stage.

291 The following sections elaborate on how various elements of the Sequential Test should be  
292 addressed. In applying the sequential test, the Authority will use the following:

293 A site is considered to be **reasonably available** if all of the following apply:

- 294 a) The site is available to be developed (including considering site ownership or whether  
295 the owners of sites have any intention of them being developed); and
- 296 b) The site is within the agreed area of search; and
- 297 c) The site is of comparable size in that it can accommodate the requirements of the  
298 proposed development; and
- 299 d) The site is not safeguarded in the relevant Local Plan (including Minerals and Waste) or  
300 Neighbourhood Plan for another use; and
- 301 e) It does not conflict with any other policies in the Local Plan.

302 A site is not considered to be reasonably available if they fail to meet any of the above  
303 requirements or already have planning permission for a development that is likely to be  
304 implemented.

305 The **area of search** should be guided by the requirement for the proposed development in a  
306 particular area and should be discussed with the Broads Authority at the pre-application  
307 stage.

308 The Authority considers the following areas of search to be reasonable:

- 309 a) The rest of the particular district within the Broads Authority Executive Area
- 310 b) Within the entire Parish (including the part that may be out of the Broads)
- 311 c) Other settlements/parishes that are nearby (that may be out of the district)

312 d) Or a wider/another area as appropriate and subject to agreement with the Broads  
313 Authority

314 It is acknowledged that the area of search could be outside of the Broads Authority  
315 Executive Area and would require discussions with other Local Planning Authorities (and  
316 proposals would therefore need to comply with relevant planning policies of the relevant  
317 Local Planning Authorities). However, sites that are at less risk of flooding could be in the  
318 part of the settlement that is not in the Broads.

319 The Authority acknowledges that some schemes are site specific, such as the regeneration  
320 of a particular brownfield site or extension of a building, so it is impractical to change the  
321 location.

322 In all cases the developer must justify with evidence to the Broads Authority what area of  
323 search has been used when making the application.

324 If there are found to be other reasonably available sites at a lower risk of flooding, then the  
325 development has **failed the Sequential Test** and this could lead to refusal of planning  
326 permission. Failing to pass the Sequential Test is sufficient grounds for refusal, as it would  
327 make the proposal contrary to the NPPF and Local Plan policies.

328 If, however there are no other reasonably available sites, then the development has **passed**  
329 **the Sequential Test**. The Exception Test may also need to be undertaken at this point (if  
330 required).

### 331 Exceptions Test

332 Where an exception test is necessary, the applicant's FRA must include sufficient  
333 information to enable this assessment to be undertaken. For the purposes of this policy,  
334 'footprint' will be defined as the aggregate ground floor area of the existing on site  
335 buildings, including outbuildings that affect the functionality of the floodplain, but excluding  
336 temporary buildings, open spaces with direct external access between wings of a building,  
337 and areas of hard standing.

338 The NPPF at paragraph 164 says that for the Exception Test to be passed 'it should be  
339 demonstrated that: a) the development would provide wider sustainability benefits to the  
340 community that outweigh the flood risk'. To assess this, the Authority will use the most **up**  
341 **to date Local Plan Sustainability Appraisal Objectives**. The current objectives are set out at  
342 Appendix **x**.

343 The NPPF at paragraph 164 goes on to say that for the Exception Test to be passed 'b) the  
344 development will be safe for its lifetime taking account of the vulnerability of its users,

345 without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

346 The NPPG says:

- 347 • Residential development can be assumed to have a lifetime of at least 100 years, unless
- 348 there is specific justification for considering a different period.
- 349 • The lifetime of a non-residential development depends on the characteristics of that
- 350 development but a period of at least 75 years is likely to form a starting point for
- 351 assessment.

352 In addition to these conditions, the following will also be applied as part of the Exception

353 Test:

- 354 a) The development must not compromise future flood alleviation or flood defence
- 355 schemes;
- 356 b) The Flood Risk Assessment must demonstrate how resilience to flooding has been
- 357 incorporated through a design which does not detract from the character of the locality;
- 358 c) The site-specific Flood Risk Assessment must demonstrate how the development will be
- 359 compatible with the nature of flooding in the Broads, considering climate change and
- 360 sea level rise over the planned life of the development (see section 6.5 on Climate Smart
- 361 Thinking); and,
- 362 d) in the case of the replacement of a residential property, a residential development must
- 363 be on a like-for-like basis, with no increase in the number of bedrooms, on the same
- 364 sized footprint<sup>14</sup>, potentially being relocated in a less vulnerable part of the site.

### 365 **Climate change allowances**

366 Climate change allowances can be found here: ([https://www.gov.uk/guidance/flood-risk-](https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances)

367 assessments-climate-change-allowances). These will result in increases in flood level of

368 between 1.2m and 1.6m compared to present day flood levels.

### 369 **Principles for development in flood zone 3**

370 The approach in any particular case will depend on the nature of the land and the specific

371 functionality of the floodplain, considering the presence of built structures and site

372 infrastructure. The following principles will apply to development in flood zone 3.

373 In the case of a ‘greenfield’ site which has not been the subject of any previous

374 development, the site could function as an unconstrained, open floodplain, subject to the

375 presence of any ‘defences’. It may provide areas for water storage in times of flood and may

376 have other value associated with this, for example as wet woodland.

377 Sites categorised as “brownfield sites which have been previously developed” will often

378 cover sites larger than a single plot and may have been in use for a variety of uses, often

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<sup>14</sup> The “footprint” is the aggregate ground floor area of the existing on-site buildings, including outbuildings which affect the functionality of the floodplain but excluding temporary buildings, open spaces with direct external access between wings of a building, and areas of hardstanding.

379 employment based. These will often be characterised by areas of built development,  
380 including buildings and hardstandings, with undeveloped areas which might include  
381 vegetated margins or open areas. Parts of the site may function as functional floodplain and  
382 parts will not. The functionality of any part will depend on the way in which the water would  
383 behave in times of flood. If flood waters which inundate the site in a 1:20 (5%) annual  
384 probability event can pass under or through a building or sit on land this will be defined as  
385 functional floodplain. Where an existing building or structure acts as a barrier to flood water  
386 then its functionality is compromised and it will not be classified as Flood Zone 3b and can  
387 be described as Flood Zone 3a.

388 When considering development proposals for brownfield sites which have been previously  
389 developed, the objective is to locate development in a sequentially appropriate manner on  
390 the site and to reduce risk through design. An initial site appraisal should identify the  
391 different flood risk zones on the site (where applicable) and differentiate between areas of  
392 Flood Zone 3a and Flood Zone 3b, as described above.

393 The objective when looking at development proposals on previously developed brownfield  
394 sites is to seek opportunities to restore the functionality of the floodplain. This must,  
395 however, be balanced against the need to maintain the land uses and development which  
396 support the economic and social viability of the Broads communities. So, the over-riding  
397 principle in respect of development is that it should not increase risk above the existing  
398 level.

399 Development should be located in a sequentially appropriate manner (which considers  
400 areas of lower flood risk first as discussed in this policy and supporting text) across any flood  
401 risk zones, in accordance with the NPPG. Where there is existing development within Flood  
402 Zone 3a or 3b, opportunities to improve flood risk should follow the following hierarchy:

- 403 i) relocate development to Flood Zone 1 (subject to other sources of flooding as discussed  
404 previously)
- 405 ii) relocate development to a lower flood risk zone
- 406 iii) ensure there is no net increase in the development area within Flood Zone 3a.

407 Land uses or development which is of a higher level of vulnerability, as defined in the NPPG,  
408 than existing or previous uses on the site will only be permitted if it complies with table 3<sup>15</sup>  
409 of the NPPG and all the other policy requirements (such as safety and not increasing flood  
410 risk elsewhere).

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<sup>15</sup> Table 3 is copied previously in this SPD or can be found here:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/575184/Table\\_3\\_-\\_Flood\\_risk\\_vulnerability\\_and\\_flood\\_zone\\_compatibility\\_.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/575184/Table_3_-_Flood_risk_vulnerability_and_flood_zone_compatibility_.pdf) Table 3 - Flood risk vulnerability and flood zone compatibility (pdf | publishing.service.gov.uk)

411 Sites categorised as “brownfield sites which are currently developed” will often cover  
412 individual sites where replacement development is proposed. These will often be smaller  
413 plots and are owner occupied with limited (if any) opportunity for relocating development  
414 to an area of lesser flood risk, either on-site or elsewhere.

415 When considering proposals for replacement development, an initial appraisal should  
416 identify whether the development is in Flood Zone 3a or Flood Zone 3b.

417 If the site is in Flood Zone 3b, new water compatible development and essential  
418 infrastructure that has been subject to the Exception Test (as defined in the NPPG) will be  
419 permitted or a like-for-like replacement of an existing use. As detailed above, existing built  
420 development on site may prevent parts of the site from functioning as Flood Zone 3b,  
421 meaning it will be considered as Flood Zone 3a. In those cases, it may be acceptable to  
422 locate development appropriate to Flood Zone 3a within the extent of the previously  
423 developed footprint. This will be subject to the usual considerations in terms of safety of the  
424 development.

425 If the site is in Flood Zone 3a, new development for water compatible uses, less vulnerable  
426 uses or more vulnerable subject to the Exception Test (as defined in the NPPG) will be  
427 permitted or a like-for-like replacement of an existing use. In all cases the safety of the  
428 proposed development would need to be considered.

429 The objective when looking at development proposals on brownfield sites which are  
430 currently developed is to ensure that development does not increase flood risk to the site or  
431 the building or elsewhere above the existing level. Opportunities to reduce flood risk should  
432 also be considered.

433 The Authority may permit the relocation of existing development out of Flood Zone 3b to an  
434 undeveloped site with a lower probability of flooding where the vacated site is reinstated as  
435 naturally functioning floodplain, and where the benefits to flood risk outweigh the benefits  
436 of leaving the new site undeveloped. Such proposals will be considered against adopted  
437 planning policies.

438 **Existing footprint of development in Flood Zone 3b and Permitted Development (PD)**  
439 Firstly, the following only applies to development within Flood Risk Zone 3b where ‘more  
440 vulnerable’ development is not considered appropriate, according to the NPPG.

441 For a replacement dwelling in Flood Zone 3b the existing footprint is currently defined in the  
442 footnote to policy DM5<sup>16</sup>. This does not make any reference to permitted development

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<sup>16</sup> Footnote 22 says the “footprint” is the aggregate ground floor area of the existing on site buildings, including outbuildings which affect the functionality of the floodplain but excluding temporary buildings, open spaces with direct external access between wings of a building, and areas of hard standing.



443 rights, only to existing buildings. The 'like for like' requirement of the policy is still valid as  
444 that is the starting point for the application – that the base position for any replacement  
445 dwelling in flood zone 3b is like for like. The Authority and Environment Agency consider  
446 that a scheme for a replacement dwelling may only include what is permitted through PD  
447 rights Class A enlargement, improvement or other alteration of a dwelling house<sup>17</sup> as a  
448 pragmatic approach. The inclusion of these PD rights in the calculation of footprint is  
449 considered a reasonable approach to take, as it would avoid the need for applicants to first  
450 construct a rear extension only to include it in the calculations for a replacement dwelling. It  
451 is important to note however that there may be other considerations that might be relevant  
452 to decision making other than flood risk; for example, landscape character impacts.  
453 If an application for a replacement dwelling is approved, the PD rights for  
454 extensions/outbuildings will be removed by the Authority in order to restrict further  
455 development within the functional floodplain. Householder PD rights would also be  
456 removed when permitting householder extensions within Flood Zone 3B, for the same  
457 reason; to restrict the further development within the functional floodplain.

#### 458 **Flood response plan template.**

459 A site-specific Flood Response Plan will always be required for development in flood zone 3.  
460 The client/developer responsibilities for health and safety and facilities management may  
461 also require a site-specific flood response plan. These are important considerations on  
462 commercial sites and are potential requirements for compliance with the Construction  
463 (Design and Management) Regulations 2015<sup>18</sup>.

464 They can form one means of managing residual risk where a development is found to be  
465 acceptable in flood risk terms and is a valuable document for owners and occupiers of all  
466 property at risk of flooding to have in place. The Authority has produced guidance and a  
467 suggested structure for these plans. The guidance and structure can be found at Appendix  
468 XXXX.

#### 469 **SUDS**

470 Sustainable Drainage Systems (SuDS) are an alternative to traditional drainage systems that  
471 **attempt** aim to reduce the total amount, flow and rate of surface water run-off. There is a  
472 range of possible SuDS techniques that can be used, although not all techniques will be  
473 appropriate for individual development sites. Surface water run-off proposals should  
474 address the requirements of the Flood and Water Management Act 2010. See policy DM6:  
475 Surface water run-off.

#### 476 **Dry Islands**

477 Dry Islands are areas of a lower flood risk surrounded by areas of higher flood risk, such as  
478 flood zone 1 surrounded by flood zone 3. While development may be suitable in flood risk

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<sup>17</sup> SCHEDULE 2 Permitted development rights, PART 1 Development within the curtilage of a dwellinghouse, Class A – enlargement, improvement or other alteration of a dwellinghouse <http://www.legislation.gov.uk/ukxi/2015/596/made>

<sup>18</sup> Construction (Design and Management) Regulations 2015 <http://www.hse.gov.uk/pUbns/priced/l153.pdf>

479 terms in the lower flood risk zone, in times of flood the area could effectively become an  
480 island. The issue here is about safe access and egress at times of flood. In the Broads, dry  
481 islands tend to occur in more isolated areas that may not experience development.  
482 However, there may be requirements for a Flood Response Plan to be produced for  
483 development in dry islands. When looking at the flood risk of a proposal, it will be important  
484 to assess the wider area as well as on the site.

#### 485 **Other consents that may also be required**

486 Applicants should be aware that in accordance with the Environmental Permitting  
487 Regulations 2010 there is a need to obtain an Environmental Permit<sup>19</sup> from the Environment  
488 Agency for flood risk activities for work or structures in, under, over or within 16m from a  
489 main river and from any flood defence structure or culvert. The works may fall under one or  
490 more of the following categories: Exemption, Exclusion, Standard Rules Permit, Bespoke  
491 permit. Anyone carrying out these activities without a permit where one is required is  
492 breaking the law.

493 Section 23 of The Land Drainage Act 1991 requires applicants who wish to affect the flow of  
494 an ordinary watercourse, for instance to culvert, dam, weir or install a headwall into a  
495 watercourse, to obtain consent from the drainage board concerned.

#### 496 **Reservoir Flooding**

497 The Authority will also consider issues relating to reservoir flooding, as per Government  
498 guidance: [Reservoir flood maps: when and how to use them - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/reservoir-flood-maps-when-and-how-to-use-them)

#### 499 **Status of the ~~2017~~ 2020 Flood Risk Supplementary Planning Document on adoption of the** 500 **Local Plan**

501 The Broads Authority has a Flood Risk Supplementary Planning Document (SPD)<sup>20</sup>. ~~This is~~  
502 ~~based on Development Management Policy DP29, which this policy replaces; therefore, on~~  
503 ~~adoption of this Local Plan, the SPD is out of date. The Authority will review the SPD~~  
504 ~~immediately after adoption of the Local Plan, but in the meantime (between adoption of the~~  
505 ~~Local Plan and adoption of the revised SPD) will still refer to the SPD guidance, as it contains~~  
506 ~~important and relevant detail relating to flooding. The Government have indicated that they~~  
507 ~~plan to stop SPDs being produced. They intend for Supplementary Plans to take their place.~~  
508 At the time of writing, this change had not been formally put in place. As such, the 2020 SPD  
509 remains in place. The review of the Local Plan as well as the potential for SPDs to not be  
510 relevant or not be produced any more, offer the opportunity to bring into the Local Plan  
511 relevant sections of the SPD. It is proposed that aspects of the SPD deemed not appropriate  
512 for this Local Plan become part of a new Flood Risk Guidance document that will be  
513 completed after the Local Plan is produced.

#### 514 **Strategic Flood Risk Assessment (SFRA)**

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<sup>19</sup> New forms and further information can be found at: [www.gov.uk/guidance/flood-risk-activities-environmental-permits](https://www.gov.uk/guidance/flood-risk-activities-environmental-permits).  
[Flood risk activities: environmental permits - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/flood-risk-activities-environmental-permits)

<sup>20</sup> ~~Flood Risk SPD: [www.broads-authority.gov.uk/data/assets/pdf\\_file/0006/917844/Broads\\_Flood\\_Risk\\_SPD\\_Final\\_March\\_2017.pdf](https://www.broads-authority.gov.uk/data/assets/pdf_file/0006/917844/Broads_Flood_Risk_SPD_Final_March_2017.pdf)~~  
[Broads Flood Risk SPD \(pdf | broads-authority.gov.uk\)](https://www.broads-authority.gov.uk/data/assets/pdf_file/0006/917844/Broads_Flood_Risk_SPD_Final_March_2017.pdf)

515 SFRA's are important for the production of Local Plans. The Broads is covered by four  
 516 separate SFRA's completed in 2017/2018<sup>21</sup>. However, a large area of the Broads Authority  
 517 Executive Area has not been assessed as part of this work as the model needs to be  
 518 purchased, updated and run by the Environment Agency to produce SFRA equivalent  
 519 information. It is intended that this will be completed [as part of the Broadland Futures  
 520 Initiative](#) ~~by around the end of 2021~~ and there could therefore be adjustments to flood zone  
 521 3 as a result - see the Position Statement between the Broads Authority and Environment  
 522 Agency<sup>22</sup> produced in July 2018 for more information. It is accepted that there is uncertainty  
 523 about the precise boundaries of the functional flood plain (flood zone 3b) and the  
 524 Environment Agency work should contribute to the understanding of this area. It is also  
 525 accepted that due to natural processes and other activities, the functional flood plain can  
 526 change over time. Where detailed modelling is not available, Indicative Flood Zone 3b has  
 527 been used in the Norfolk part of the Broads. A similar approach has been used in the  
 528 Waveney SFRA but on those maps, flood zones are 3b where modelled and 3 elsewhere.  
 529 Due to the nature of flooding in the Broads, it is expected that Flood Zone 3a and Flood  
 530 Zone 3b have similar extents so Indicative Flood Zone 3b/flood zone 3 is precautionary but  
 531 reasonable. As set out in national policy, planning applications for schemes in flood zones 2  
 532 and 3 require site-specific flood risk assessments and these will determine the precise detail  
 533 of flood risk on site. ~~Also see Appendix C for more information on SFRA's.~~

534 **Reasonable alternative options**

- 535 a) No policy
- 536 b) Original policy

537 **Sustainability appraisal summary**

538 The options of no policy, the original policy and amended policy have been assessed in the  
 539 SA. The following is a summary.

A: Original policy	5 positives. 0 negatives. 0 ? Overall, positive.
B: Amended policy	positives. 0 negatives. 0 ? Overall, positive.
C: No policy	0 positives. 0 negatives. ?

540 **How has the existing policy been used since adoption in May 2019?**

541 According to recent Annual Monitoring Reports, the policy has been used and schemes have  
 542 been permitted in accordance with the policy.

543 **Why has the alternative option been discounted?**

544 Flooding is a real issue in the Broads. The policy provides local detail and elaborates on  
 545 national policy and so is favoured. The amended policy brings in parts of the Flood Risk SPD  
 546 because SPDs may not be in place in the near future.

<sup>21</sup> ~~The SFRA's can be found here: [www.broads-authority.gov.uk/planning/planning-policies/sfra/sfra](http://www.broads-authority.gov.uk/planning/planning-policies/sfra/sfra)~~ [Strategic Flood Risk Assessment \(broads-authority.gov.uk\)](http://www.broads-authority.gov.uk/planning/planning-policies/sfra/sfra)

<sup>22</sup> ~~SFRA Joint Position Statement: [www.broads-authority.gov.uk/planning/planning-policies/development/current-documents/supporting-documents-and-evidence](http://www.broads-authority.gov.uk/planning/planning-policies/development/current-documents/supporting-documents-and-evidence)~~ [SFRA Joint Position Statement \(pdf | broads-authority.gov.uk\)](http://www.broads-authority.gov.uk/planning/planning-policies/development/current-documents/supporting-documents-and-evidence)

547 **UN Sustainable Development Goals check**

548 This policy meets these [UN SD Goals](#):

**3** GOOD HEALTH  
AND WELL-BEING



**11** SUSTAINABLE CITIES  
AND COMMUNITIES



**13** CLIMATE  
ACTION



549 **Policy DM6: Surface water run-off**

- 550 1. All development proposals will need to incorporate measures to attenuate surface water  
551 run-off in a manner appropriate to the Broads. This will need to reflect the  
552 characteristics of the site in accordance with a drainage hierarchy for rainwater so that,  
553 in order of priority, they:
- 554 a) Continue natural discharge processes;
  - 555 b) Store water for later use;
  - 556 c) Adopt shallow infiltration techniques in areas of suitable porosity;
  - 557 d) Store water in open water features for gradual release to a watercourse;
  - 558 e) Store water in sealed water features for gradual release to a watercourse;
  - 559 f) Discharge direct to a watercourse;
  - 560 g) Discharge direct to a surface water drain (highways, Anglian Water or other body or  
561 within private ownership);
  - 562 h) Discharge direct to deep infiltration or borehole soakaways; or
  - 563 i) Discharge direct to a combined sewer
- 564 2. The surface water runoff rate that will occur as a consequence of the development is  
565 required to be no more than the existing pre development greenfield runoff rate.  
566 Brownfield sites should aim to reduce runoff as close to greenfield rates as possible. The  
567 discharge rate for brownfield sites should be no more than the rate prior to any new  
568 development. Applicants are encouraged to seek betterment in surface water runoff as  
569 part of their proposals for brownfield sites. The runoff rate should be agreed with the  
570 Local Planning Authority, in conjunction with the Lead Local Flood Authority and where  
571 relevant sewerage undertaker.
- 572 3. Sustainable Drainage Systems (SuDS) shall be used unless, following adequate  
573 assessment, soil conditions and/or engineering feasibility dictate otherwise. [These](#)  
574 [should be designed and implemented following the general principles set out at](#)  
575 [Appendix xx as well as any relevant guidance or standards that are in place.](#)
- 576 4. Proposals to address surface water must be considered at an early stage of the scheme  
577 design process. The following criteria need to be addressed when designing measures to  
578 address surface water:
- 579 a) Use a risk assessment on treatment stages to reflect the type of proposed development  
580 and how surface water run-off and drainage will affect the receptor. A 1.2m clearance  
581 between the base of infiltration SuDS and the peak seasonal groundwater levels is  
582 required;
  - 583 b) Take the current drainage arrangements of the area into account (including  
584 groundwater levels);
  - 585 c) Take natural site drainage and topography into account;
  - 586 d) Effectively manage water including maintenance of and, where possible improvement to  
587 water quality; and
  - 588 e) Provide amenity for local residents whilst ensuring a safe environment.
- 589 5. Where SuDS via ground infiltration is feasible, to ensure that SuDS discharge water from  
590 the development at the same or lesser rate as prior to construction, developers must

591 undertake groundwater monitoring within the winter period and winter percolation  
592 testing in accordance with the current procedure<sup>23</sup>.

593 6. Minor developments that increase the footprint of an impermeable surface are  
594 required, where appropriate, to incorporate mitigation measures to reduce surface  
595 water runoff, manage surface water flood risk to the development itself and to others,  
596 maximise the use of permeable materials to increase infiltration capacity, incorporate  
597 on-site water storage, and make use of green roofs and green walls wherever  
598 reasonably practicable and appropriate, in accordance with design policies.

599 7. Within the critical drainage catchments as identified by the Lead Local Flood Authority,  
600 and in other areas where the best available evidence indicates that a serious and  
601 exceptional risk of surface water flooding exists, all development proposals involving  
602 new buildings, extensions and additional areas of hard surfacing shall ensure that  
603 adequate and appropriate consideration has been given to mitigating surface water  
604 flood risk.

605 8. Schemes that involve SuDS will be required to provide details of the management  
606 regime to ensure effective operation of the type of SuDS delivered in perpetuity.

#### 607 **Reasoned Justification**

608 The policy seeks to ensure that surface water run-off is discharged as high up the following  
609 **hierarchy** (as set out in the NPPG) as possible:

- 610 • into the ground (infiltration);
- 611 • to a surface water body;
- 612 • to a surface water sewer, highway drain, or another drainage system;
- 613 • to a combined sewer.

614 Sustainable drainage systems (SuDS) slow the rate of surface water run-off and improve  
615 infiltration, by mimicking natural drainage in both rural and urban areas. This reduces the  
616 risk of flash flooding, which occurs when rainwater rapidly flows into the public sewerage  
617 and drainage systems. SuDS can also be used to enhance the environment of a site by  
618 contributing to green infrastructure and providing habitats for wildlife.

619 The Government has issued a written statement in relation to SuDS<sup>24</sup>saying that '*we expect*  
620 *local planning policies and decisions on planning applications relating to major development*  
621 *(developments of 10 dwellings or more; or equivalent non-residential or mixed development)*  
622 *to ensure that sustainable drainage systems for the management of run-off are put in place,*  
623 *unless demonstrated to be inappropriate.*' The policy seeks to address this direction.

624 Watercourses in the Broads are regulated and maintained by the Internal Drainage Board or  
625 by private landowners. The IDB have their own local surface water policy which takes

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<sup>23</sup> Currently BRE Digest 365: [www.brebookshop.com/details.jsp?id=327592](http://www.brebookshop.com/details.jsp?id=327592) Soakaway design (DG 365 - 2016) : BREbookshop.com

<sup>24</sup> Written Ministerial Statement [www.parliament.uk/documents/commons-vote-office/December%202014/18%20December/6.%20DCLG-sustainable-drainage-systems.pdf](http://www.parliament.uk/documents/commons-vote-office/December%202014/18%20December/6.%20DCLG-sustainable-drainage-systems.pdf) [DCLG sustainable drainage systems \(pdf | parliament.uk\)](http://DCLG-sustainable-drainage-systems.pdf)

626 precedence over national best practice (<https://www.wlma.org.uk/broads->  
627 [idb/development/Development - Water Management Alliance \(wlma.org.uk\)](https://www.wlma.org.uk/broads-idb/development/Development-Water-Management-Alliance-wlma.org.uk)).  
628 **Potential to reduce phosphorous in surface water runoff**  
629 The Authority encourages using SuDS to reduce phosphorus in surface water runoff. Please  
630 see this guide.

### 631 **Types of SuDS**

632 The Broads is ideally suited for this sort of approach, as dykes and other forms of holding  
633 basins are characteristic of the landscape. The most effective form of water management is  
634 a naturally functioning floodplain and development proposals should aim to maximise  
635 opportunities to restore a naturally functioning floodplain where possible. A range of  
636 possible SUDs techniques can be used, although not all techniques will be appropriate for  
637 individual development sites. Examples of SuDS include retention ponds (a depression that  
638 holds water even during dry weather conditions), water butts, and swales (long vegetative  
639 depressions that are normally dry except during and after heavy rainfall).

### 640 **Designing SuDS**

641 An appropriate amount of land-take should be allowed to account for SuDS within any  
642 development. To be most effective, SuDS proposals need to be integrated into scheme  
643 designs at an early stage and not retrofitted once the layout has already been established.

644 Special consideration will need to be given to the design of the drainage system when there  
645 are known flooding issues within the immediate catchment of the development. Generally,  
646 known flooding issues correlate with areas shown as high risk flooding on the Government  
647 Risk of Surface Water Flooding (RoSWF) maps, but the Lead Local Flood Authority (LLFA) will  
648 highlight any relevant information if consulted on a scheme. The Interactive PDFs produced  
649 as part of the SFRA work<sup>25</sup> (referred to previously) show areas that are subject to surface  
650 water flooding.

651 The scope of any drainage strategy should be proportionate to the scale of the development  
652 and the amount and type of flood risk the development site is subject to. As part of the  
653 strategy, it will be important to identify existing drainage arrangements to determine  
654 options for draining the site and the impact of the proposal post-development.

655 In some instances, it may not be appropriate to lessen significant amounts of water due to  
656 ecological considerations, but water quality issues should always be considered. A risk  
657 assessment should be undertaken and appropriate treatment stages introduced if the  
658 receiving environment is assessed as being sensitive to development.

659 Normal infiltration SuDS should be no deeper than 2m below ground level, with a minimum  
660 of 1.2m clearance between the base of infiltration SuDS and the peak seasonal groundwater  
661 levels. Monitoring/ testing of groundwater must be undertaken in winter, as this tends to be  
662 the time of year that sees most precipitation and higher groundwater levels.

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<sup>25</sup> SFRA: [www.broads-authority.gov.uk/planning/planning-policies/sfra/sfra](http://www.broads-authority.gov.uk/planning/planning-policies/sfra/sfra) Strategic Flood Risk Assessment ([broads-authority.gov.uk](http://broads-authority.gov.uk))

663 Advice from Norfolk County Council (one of the two LLFAs covering the Broads) is that deep  
664 infiltration or borehole soakaways should be one of the final options for consideration.  
665 While these methods can provide groundwater recharge via infiltration at depth, they do  
666 not mimic the natural drainage system as shallow infiltration does.

667 The Environment Agency would not normally support the use of deep bore soakaway  
668 systems, as these can present an unacceptable risk to the groundwater environment.  
669 Where applications are proposing their use, they should provide supporting documentation  
670 that clearly demonstrates why other SuDS discharge options are not appropriate. Each  
671 application for deep bore soakaways should also be supported by a detailed risk assessment  
672 demonstrating that their use will not impact on groundwater quality. If deep bore  
673 soakaways are proposed, the developer may require an environmental permit from the  
674 Agency for a direct discharge to groundwater<sup>26</sup>. Granting of planning permission does not  
675 automatically mean a developer will be awarded an environmental permit, and early  
676 engagement with the Agency is recommended where deep bore soakaways are proposed.

677 Areas with concentrated surface water risk will be identified by the Lead Local Flood  
678 Authorities as Critical Drainage Catchments<sup>27</sup> (CDCs). The CDCs are the focus for partner  
679 engagement, detailed analysis and the potential implementation of flood protection  
680 schemes, as well as the production of Surface Water Management Plans<sup>28</sup> that look in detail  
681 at places that have suffered surface water flooding or have a high surface water flood risk.  
682 Currently, there are no CDCs in the Broads Authority area.

683 The following guidance will be useful when designing SuDS schemes:

- 684 • [General principles set out in Appendix xxx.](#)
- 685 • Non-statutory technical standards for the design, maintenance and operation of  
686 sustainable drainage systems: ~~[www.gov.uk/government/publications/sustainable-](http://www.gov.uk/government/publications/sustainable-drainage-systems-non-statutory-technical-standards)~~  
687 ~~[drainage-systems-non-statutory-technical-standards](http://www.gov.uk/government/publications/sustainable-drainage-systems-non-statutory-technical-standards)~~ [Sustainable drainage systems: non-](http://www.gov.uk/government/publications/sustainable-drainage-systems-non-statutory-technical-standards)  
688 [statutory technical standards - GOV.UK \(www.gov.uk\)](http://www.gov.uk/government/publications/sustainable-drainage-systems-non-statutory-technical-standards)
- 689 • SuDS manual produced by CIRIA: In delivering SuDS there is a requirement to meet the  
690 framework set out by the Government's 'non statutory technical standards'. The revised  
691 SuDS manual complements these, but goes further to support the cost-effective delivery  
692 of multiple benefits.  
693 ~~[www.ciria.org/Resources/Free-publications/SuDS-manual-C753.aspx](http://www.ciria.org/Resources/Free-publications/SuDS-manual-C753.aspx)~~ [The SuDS Manual](http://www.ciria.org/Resources/Free-publications/SuDS-manual-C753.aspx)  
694  [\(C753F\) \(ciria.org\)](http://www.ciria.org/Resources/Free-publications/SuDS-manual-C753.aspx)
- 695 • Good examples of how development can be planned to manage water and deliver  
696 multiple benefits are outlined in the RSPB/WWT report 'Sustainable drainage systems:  
697 maximising the potential for people and wildlife – A guide for local authorities and  
698 developers', available at ~~[www.rspb.org.uk/Images/SuDS-report-final-tcm9-338064.pdf](http://www.rspb.org.uk/Images/SuDS-report-final-tcm9-338064.pdf)~~  
699 [WWT RSPB Sustainable drainage systems guide \(pdf | wwt.org.uk\).](http://www.rspb.org.uk/Images/SuDS-report-final-tcm9-338064.pdf)

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<sup>26</sup> ~~More information can be found at [www.gov.uk/guidance/discharges-to-surface-water-and-groundwater-environmental-permits](http://www.gov.uk/guidance/discharges-to-surface-water-and-groundwater-environmental-permits).~~  
[Discharges to surface water and groundwater: environmental permits - GOV.UK \(www.gov.uk\)](http://www.gov.uk/guidance/discharges-to-surface-water-and-groundwater-environmental-permits)

<sup>27</sup> A Critical Drainage Area is a discrete geographic area (usually a hydrological catchment) where multiple or interlinked sources of flood risk cause flooding during a severe rainfall event thereby affecting people, property or local infrastructure

<sup>28</sup> Surface Water Management Plans: ~~[www.norfolk.gov.uk/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-](http://www.norfolk.gov.uk/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-and-strategies/flood-and-water-management-policies/surface-water-management-plans)~~  
~~[and-strategies/flood-and-water-management-policies/surface-water-management-plans](http://www.norfolk.gov.uk/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-and-strategies/flood-and-water-management-policies/surface-water-management-plans)~~ [Surface Water Management Plans - Norfolk County Council](http://www.norfolk.gov.uk/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-and-strategies/flood-and-water-management-policies/surface-water-management-plans) and ~~[www.suffolk.gov.uk/roads-and-transport/flooding-and-drainage/flood-management-in-suffolk/](http://www.suffolk.gov.uk/roads-and-transport/flooding-and-drainage/flood-management-in-suffolk/)~~ [Flood management in Suffolk - Suffolk County Council](http://www.suffolk.gov.uk/roads-and-transport/flooding-and-drainage/flood-management-in-suffolk/)



- 700 • Suffolk County Council's Guidance sets out Suffolk County Council's approach as Lead  
701 Local Flood Authority: [www.suffolk.gov.uk/roads-and-transport/flooding-and-](http://www.suffolk.gov.uk/roads-and-transport/flooding-and-drainage/guidance-on-development-and-flood-risk/)  
702 [drainage/guidance-on-development-and-flood-risk/](http://www.suffolk.gov.uk/roads-and-transport/flooding-and-drainage/guidance-on-development-and-flood-risk/) [Guidance on development and](http://www.suffolk.gov.uk/roads-and-transport/flooding-and-drainage/guidance-on-development-and-flood-risk/)  
703 [flood risk - Suffolk County Council \(suffolk.gov.uk\)](http://www.suffolk.gov.uk/roads-and-transport/flooding-and-drainage/guidance-on-development-and-flood-risk/)
- 704 • Norfolk County Council's guidance: [www.norfolk.gov.uk/-](http://www.norfolk.gov.uk/~media/norfolk/downloads/rubbish-recycling-planning/flood-and-water-management/guidance-on-norfolk-county-councils-lead-local-flood-authority-role-as-statutory-consultee-to-planning.pdf)  
705 [/media/norfolk/downloads/rubbish-recycling-planning/flood-and-water-](http://www.norfolk.gov.uk/~media/norfolk/downloads/rubbish-recycling-planning/flood-and-water-management/guidance-on-norfolk-county-councils-lead-local-flood-authority-role-as-statutory-consultee-to-planning.pdf)  
706 [management/guidance-on-norfolk-county-councils-lead-local-flood-authority-role-as-](http://www.norfolk.gov.uk/~media/norfolk/downloads/rubbish-recycling-planning/flood-and-water-management/guidance-on-norfolk-county-councils-lead-local-flood-authority-role-as-statutory-consultee-to-planning.pdf)  
707 [statutory-consultee-to-planning.pdf](http://www.norfolk.gov.uk/~media/norfolk/downloads/rubbish-recycling-planning/flood-and-water-management/guidance-on-norfolk-county-councils-lead-local-flood-authority-role-as-statutory-consultee-to-planning.pdf) [Guidance on Norfolk County Council's Lead Local](http://www.norfolk.gov.uk/~media/norfolk/downloads/rubbish-recycling-planning/flood-and-water-management/guidance-on-norfolk-county-councils-lead-local-flood-authority-role-as-statutory-consultee-to-planning.pdf)  
708 [Flood Authority role as Statutory Consultee to Planning \(pdf | norfolk.gov.uk\)](http://www.norfolk.gov.uk/~media/norfolk/downloads/rubbish-recycling-planning/flood-and-water-management/guidance-on-norfolk-county-councils-lead-local-flood-authority-role-as-statutory-consultee-to-planning.pdf)

### 709 Management, maintenance, and adoption of SuDS

710 Managing SuDS during the construction phase is important to make sure they are effective.  
711 Once constructed a management plan needs to be in place, along with appropriate  
712 resources, to ensure they continue to operate in perpetuity. Anglian Water's standards for  
713 adopting SuDs may be viewed here: [www.anglianwater.co.uk/developers/suds.aspx](http://www.anglianwater.co.uk/developers/suds.aspx)  
714 [Sustainable surface water drainage \(anglianwater.co.uk\)](http://www.anglianwater.co.uk/developers/suds.aspx). SuDS can also be adopted by other  
715 bodies such as Management Companies.

### 716 Additional information

717 Various sources of technical information can be used when addressing surface water and  
718 designing SuDS:

- 719 • NPPG: [www.gov.uk/guidance/flood-risk-and-coastal-change#flood-risk-opportunities](http://www.gov.uk/guidance/flood-risk-and-coastal-change#flood-risk-opportunities)  
720 [Flood risk and coastal change - Sustainable drainage systems \(www.gov.uk\)](http://www.gov.uk/guidance/flood-risk-and-coastal-change#flood-risk-opportunities)
- 721 • [www.nonnativespecies.org/checkcleandry/documents/species-guide.pdf](http://www.nonnativespecies.org/checkcleandry/documents/species-guide.pdf) [Check Clean](http://www.nonnativespecies.org/checkcleandry/documents/species-guide.pdf)  
722 [Dry - Help stop the spread of invasive plants and animals in our waters](http://www.nonnativespecies.org/checkcleandry/documents/species-guide.pdf)  
723 [\(nonnativespecies.org\)](http://www.nonnativespecies.org/checkcleandry/documents/species-guide.pdf)
- 724 • [thegreenblue.org.uk/~media/TheGreenBlue/Files-and-](http://thegreenblue.org.uk/~media/TheGreenBlue/Files-and-Documents/Leaflets/The-Green-Guide-to-Boat-Washdown-Systems.ashx)  
725 [Documents/Leaflets/The Green Guide to Boat Washdown Systems.ashx](http://thegreenblue.org.uk/~media/TheGreenBlue/Files-and-Documents/Leaflets/The-Green-Guide-to-Boat-Washdown-Systems.ashx)

### 726 Reasonable alternative options

- 727 a) No policy
- 728 b) Original policy

### 729 Sustainability appraisal summary

730 The options of no policy, the original policy and amended policy have been assessed in the  
731 SA. The following is a summary.

A: Original policy	7 positives. 0 negatives. 0 ? Overall, positive.
B: Amended policy	7 positives. 0 negatives. 0 ? Overall, positive.
c: No policy	0 positives. 0 negatives. 7 ?

### 732 How has the existing policy been used since adoption in May 2019?

733 According to recent Annual Monitoring Reports, the policy has been used and schemes have  
734 been permitted in accordance with the policy.

735 **Why has the alternative option been discounted?**

736 SuDS are an important component in tackling flood risk and so a policy is favoured. The  
737 amendment brings in design considerations in order to make sure that any SuDS are  
738 designed as well as possible.

739 **UN Sustainable Development Goals check**

740 This policy meets these [UN SD Goals](#):

**3** GOOD HEALTH  
AND WELL-BEING



**11** SUSTAINABLE CITIES  
AND COMMUNITIES



**13** CLIMATE  
ACTION



741 **Appendix xxxx – Flood response plan guidance and structure**

742 **Chapter 1: Flood Response Plan Guidance**

743 **1. Introduction**

744 This guidance has been produced to assist with the preparation of Flood Response Plans  
745 (FRP). FRPs need to be provided as part of a Flood Risk Assessment where this is necessary  
746 to accompany a planning application.

747 All residents and businesses in flood risk areas are encouraged to prepare and maintain a  
748 Flood Response Plan so they are prepared in the event of a flood.

749 Floods present a danger to health and life and can damage property. It is important to be  
750 prepared in advance to limit the dangers and damage. At times of flooding, emergency and  
751 other local services will be under significant pressure. The better prepared you are, the less  
752 pressure the services will be under so they can attend to the most vulnerable in the  
753 community. Even if you are not physically injured in a flood, the consequences can have an  
754 emotional impact. The shock and disruption and damage to, or loss of, property and  
755 possessions can have big impacts. Being proactive and having a Plan you are familiar with in  
756 advance can help you take prompt, effective action when warnings are issued and result in  
757 an easy and efficient recovery.

758 Every effort has been made to ensure this guidance is accurate and comprehensive as at the  
759 date it was prepared. However, it is the responsibility of the developer to ensure that any  
760 additional risks relevant to a particular property development are fully considered. The  
761 Broads Authority will not accept responsibility for any errors, omissions or misleading  
762 statements in this guidance or for any loss, damage or inconvenience caused as a result of  
763 relying on this guidance.

764 You will need to adapt the template to reflect the specifics of your site; such as the size and  
765 the number of people who use and what they use it for.

766 According to a new guide produced by ADEPT and the Environment Agency in September  
767 2019<sup>29</sup>, flood response plans should address the following:

- 768 • characterise and quantify the flood risk
- 769 • list relevant flood warnings and estimate the likely lead-time available
- 770 • detail who is at risk – including vulnerable people and transient users
- 771 • explain how the EP will be triggered, by who and when
- 772 • define any areas of responsibility for those participating in the EP
- 773 • describe what actions are required by the people in the development
- 774 • set out the type and performance of any flood resistance or resilience measures to be  
775 installed prior to a flood
- 776 • establish safe access and escape routes to a safe location

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<sup>29</sup> [Flood risk emergency plans for new development: https://www.adeptnet.org.uk/floodriskemergencyplan](https://www.adeptnet.org.uk/floodriskemergencyplan)  
[ADEPT/EA Flood Risk Emergency Plans for New Development | ADEPT \(adeptnet.org.uk\)](https://www.adeptnet.org.uk/floodriskemergencyplan)

- 777 • outline the evacuation procedure, place of refuge and related equipment needed to
- 778 serve occupants for the required duration
- 779 • detail what emergency service infrastructure and/or contributions are proposed
- 780 • establish procedures for implementing, monitoring and maintaining the plan throughout
- 781 the lifetime of the development

## 782 2. Flood response plans - considerations

### 783 2.1. Flood warnings

784 The Environment Agency is responsible for providing flood warnings to the public. Anyone  
 785 can register with the Environment Agency's flood warning service 'Floodline Warnings  
 786 Direct'<sup>30</sup>. The Floodline Warnings Direct (FWD) service provides information about the  
 787 current and future flooding danger. If flooding may happen, the Environment Agency will  
 788 issue a flood warning to registered users by telephoning a pre-arranged number with a  
 789 recorded message or by sending a text or email.

790 The 3 flood warning codes are shown below. You can go to the Flood Information Service<sup>31</sup>  
 791 to see what warnings are in place around the Country.



Severe Flood Warning  
Severe flooding. Danger to  
life.



Flood Warning  
Flooding is expected.  
Immediate action required



Flood Alert  
Flooding is possible.  
Be prepared

### 792 2.2. Liaise with neighbours

793 When drafting an FRP you are strongly encouraged to liaise with the owners/occupiers of  
 794 any neighbouring and nearby sites. That way you can coordinate procedures and minimise  
 795 confusion during an incident.

### 796 2.3. Evacuating

797 FRPs should reflect the fact that people should evacuate **prior** to a flood occurring. Once  
 798 flooding has **inundated** an area, staying put rather than evacuating, could be the safer  
 799 option. This is because of the dangers of moving in flooded areas such as lifted manhole  
 800 covers and contaminated water. It is important to note that in the Broads area, flood waters  
 801 may take a longer time to subside which can cause difficulties for those taking refuge within  
 802 buildings. Your FRP needs to reflect the local circumstances.

803 Ensure that the FRP deals with the potential difficulties involved in immediate evacuation  
 804 which may need to be carried out in inclement weather. The FRP needs to address how  
 805 people will reach local authority designated rest centres.

<sup>30</sup> Register With Floodline Warnings Direct <https://www.gov.uk/sign-up-for-flood-warnings> Sign up for flood warnings - GOV.UK ([www.gov.uk](http://www.gov.uk))

<sup>31</sup> <https://flood-warning-information.service.gov.uk/> Check for flooding in England - GOV.UK ([check-for-flooding.service.gov.uk](http://check-for-flooding.service.gov.uk))

806 **2.4. People requiring extra assistance**

807 Informing appropriate response organisations, such as Social Services, about any elderly or  
808 vulnerable people who may require extra assistance in the event of an emergency such as a  
809 flood.

810 Particular attention should be given to the communication of warnings to vulnerable people  
811 including those with impaired hearing or sight and those with restricted mobility.

812 **3. Other sources of useful information**

813 Emergencies web pages of the County and District Councils contain useful information  
814 which you may wish to consult/refer to in your FRP:

- 815 • Norfolk County Council:

816 <http://www.norfolk.gov.uk/safety-emergencies-and-accidents/index.htm> Safety -  
817 [Norfolk County Council](http://www.norfolk.gov.uk/safety-emergencies-and-accidents/index.htm)

- 818 • Suffolk County Council and Waveney District Council:

819 <https://www.suffolk.gov.uk/emergency-and-rescue/> Suffolk Fire and Rescue Service -  
820 [Suffolk County Council](https://www.suffolk.gov.uk/emergency-and-rescue/)

- 821 • South Norfolk Council: [http://www.south-](http://www.south-norfolk.gov.uk/environment/1507.asp)

822 [norfolk.gov.uk/environment/1507.asp](http://www.south-norfolk.gov.uk/environment/1507.asp) Flooding – Broadland and South Norfolk  
823  [\(southnorfolkandbroadland.gov.uk\)](http://www.south-norfolk.gov.uk/environment/1507.asp)

- 824 • Broadland Council: <http://www.broadland.gov.uk/environment/316.asp> Flooding –  
825 [Broadland and South Norfolk \(southnorfolkandbroadland.gov.uk\)](http://www.broadland.gov.uk/environment/316.asp)

- 826 • Norwich Council: <https://www.norwich.gov.uk/info/20226/emergency-planning>  
827 [Emergency planning | Norwich City Council](https://www.norwich.gov.uk/info/20226/emergency-planning)

- 828 • North Norfolk Council: <https://www.north-norfolk.gov.uk/tasks/emergency-planning/>  
829 [Home | Emergency Planning \(north-norfolk.gov.uk\)](https://www.north-norfolk.gov.uk/tasks/emergency-planning/)

- 830 • Great Yarmouth Council: [http://www.great-yarmouth.gov.uk/article/2512/Emergency-](http://www.great-yarmouth.gov.uk/article/2512/Emergency-planning)  
831 [planning](http://www.great-yarmouth.gov.uk/article/2512/Emergency-planning) Emergency Planning - Great Yarmouth Borough Council ([great-](http://www.great-yarmouth.gov.uk)  
832 [yarmouth.gov.uk](http://www.great-yarmouth.gov.uk))

- 833 • Met Office website. <http://www.metoffice.gov.uk/public/weather/forecast/?tab=map>  
834 [Weather and climate change - Met Office](http://www.metoffice.gov.uk/public/weather/forecast/?tab=map)

- 835 • National Flood Forum: The NFF is an independent body that supports flood  
836 preparedness and flood recovery. It has advice about flood protection products and  
837 clean up processes. It also covers other areas of post flooding support.

838 <http://www.floodforum.org.uk/> [National Flood Forum – A charity to help, support and](http://www.floodforum.org.uk/)  
839 [represent people at risk of flooding.](http://www.floodforum.org.uk/)

- 840 • Flood risk emergency plans for new development

841 <https://www.adeptnet.org.uk/floodriskemergencyplan> [ADEPT/EA Flood Risk Emergency](https://www.adeptnet.org.uk/floodriskemergencyplan)  
842 [Plans for New Development | ADEPT \(adeptnet.org.uk\)](https://www.adeptnet.org.uk/floodriskemergencyplan)

843 **4. Your Flood Response Plan**

844 Flood Response Plans may be different for different buildings. This would reflect the time of  
845 day someone might be there, how many people are in or around the building and what the  
846 building is used for.

- 847 • **Businesses** can follow the Environment Agency's guide '[Prepare your business for](#)  
848 [flooding - Checklists to help you prepare your business for flooding](#)'~~Would your business~~  
849 ~~stay afloat? A guide to preparing your business for flooding~~<sup>32</sup>.
- 850 • **Community organisations** can follow the Environment Agency's guide '[Community flood](#)  
851 [plan - Checklists to help you prepare for flooding if you support a community or](#)  
852 [group](#)'~~Flooding – minimising the risk. Flood plan guidance for communities and groups.~~  
853 ~~Practical advice to help you create a flood plan~~<sup>33</sup>.



854 The following suggested structure is for the production of Plans for residential, holiday and  
855 other development which includes overnight accommodation.

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<sup>32</sup> ~~would your business stay afloat?~~  
~~[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/410606/LIT\\_5284.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/410606/LIT_5284.pdf)~~ [Business flood plan checklists - GOV.UK \(www.gov.uk\)](#)

<sup>33</sup> ~~Flooding – minimising the risk~~  
~~[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/292939/LIT\\_5286\\_b9ff43.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/292939/LIT_5286_b9ff43.pdf)~~ [Community flood plan - GOV.UK \(www.gov.uk\)](#)

## 856 Chapter 2: Suggested structure for your Flood Response Plan

### 857 **1. Introduction**

- 858 • Describe the site fully and accurately including where it is and what it is used for:
  - 859 ○ State the name and address of the property.
  - 860 ○ Attach a site plan to identify the location and size of the site.
  - 861 ○ Identify what type of development it is (a residential dwelling, holiday let, second
  - 862 home, etc.) and the size (number of storeys, number of bedrooms, any
  - 863 outbuildings, etc).
  - 864 ○ Identify where the access into the site and into the building is – will this be safe
  - 865 at times of flood? If not, are there other safe accesses that can be used?
  - 866 ○ Identify where people could safely be rescued from in an emergency if a flood
  - 867 occurs before the building is evacuated (usable safe refuge).
- 868 • Identify potential sources of floodwater and what to look out for.
- 869 • What timescale are people likely to have to respond to flood warnings?
- 870 • State who will be responsible for implementing the Flood Response Plan and who will
- 871 review it and how regularly.
- 872 • State the date the Plan was adopted and refer to timescales for review.
- 873 • State which flood zone the site is in (as identified in a Flood Risk Assessment or on the
- 874 Environment Agency's website<sup>34</sup>). A flood zone identifies how likely the site is to flood.
- 875 • Identify the scope of the plan – the site, building, property and people

#### 876 **Zone 1: Low Probability of flooding**

877 Land having a less than 1 in 1,000 (0.1%) annual probability of river or sea flooding.

#### 878 **Zone 2: Medium Probability of flooding**

879 Land having between a 1 in 100 (1%) and 1 in 1,000 (0.1%) annual probability of river

880 flooding; or

881 Land having between a 1 in 200 (0.5%) and 1 in 1,000 (0.1%) annual probability of sea/tidal

882 flooding.

#### 883 **Zone 3a: High Probability**

884 Land having a 1 in 100 (1%) or greater annual probability of river flooding; or

885 Land having a 1 in 200 (0.5%) or greater annual probability of sea/tidal flooding.

#### 886 **Zone 3b: The Functional Floodplain**

887 This zone comprises land where water has to flow or be stored in times of flood, during a

888 flood event with an annual probability of 1 in 20 (5%) or greater.

### 889 **2. Warning arrangements**

- 890 • Register the site with the Environment Agency's Floodline Warnings Direct service.
- 891 • Who receives these warnings and how? What if they are away? What will they do when
- 892 they receive a warning?

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<sup>34</sup> Long term flood risk assessment for locations in England  
<http://watermaps.environment-agency.gov.uk/wiyby/wiyby.aspx?topic=floodmap#x=357683&y=355134&scale=2> Check  
the long term flood risk for an area in England - GOV.UK ([www.gov.uk](http://www.gov.uk))

- 893 • Where will a copy of this Plan be kept? How will all residents/tenants know where to  
894 find it?
- 895 • How will response organisations (like the police and fire service) be made aware of  
896 elderly or vulnerable people who may require extra assistance in the event of an  
897 emergency such as a flood?
- 898 • If warnings are received outside of normal working hours, how will you tell the  
899 staff/visitors before they leave for work? Who will inspect the premises before letting  
900 them arrive?




901 **3. Instructions to residents/tenants in the event of a flood warning**

902 The plan needs to set out clear instructions and actions for each stage of warning. This  
903 needs to form an easy-to-refer-to plan that can be followed in an emergency, providing all  
904 the necessary information and identifying who is responsible for doing what. It needs to  
905 identify at which stage the property should be evacuated, how and where to. A plan  
906 showing a safe exit route needs to be included.

907 If refuge is to be taken within the property, the plan needs to identify the circumstances  
908 when this should take place, where there is safe refuge and where any resources such as a  
909 flood kit (see below) will be found. Single storey properties may not have a place of safe  
910 refuge, so evacuating at an early stage to a safe place is more important.

911 The following table shows the stages of flood warning. What will you do at each stage?



 <p><b>Flood Alert</b> Flooding is possible. Be prepared.</p>	<ul style="list-style-type: none"> <li>• How will you respond to this alert?</li> <li>• What will you need to do to be prepared?</li> <li>• Is any other action necessary?</li> <li>• Who do you need to tell there is an alert in place? What will they need to do?</li> </ul>
 <p><b>Flood Warning</b> Flooding is expected. Immediate action required.</p>	<ul style="list-style-type: none"> <li>• How will you respond to this warning?</li> <li>• What is the immediate action you need to take?</li> <li>• Who do you need to tell there is a warning in place? What will they need to do?</li> </ul>
 <p><b>Severe Flood Warning</b> Severe flooding. Danger to life.</p>	<ul style="list-style-type: none"> <li>• How will you respond to this severe warning?</li> <li>• What action(s) do you need to take?</li> <li>• Who do you need to tell there is a severe warning in place? What will they need to do?</li> </ul>
<p><b>Warnings no longer in force - no flooding occurred</b></p>	<ul style="list-style-type: none"> <li>• How will you know when warnings are no longer in force?</li> <li>• Who do you need to tell the danger has passed?</li> <li>• What action is necessary?</li> </ul>
<p><b>Warnings no longer in force - flooding has occurred</b></p>	<ul style="list-style-type: none"> <li>• How will you know when warnings are no longer in force?</li> <li>• Who do you need to tell the danger has passed?</li> <li>• What action is necessary?</li> <li>• Re-occupation of flooded premises should only be carried out following consultation with the emergency services and appropriate authorities. This is because of any residual hazards. Identify who needs to be consulted, when and how.</li> </ul>

913 **Chapter 3: Important Considerations for your Flood Response Plan**

914 The following considerations may be relevant and important to your Flood Response Plan.  
915 They could help reduce the impact of a flood on people and property. A comprehensive and  
916 effective Plan will identify all actions that would be necessary before, during and after a  
917 flood event.

918 **Be Proactive**

- 919 • Do not wait for a flood – be proactive and consider what can be permanently moved to a  
920 safer higher level. Produce a checklist of remaining items that must be moved if there is  
921 a flood event. E.g. important documents, IT or vehicles.
- 922 • Check your insurance policy covers flooding.
- 923 • Look at the best way of stopping floodwater entering your property. There are a range  
924 of flood protection products on the market, a directory of these is available from the  
925 National Flood Forum at [www.bluepages.org.uk](http://www.bluepages.org.uk) [Blue Pages \(bluepages.org.uk\)](http://Blue Pages (bluepages.org.uk))
- 926 • Find out where you can get gel bags if you are in a fresh water area.
- 927 • Identify who can help you and who you can help.
- 928 • Understand the different flood warning levels.
- 929 • Make sure you keep an up to date contact list for all staff/residents
- 930 • Produce a Business Continuity Plan – part could relate to how to continue at times of  
931 flood.

932 **Familiarisation**

- 933 • Emphasise the need for all who work/live at your site to be familiar and comfortable  
934 with the Plan and its contents. You may wish to hold staff awareness briefings or add  
935 flood risk to the staff induction.
- 936 • Consider practicing your response to warnings and how to evacuate.
- 937 • Become familiar with the safest route from the property to any local evacuation centre.  
938 Get to know your local volunteer Emergency Co-ordinator. Ask the Emergency Planning  
939 Team at your local District Council for details.

940 **Actions to consider (to identify at each stage of warning)**

941 The plan should identify which actions will be undertaken when a flood alert is issued, which  
942 will be done when a flood warning is issued, etc.

- 943 • Check at what time the flooding is expected. If the site is vulnerable to tidal flooding,  
944 there can be 6 to 12-hour warning.
- 945 • Stay calm and tune in to BBC Radio Norfolk/Suffolk for weather forecasts and local  
946 information.
- 947 • Fasten your outer doors and fix any flood protection devices.
- 948 • Shut off your gas/electric supplies – show on a plan where this is as well as give details  
949 of how to do this. Do not touch electrics if already wet.
- 950 • Fill bath and buckets with water in case supply is shut off. Drinking water should be  
951 stored in clean containers.

- 952 • Move any important documents, valuables and sentimental items above the flood level  
953 or protect them by placing them in sealed plastic bags.
- 954 • Move furniture and electrical items if possible. Roll up carpets and rugs. Remove  
955 curtains, or hang them over rods.
- 956 • Consider moving vehicles to higher ground and make safe or secure any large or loose  
957 items outside that could cause damage if moved by floodwater. Pay particular attention  
958 to how boats are moored – if too tightly, they could list. If too loose they could cast  
959 adrift or float onto the landside of the quay heading.
- 960 • Ensure any hazardous materials are safe and secure and do not create any additional  
961 risks by coming in contact with flood waters
- 962 • Tie or anchor down equipment that could potentially float and cause an additional  
963 hazard (e.g. containers used for storage).
- 964 • Tell your neighbours about the warning, especially if they are elderly or vulnerable.  
965 Consider coordinating plans with neighbours/neighbouring organisations.
- 966 • If advised to do so, move to an identified Evacuation Centre or other safe place (such as  
967 a friend or relative). If it is not possible to evacuate, move to a safe refuge. If the  
968 property is single storey, move to an identified refuge place with nearby neighbours  
969 with safe, higher level accommodation.
- 970 • Take essential medicines, infant care items, personal documents/identification for each  
971 member of the family when you evacuate.
- 972 • Take food, clothes, blankets, candles/torches with you when you evacuate.
- 973 • Remember any pets (and their needs such as food, cages and litter trays).
- 974 • Notify visitors to the site that it is not safe.
- 975 • How will you shut down the site in an orderly fashion so people and assets can be  
976 protected?

977 **Flood Kit**

978 The flood kit should include essential items, be stored in the refuge area and be as easily  
979 accessible as possible. The flood kit could contain:

- 980 • Copies of insurance documents
- 981 • A torch with spare batteries (or a wind-up torch)
- 982 • Portable radio (wind-up preferred or store spare batteries)
- 983 • Warm, waterproof clothing.
- 984 • Rubber gloves
- 985 • Wellingtons
- 986 • Blankets
- 987 • First aid kit with essential prescription medication/repeat prescription form
- 988 • Bottled water and high energy food snacks (non-perishable and check use by dates)
- 989 • A copy of the Flood response plan
- 990 • List of important contact numbers
- 991 • Wash kit and essential toiletries (such as toilet paper and wet wipes)

- 992 • Children’s essentials (such as milk, baby food, sterilised bottles, wipes, nappies, nappy
- 993 bags, clothing, comforter, teddy or favourite toy)
- 994 • Food and cages for pets
- 995 • Laminated copy of the emergency card from the FRP
- 996 • Plus, anything else you consider important.

997 **Dangers of flood water**

998 Include the dangers associated with flooding in your FEP. Do not assume that every flood  
999 event will be the same; just because flood water hasn't been deep or flowed fast in the past,  
1000 it doesn't mean it won't in future. A brief guide is given below:

1001 **Remember:**

- 1002 • **Don’t walk through flowing water** – currents can be deceptive. Shallow and fast-moving  
1003 water can knock you off your feet!
- 1004 • **Don’t swim through fast flowing water** – you may get swept away or struck by an object  
1005 in the water.
- 1006 • If you **have** to walk in standing water, **use a pole or stick** to ensure that you do not step  
1007 into deep water, open manholes or ditches. Use the stick to ‘feel’ your way.
- 1008 • **Don’t drive through a flooded area.** You may not be able to see obstacles under the  
1009 water or abrupt drop-offs. Even half a meter of flood water can carry a car away.
- 1010 • **Avoid contact with water** as it may be contaminated with sewerage, chemicals, oil or  
1011 other substances.

1012 **Re-occupation after a flood**

1013 Re-occupation of flooded premises should only be carried out following consultation with  
1014 the emergency services and appropriate authorities. This is because of any residual hazards.  
1015 A statement to this effect could usefully be included in the response plan.

1016 When you can reoccupy, you shall need to:

- 1017 • Safely throw away food that has been in contact with flood water – it could be  
1018 contaminated.
- 1019 • Open doors and windows to ventilate your property.
- 1020 • Call your insurance company Emergency Helpline as soon as possible. Makes notes of  
1021 what the insurers say and keep correspondence with the insurers.
- 1022 • Keep a record of the flood damage (use photographs or videos).
- 1023 • Commission immediate emergency pumping/repair work if necessary, to protect your  
1024 property from further damage. Check that you can do this without your insurance  
1025 company’s approval.
- 1026 • Keep receipts of work paid for.
- 1027 • Where detailed or lengthy repairs needed, get advice. Your insurer or loss adjuster can  
1028 give advice on reputable contractors/tradesmen. Always check references of tradesmen.

- 1029 • Check with your insurer regarding cost of alternative accommodation, if you need to  
1030 move out. Make sure the insurer knows where to contact you.

1031 **Cleaning up**

- 1032 • Find out where you can get help to clean up. Look on the internet for suppliers of  
1033 cleaning materials and equipment to dry out your property. As a guide, it can take a  
1034 brick house one month per inch to dry out.
- 1035 • Don't attempt to dry out photos or papers – place in a plastic bag and if possible store in  
1036 a fridge
- 1037 • The Citizens Advice Bureau may be able to help.
- 1038 • **Don't think flooding will not happen again – restock supplies and review your plan!**

1039 **Advice and information**

- 1040 • List useful telephone numbers and website - including responsible persons, emergency  
1041 contacts, utilities providers, insurance companies and sources of information such as the  
1042 local radio station. A copy could be included in the flood kit.
- 1043 • Provide residents/tenants with information on how to register with the Environment  
1044 Agency's Floodline Warnings Direct service.
- 1045 • Display notices within properties (translated where foreign visitors may be present),  
1046 outlining procedures to be followed, escape routes and evacuation plans.
- 1047 • Review your FRP regularly.

1048 **Chapter 4: Flood Response plan checklist**

1049 The following table is a summary of this FRP. Please use it as a checklist for when you  
 1050 produce your FRP. Include this checklist as part of your FRP, perhaps as an appendix. Please  
 1051 complete it with details such as page number or explanatory text. This checklist does not  
 1052 constitute your FRP – it is a summary and simply a checklist to help you produce a robust  
 1053 FRP.

<b>Have you done these things?</b>	<b>Checklist</b>
Liased with neighbours about responding to flood event	
Registered for flood warnings	
Identified anyone who will need extra assistance	
Identified a safe refuge	
Identified a safe escape route	
Made a flood kit	

<b>Does your FRP address these things?</b>	<b>Checklist</b>
Description and location of site	
Date FRP produced	
Warning arrangements	
How instructions will be given	
What you can do to be pro-active	
Identify escape routes, local evacuation centre and local emergency coordinator	
How tenants/occupiers will be made aware of the FRP including the safe refuge, escape route and flood kit	
Actions at each level of flood alert	
What will be in your flood kit	
Dangers of flood water	
Re-occupation procedure	
List useful telephone numbers and website	
Review after a flood event	

<b>Other things to address:</b>	<b>Checklist</b>
How often will you review the FRP?	
How will you tell your tenants/occupiers about the FRP and escape routes?	
Where will important information be displayed?	
Have you put your flood kit together?	
Where is the flood kit stored?	

1054 **Appendix 2– Flood Risk Assessment tick sheet**

1055 **Flood Risk Assessments for Householder and other minor extensions in Flood Zones 2 & 3**

1056 Applications for planning permission within either Flood Zones 2 & 3 should be  
1057 accompanied by a flood risk assessment. This guidance is for domestic applications and non-  
1058 domestic extensions where the additional footprint created by the development does not  
1059 exceed 250 sq. metres (minor development<sup>35</sup>). It does NOT apply if an additional dwelling is  
1060 being created e.g. a self-contained annex. This Tick Sheet is consistent with the Environment  
1061 Agency’s Standing Advice. It is a pragmatic and proportionate response to low risk  
1062 developments in order to reduce the burden on applicants, the LPA and consultees.

1063 Make sure that **floor levels are either no lower than existing floor levels or 300 millimetres**  
1064 **(mm) above the estimated flood level.** If your floor levels aren’t going to be 300mm above  
1065 existing flood levels, you will need to consider appropriate flood resistance and resilience  
1066 measures. If floor levels are proposed to be set lower than existing floor levels they should  
1067 be above the known or modelled 1 in 100 annual probability river flood (1%) or 1 in 200  
1068 annual probability sea flood (0.5%) in any year.

1069 Further information and guidance on flood resistance and resilience measures is available in  
1070 the Flood Risk SPD and here [https://www.gov.uk/guidance/flood-risk-assessment-in-flood-](https://www.gov.uk/guidance/flood-risk-assessment-in-flood-zones-2-and-3#extra-flood-resistance-and-resilience-measures)  
1071 [zones-2-and-3#extra-flood-resistance-and-resilience-measures](https://www.gov.uk/guidance/flood-risk-assessment-in-flood-zones-2-and-3#extra-flood-resistance-and-resilience-measures) [Flood risk assessment in flood](https://www.gov.uk/guidance/flood-risk-assessment-in-flood-zones-2-and-3#extra-flood-resistance-and-resilience-measures)  
1072 [zones 2 and 3 - extra flood resistance and resilience measures \(www.gov.uk\)](https://www.gov.uk/guidance/flood-risk-assessment-in-flood-zones-2-and-3#extra-flood-resistance-and-resilience-measures) &  
1073 <https://www.gov.uk/government/publications/flood-resilient-construction-of-new-buildings>  
1074 [Flood resilient construction of new buildings - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/flood-resilient-construction-of-new-buildings)

1075 State in your Flood Risk Assessment all levels in relation to Ordnance Datum (the height  
1076 above average sea level). You may be able to get this information from the Ordnance  
1077 Survey<sup>36</sup>. If not, you’ll need to get a land survey carried out by a qualified surveyor.

1078 **Applicants/Agents: Please complete the table overleaf and include it with the planning**  
1079 **application submission. The table, together with a plan showing the finished floor levels**  
1080 **and estimated flood levels, will form the Flood Risk Assessment (FRA) and will act as an**  
1081 **assurance to the Local Planning Authority that flood risk issues have been adequately**  
1082 **addressed.**

1083 You may be able to get the estimated flood level from the Environment Agency. Please  
1084 contact [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk). If not, you’ll need a flood risk specialist  
1085 to calculate this for you.

1086 You can use the Tick Sheet over page or provide your written flood risk assessment in  
1087 another format but it must include the relevant plans, surveys and assessments.  
1088 Any proposed works or structures, in, under, over or within 8m of the top of the bank of a  
1089 main river, or 16m of a tidal main river, may require a permit under the Environmental  
1090 Permitting (England and Wales) Regulations 2010 from the Environment Agency. This was

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<sup>35</sup> Minor development in relation to flood risk: <http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/what-is-meant-by-minor-development-in-relation-to-flood-risk/> [Flood risk and coastal change - What is meant by “minor development” in relation to flood risk? \(www.gov.uk\)](http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/what-is-meant-by-minor-development-in-relation-to-flood-risk/)

<sup>36</sup> OS MAPS <https://www.ordnancesurvey.co.uk/>

1091 formerly called a Flood Defence Consent. Some activities<sup>37</sup> are also now excluded or  
 1092 exempt. A permit is separate to and in addition to any planning permission granted. Also  
 1093 note that a Marine Management Organisation Marine Licence may be required for works  
 1094 that are carried out on tidal rivers.

1095 Further details and guidance are available at: <https://www.gov.uk/guidance/flood-risk-activities-environmental-permits>  
 1096 ~~https://www.gov.uk/guidance/flood-risk-activities-environmental-permits~~ [Flood risk activities: environmental permits - GOV.UK](https://www.gov.uk/guidance/flood-risk-activities-environmental-permits)  
 1097 [www.gov.uk](https://www.gov.uk)). Or by contacting: [floodriskpermit@environment-agency.gov.uk](mailto:floodriskpermit@environment-agency.gov.uk)

1098 **Flood Risk Assessment**

1099 **Flood Risk Assessments for Householder and other minor extensions in Flood Zones 2 & 3**

<b>Applicant to choose one or other of the flood mitigation measures below</b>	<b>Applicant to indicate their choice in the box below. Enter 'yes' or 'no'</b>
<p><b>Either;</b>            Floor levels within the proposed development will be set no lower than existing levels AND, flood resilient and/or flood resistant measures have been incorporated in the proposed development where appropriate</p>	
<p><b>Or;</b>            Floor levels within the proposed development will be set 300mm above the known or modelled 1 in 100 annual probability river flood (1%) or 1 in 200 annual probability sea flood (0.5%) in any year. This flood level is the extent of the Flood Zones. Please remember to include a plan showing the finished floor levels and the estimated flood levels.</p>	

<b>Site Address</b>	
<b>Proposal Description</b>	
<b>Estimated flood level (i.e. The 1 in 100 year flood level)</b>	
<b>Details of flood resilience and resistance measures</b>	

1100

<sup>37</sup> ~~Flood risk activities: environmental permits~~ <https://www.gov.uk/guidance/flood-risk-activities-environmental-permits#check-if-what-you-are-doing-is-an-excluded-activity> [Flood risk activities: environmental permits - Exemptions \(www.gov.uk\)](https://www.gov.uk/guidance/flood-risk-activities-environmental-permits-exemptions)



1101 **Appendix 3: General principles for Sustainable Drainage Systems.**

1102 SuDS are expected to:

- 1103 1. Drain surface water and be integrated into the green infrastructure provision of the  
1104 development . Preference should be given to the installation of blue-green surface  
1105 infrastructure, as opposed to hardscape (artificial engineered solutions) or underground  
1106 solutions, which should be a last resort, due to the wider benefits attained from a  
1107 landscaped SuDS scheme;
- 1108 2. Integrate SuDS into the design of streets, public open spaces and parking as visually  
1109 appealing features that contribute to creating distinctive character to development.
- 1110 3. Where possible, incorporate 'blue corridors' to create a network that facilitates natural  
1111 hydrological processes that help to minimise flooding; this approach is also helpful for  
1112 the movement of wildlife;
- 1113 4. Restrict run-off rates to as close to the greenfield rates, or at the very minimum a  
1114 betterment of at least 30% over the brownfield run-off rates ;
- 1115 5. Contribute to the design quality of the scheme;
- 1116 6. Deliver sufficient and appropriate water quality and aquatic biodiversity improvements  
1117 wherever possible. This should be complementary of any local designations such as  
1118 Source Protection Zones;
- 1119 7. Where practical incorporate green roofs and/or rainwater harvesting systems (which  
1120 could be used on their own for the collection of rainwater in water butts, or integrated  
1121 into a water recycling system for uses not requiring potable water, such as flushing  
1122 toilets);
- 1123 8. Should be designed to be safe to access. Where restrictions to access are required due  
1124 to an unavoidable safety concern, low impact barriers such as landscaping and an  
1125 appropriate planting scheme should be used instead of fencing, if possible.
- 1126 9. When deciding whether to incorporate a retention element (e.g. a pond with a  
1127 permanent minimum level of water) or detention element (e.g. a basin which is dry most  
1128 of the time, having been designed to completely drain within a maximum of 48 hours  
1129 after rainfall), the amenity benefits of either option should be carefully assessed within  
1130 the overall site context. For example, is there a publicly accessible blue infrastructure  
1131 within a walkable radius of the site, or is the community currently under served in this  
1132 regard. Is a detention basin more suited to the public open space to be provided;
- 1133 10. Should take account of any impacts on the historic environment, where applicable;
- 1134 11. Deliver environmental improvements including improvements to water quality,  
1135 biodiversity and flood risk;
- 1136 12. Create a more varied natural environment within the site. A SuDS scheme that contrasts  
1137 but has relationship with other green/blue infrastructure elements on site such as using  
1138 a 'rock garden' approach to add variety to what is otherwise a wooded network of green  
1139 features on site;
- 1140 13. Not connect to the foul system and should only connect to the combined or surface  
1141 water system in exceptional circumstances where there are no feasible alternatives. Foul  
1142 and surface water flows should also be separated.
- 1143 14. Contribute to the creation of green space, and improving the overall aesthetic quality  
1144 and enjoyment of the public space on site;

- 1145 15. Contribute to the overall habitat, food source and breeding spaces provided for  
1146 ecosystems to thrive on the site through the use of supportive flora;
- 1147 16. Improve biodiversity: increasing the amount of biodiversity able to be supported by the  
1148 site, potentially whilst also prioritising the needs of native and/or priority species,  
1149 through the use of supportive flora for new habitat creation;
- 1150 17. Inform and educate residents and visitors. This may be through the use of interpretation  
1151 / signage and/or, on larger sites, the establishment of nature trails (particularly where  
1152 the SuDS scheme is an integral part of a larger green/blue infrastructure plan for the  
1153 site);
- 1154 18. Lead to an improvement in the water quality of the surface run-off water  
1155 (environmental net gain);
- 1156 19. Provide overall space for play and leisure experiences by ensuring the landscaping  
1157 design is safe to access (most relevant to detention elements);
- 1158 20. Support the physical and mental health of future occupants by being integrated into and  
1159 having a relationship with other health and wellbeing amenities on site, for example,  
1160 creating a natural setting to encourage use of the site's nearby outdoor gym equipment  
1161 and trim trail/equipped area of play.
- 1162 21. Reduce the heat island effect of urban environments: creating urban cooling, particularly  
1163 where nature-based SuDS schemes include trees with significant canopy cover; the latter  
1164 is also linked to improving air quality;
- 1165 22. Enable easy site maintenance by being intentionally designed to be low-maintenance  
1166 and any necessary artificial elements (if relevant) easy to access and repair. Where  
1167 maintenance is required, integrate access and buffer zones into the wider landscape  
1168 design.
- 1169 23. Use surface level SuDS systems rather than below ground attenuation tanks or storage.
- 1170 24. Design SuDS to be multifunctional, for example as wildlife habitats, for formal or  
1171 informal recreation, for parking, and/or supporting community educational learning.
- 1172 25. Integrate SuDS into building design through including green, brown or blue roofs.
- 1173 26. Maximise the benefits to the sense of place, amenity and biodiversity;
- 1174 27. Provide attractive, biodiverse and non-buried systems;
- 1175 28. Maximise the amount of permeable and absorbent surfaces on the site.
- 1176 29. SuDS can also be used to harvest rainwater for use by on-site or adjacent community  
1177 green infrastructure such as allotments, community gardens, orchards, school gardens  
1178 or, where applicable to the mix of land uses present on the site, on-site land-based  
1179 enterprises (e.g. plant nurseries).

1180 **Sustainability Appraisal**

1181 SA objectives:

- 1182 • ENV1: To reduce the adverse effects of traffic (on roads and water).
- 1183 • ENV2: To safeguard a sustainable supply of water, to protect and improve water quality and to use water
- 1184 efficiently.
- 1185 • ENV3: To protect and enhance biodiversity and geodiversity.
- 1186 • ENV4: To conserve and enhance the quality and local distinctiveness of landscapes and towns/villages.
- 1187 • ENV5: To adapt, become resilient and mitigate against the impacts of climate change
- 1188 • ENV6: To avoid, reduce and manage flood risk and to become more resilient to flood risk and coastal
- 1189 change.
- 1190 • ENV7: To manage resources sustainably through the effective use of land, energy and materials.
- 1191 • ENV8: To minimise the production and impacts of waste through reducing what is wasted, and re-using
- 1192 and recycling what is left.
- 1193 • ENV9: To conserve and enhance the cultural heritage, historic environment, heritage assets and their
- 1194 settings
- 1195 • ENV10: To achieve the highest quality of design that is innovative, imaginable, and sustainable and
- 1196 reflects local distinctiveness.
- 1197 • ENV11: To improve air quality and minimise noise, vibration and light pollution.
- 1198 • ENV12: To increase the proportion of energy generated through renewable/low carbon processes
- 1199 without unacceptable adverse impacts to/on the Broads landscape
- 1200 • SOC1: To improve the health and wellbeing of the population and promote a healthy lifestyle.
- 1201 • SOC2: To reduce poverty, inequality and social exclusion.
- 1202 • SOC3: To improve education and skills including those related to local traditional industries.
- 1203 • SOC4: To enable suitable stock of housing meeting local needs including affordability.
- 1204 • SOC5: To maximise opportunities for new/ additional employment
- 1205 • SOC6: To improve the quality, range and accessibility of community services and facilities and to ensure
- 1206 new development is sustainability located with good access by means other than a private car to a range
- 1207 of community services and facilities.
- 1208 • SOC7: To build community identity, improve social welfare and reduce crime and anti-social activity.
- 1209 • ECO1: To support a flourishing and sustainable economy and improve economic performance in rural
- 1210 areas.
- 1211 • ECO2: To ensure the economy actively contributes to social and environmental well-being.
- 1212 • ECO3: To offer opportunities for Tourism and recreation in a way that helps the economy, society and
- 1213 the environment.

Policy POSP2: Strategic flood risk policy

	A: Having a policy		B: No policy	
ENV1			Not having a policy does not mean that these issues will not be considered or addressed; a policy provides certainty.	
ENV2				
ENV3	+	Policy refers to biodiversity and habitats.		?
ENV4				
ENV5	+	Flooding is likely to get worse as a result of climate change.		?
ENV6	+	Policy relates to flooding.		?
ENV7				
ENV8				
ENV9				
ENV10				
ENV11				
ENV12				
SOC1	+	Flooding impacts health and wellbeing.		?
SOC2				
SOC3				
SOC4				
SOC5				
SOC6				
SOC7				
ECO1				
ECO2				
ECO3				

Policy DM5: Development and flood risk

	A: Original policy	B: Preferred Option - amend policy	C: No policy
ENV1			
ENV2			
ENV3	+ Policy refers to biodiversity and habitats.	+ Policy refers to biodiversity and habitats.	?
ENV4			
ENV5	+ Flooding is likely to get worse as a result of climate change.	+ Flooding is likely to get worse as a result of climate change.	?
ENV6	+ Policy relates to flooding.	+ Policy relates to flooding.	?
ENV7			
ENV8			
ENV9			
ENV10	+ Generally, design is an important consideration when addressing flood risk.	+ Generally, design is an important consideration when addressing flood risk.	?
ENV11			
ENV12			
SOC1	+ Flooding impacts health and wellbeing.	+ Flooding impacts health and wellbeing.	?
SOC2			
SOC3			
SOC4			
SOC5			
SOC6			
SOC7			
ECO1			
ECO2			
ECO3			

Not having a policy does not mean that these issues will not be considered or addressed; a policy provides certainty.

1214

Policy DM6: Surface water run-off

	A: Original policy		B: Preferred Option - amend policy		C: No policy	
ENV1						
ENV2						
ENV3	+	Policy refers to biodiversity and habitats.	+	Policy refers to biodiversity and habitats.	?	Not having a policy does not mean that these issues will not be considered or addressed; a policy provides certainty.
ENV4	+	Design principles reflect public realm and landscape impact.	+	Design principles reflect public realm and landscape impact.	?	
ENV5	+	Flooding is likely to get worse as a result of climate change.	+	Flooding is likely to get worse as a result of climate change.	?	
ENV6	+	Policy relates to flooding.	+	Policy relates to flooding.	?	
ENV7						
ENV8						
ENV9	+	Design principles reflect impact on the historic environment.	+	Design principles reflect impact on the historic environment.	?	
ENV10	+	Generally, design is an important consideration when addressing flood risk and SuDS	+	Generally, design is an important consideration when addressing flood risk and SuDS	?	
ENV11						
ENV12						
SOC1	+	Flooding impacts health and wellbeing.	+	Flooding impacts health and wellbeing.	?	
SOC2						
SOC3						
SOC4						
SOC5						
SOC6						
SOC7						
ECO1						
ECO2						
ECO3						



**Local Plan for the Broads - Review  
Preferred Options bitesize pieces  
January 2024**

**Sites Specifics – Brundall Riverside**

This is a proposed draft section/policy for the Preferred Options Local Plan. Member’s comments and thoughts are requested. This policy is already in the local plan, but some amendments are proposed.

Amendments to improve the policy are shown as follows: ~~text to be removed~~ and added text.

There is an assessment against the UN Sustainable Development Goals at the end of the policy.

The proposed Sustainability Appraisal of the policy is included at the end of the document. This would not be included in the Preferred Options Local Plan itself; this table would be part of the Preferred Options Sustainability Appraisal but is included here to show how the policy and options are rated.

The currently adopted policy remains in place – these are proposed amendments, and this section will form part of the Preferred Options version of the Local Plan.

1 **Policy POBRU1: Riverside chalets and mooring plots**

2 **Policy Map xx - [3.-BRUNDALL.pdf \(broads-authority.gov.uk\)](#)**

- 3 1. The area of riverside chalet and mooring plots will be managed to retain its contribution to the  
4 enjoyment and economy of the Broads, and to the river scene.
- 5 2. Further development will be limited by the area’s vulnerability to flooding and the retention of  
6 its semi-rural and holiday character.
- 7 3. Permission will not be granted for:  
8 a) New permanent residential dwellings;  
9 b) New holiday homes;  
10 c) The use as permanent dwellings of buildings restricted to holiday or day use;  
11 d) The use for holiday or permanent occupation of buildings constructed as day huts, boatsheds or  
12 temporary buildings; or  
13 e) The stationing of caravans.
- 14 4. Extensions to existing buildings, and replacement buildings, will be permitted provided that:  
15 a) The building and use proposed comply with policies for development in areas of flood risk;  
16 b) The design, scale, materials and landscaping of the development:  
17 i) [Meet the requirements of the Design Guide \(or successor document\) and DM43](#);  
18 ii) Contributes positively to the semi-rural and holiday character of the area;

- 19 iii) Pays appropriate regard to the amenity of nearby occupiers;
- 20 iv) Meet requirements of other policies in the Development Plan such as biodiversity
- 21 enhancements, dark skies, climate change adaptation and resilience, flood risk resilience and
- 22 energy and water efficiency;
- 23 v) Ensures that the extent of hard surfacing does not dominate the plot and where provided is
- 24 permeable; and
- 25 vi) Provides additional landscape planting where practicable and having regard to navigation
- 26 interests;
- 27 c) Care is to be taken to avoid over-development of plots, and in particular:
- 28 i) A significant proportion of the plot area (excluding mooring areas) should remain un-built;
- 29 ii) Buildings should not occupy the whole width of plots;
- 30 iii) Buildings should be kept well back from the river frontage; and
- 31 iv) Buildings should be of single storey of modest height. This may limit room heights where floor
- 32 levels need to be raised to meet flood risk mitigation requirements.
- 33 5. Applications to vary existing occupancy conditions that allow less than 12 months holiday use to
- 34 allow 12 months holiday use will be permitted as long as the building remains in holiday use
- 35 only and is not used as the sole or main residence.

### 36 **Constraints and features**

- 37 • Whole area at serious risk of flooding (zones 2 & 3 by EA mapping, zone indicative 3b by SFRA
- 38 2017 mapping).
- 39 • Road access is via a railway level crossing, limited in width and alignment, and at risk of
- 40 flooding.
- 41 • Area is just across river from Site of Special Scientific Interest (SSSI).
- 42 • Article 4 Direction (1954) removes all Permitted Development Rights.

### 43 **Reasoned justification**

44 The chalets make an important contribution to the enjoyment of the Broads and to the local

45 economy. However, the management of incremental development of the Riverside Estate area,

46 including that covered by this policy, has been contentious and problematic since at least the

47 1950s.

48 Further development of the area is largely constrained by national flood risk policies, together with

49 landscape and visual amenity considerations. The policy continues to support adaptation and

50 updating of the existing chalets and retain its best features, while avoiding increases in flood risk.

51 Proposals will need to meet the requirements of policy DM22, as the Brundall riverside area

52 generally has good dark skies.

53 The Environment Agency supports the intention to keep buildings back from the river frontage.

54 While 'well back' is difficult to define and depends on particular local circumstances, in general

55 setting the building back by a third of a plot could be appropriate. Being hard up or too close to the

56 water's edge could enclose the river and be overbearing. Setting of buildings with an undeveloped

57 area in front will also allow architectural interest of buildings to be appreciated.

### 58 **Reasonable alternative options**

- 59 a) No policy



60 b) Original policy

61 **Sustainability appraisal summary**

62 The options of no policy, the original policy and amended policy have been assessed in the SA. The  
63 following is a summary.

A: Original policy	5 positives. 0 negatives. 0 ? Overall, positive.
B: Amended policy	8 positives. 0 negatives. 0 ? Overall, positive.
B: No policy	0 positives. 0 negatives. 8 ?

64 **Why has the alternative option been discounted?**

65 Given that the management of incremental development of the Riverside Estate area, including  
66 that covered by this policy, has been contentious and problematic since at least the 1950s, a policy  
67 is prudent. The amendments highlight the importance of design as well as cross refers to other  
68 important policies.

69 **UN Sustainable Development Goals check**

70 This policy meets these [UN SD Goals](#):

**11 SUSTAINABLE CITIES  
AND COMMUNITIES**



71 **Policy POBRU2: Riverside Estate Boatyards, etc., including land adjacent to railway line**  
72 **Policy Map 3 - [3.-BRUNDALL.pdf \(broads-authority.gov.uk\)](#)**

- 73 1. In this area, the development and retention of the boatyards and related uses will be supported  
74 and Broads Local Plan policies on general employment and boatyards in the economy section  
75 will apply.
- 76 2. Full regard will be given to the limitations of the road access, avoidance of potential water  
77 pollution, and the risk of flooding to the site.
- 78 3. All proposals are required to meet the requirements of the Design Guide and DM43.
- 79 4. Proposals are encouraged to:  
80 a) Include provision for public moorings.  
81 b) Include provision for appropriate public access to the river to allow the public to appreciate the  
82 area.  
83 c) Include slipways.
- 84 5. The Authority encourages and supports master planning to guide development of larger  
85 boatyards in the area.
- 86 6. Proposals will need to meet requirements of other policies in the Development Plan such as  
87 biodiversity enhancements, dark skies, climate change adaptation and resilience, flood risk  
88 resilience and energy and water efficiency.
- 89 7. Retention of existing, and provision of new or replacement landscape planting, including trees  
90 and nectar-mixes, will be encouraged. The type and location of planting should have regard to  
91 limiting wind shadow on the river in the interests of sailing.

92 **Constraints and features**

- 93 • Whole area at serious risk of flooding (zones 2 & 3 by EA mapping and zone 2 and indicative 3b  
94 by SFRA 2017 mapping).
- 95 • Road access is constrained, especially to the southeastern portion of the area.
- 96 • Area is close to SSSI, SAC, SPA, Ramsar site.
- 97 • Article 4 Direction (southern portion only) (1954) – removes all PD Rights.

98 **Reasoned Justification**

99 The boatyards and associated developments contribute to navigation and to the character,  
100 enjoyment, and traditional skills of the Broads. The policy seeks to encourage the retention and  
101 adaptation of the existing uses, providing scope for new development including diversification. This  
102 will help secure these important uses, while balancing these objectives with the flood risk and  
103 infrastructural limitations of the area.

104 The Environment Agency confirms that boatyard uses are compatible with the flood risk to the site.  
105 A small part of the area is outside the higher flood risk zones and potentially less constrained, and  
106 the application of national flood risk policy would steer any vulnerable uses to this part of the site.  
107 However, any development that relied on this lower risk for acceptability would need to be

108 supported by a site flood risk appraisal and take into account the higher flood risk to the  
109 surroundings (see section on Dry Islands of the Flood Risk policies), including the road access. The  
110 Environment Agency also highlights the need to address the risks of water pollution for waterside  
111 sites in industrial/boatyard use.

112 A measure of appropriate planting within the constraints of the business use of the site will help  
113 soften the visual impact of the buildings and boats on the local landscape, and strengthen the  
114 biodiversity of the Broads, within the constraints of the business use of the site.

115 Norfolk County Council as Highways Authority has indicated that because of the access constraints  
116 (the road and level crossing) they would not support residential moorings at this site.

117 The policy encourages greater public access to appreciate the river scene. It also seeks more public  
118 moorings and more slipways to access the water.

119 Larger operators are encouraged to undertake master planning to help plan future changes to sites.

120 Proposals will need to meet the requirements of policy DM22 as the Brundall Riverside area  
121 generally has good dark skies.

#### 122 **Reasonable alternative options**

- 123 a) No policy
- 124 b) Original policy

#### 125 **Sustainability appraisal summary**

126 The options of no policy, the original policy and amended policy have been assessed in the SA. The  
127 following is a summary.

A: Original policy	9 positives. 0 negatives. 0 ? Overall, positive.
B: Amended policy	11 positives. 0 negatives. 0 ? Overall, positive.
B: No policy	0 positives. 0 negatives. 11 ?

#### 128 **Why has the alternative option been discounted?**

129 The boatyards and associated developments contribute to navigation and to the character,  
130 enjoyment, and traditional skills of the Broads and therefore a policy is prudent. The amendments  
131 cross refer to other important relevant policies and seeks improved public access to the area.

#### 132 **UN Sustainable Development Goals check**

133 This policy meets these [UN SD Goals](#):

134 None identified.

## Sustainability Appraisal

### SA objectives:

- ENV1: To reduce the adverse effects of traffic (on roads and water).
- ENV2: To safeguard a sustainable supply of water, to protect and improve water quality and to use water efficiently.
- ENV3: To protect and enhance biodiversity and geodiversity.
- ENV4: To conserve and enhance the quality and local distinctiveness of landscapes and towns/villages.
- ENV5: To adapt, become resilient and mitigate against the impacts of climate change
- ENV6: To avoid, reduce and manage flood risk and to become more resilient to flood risk and coastal change.
- ENV7: To manage resources sustainably through the effective use of land, energy and materials.
- ENV8: To minimise the production and impacts of waste through reducing what is wasted, and re-using and recycling what is left.
- ENV9: To conserve and enhance the cultural heritage, historic environment, heritage assets and their settings
- ENV10: To achieve the highest quality of design that is innovative, imaginable, and sustainable and reflects local distinctiveness.
- ENV11: To improve air quality and minimise noise, vibration and light pollution.
- ENV12: To increase the proportion of energy generated through renewable/low carbon processes without unacceptable adverse impacts to/on the Broads landscape
- SOC1: To improve the health and wellbeing of the population and promote a healthy lifestyle.
- SOC2: To reduce poverty, inequality and social exclusion.
- SOC3: To improve education and skills including those related to local traditional industries.
- SOC4: To enable suitable stock of housing meeting local needs including affordability.
- SOC5: To maximise opportunities for new/ additional employment
- SOC6: To improve the quality, range and accessibility of community services and facilities and to ensure new development is sustainability located with good access by means other than a private car to a range of community services and facilities.
- SOC7: To build community identity, improve social welfare and reduce crime and anti-social activity.
- ECO1: To support a flourishing and sustainable economy and improve economic performance in rural areas.
- ECO2: To ensure the economy actively contributes to social and environmental well-being.
- ECO3: To offer opportunities for Tourism and recreation in a way that helps the economy, society and the environment.

Policy POBRU1: Riverside chalets and mooring plots

	A: Original policy	B: Preferred Option - amend policy	C: No policy
ENV1			
ENV2		+ Policy cross refers to water efficiency policy.	?
ENV3		+ Policy cross refers to natural environment policy.	?
ENV4	+ Policy refers to design and character of the area.	+ Policy refers to design and character of the area.	?
ENV5	+ Policy refers to flood risk.	+ Policy refers to flood risk as well as adapting and becoming resilient to climate change.	?
ENV6	+ Policy refers to flood risk.	+ Policy refers to flood risk.	?
ENV7			
ENV8			
ENV9			
ENV10	+ Policy refers to design and character of the area.	+ Policy refers to design and character of the area.	?
ENV11		+ Policy cross refers to light pollution policy.	?
ENV12			
SOC1			
SOC2			
SOC3			
SOC4			
SOC5			
SOC6			
SOC7			
ECO1	+ Generally, the thrust of the policy will enable the area to support the local economy.	+ Generally, the thrust of the policy will enable the area to support the local economy.	?
ECO2			
ECO3			?

Not having a policy does not mean that these issues will not be considered or addressed; a policy provides certainty.

Policy BRU2: Riverside Estate Boatyards, etc., including land adjacent to railway line

	A: Original policy		B: Preferred Option - amend policy		C: No policy	
ENV1	+	Policy reflects the access constraints.	+	Policy reflects the access constraints.	?	Not having a policy does not mean that these issues will not be considered or addressed; a policy provides certainty.
ENV2	+	Policy refers to water pollution.	+	Policy refers to water pollution. Policy cross refers to water efficiency policy.	?	
ENV3			+	Policy cross refers to natural environment policy.	?	
ENV4						
ENV5	+	Policy refers to flood risk.	+	Policy refers to flood risk as well as adapting and becoming resilient to climate change.	?	
ENV6	+	Policy refers to flood risk.	+	Policy refers to flood risk.	?	
ENV7						
ENV8						
ENV9						
ENV10	+	Policy refers to design and character of the area.	+	Policy refers to design and character of the area.	?	
ENV11			+	Policy cross refers to light pollution policy.	?	
ENV12						
SOC1						
SOC2						
SOC3	+	The land uses covered by the policy tend to be boatyards.	+	The land uses covered by the policy tend to be boatyards.	?	
SOC4						
SOC5						
SOC6						
SOC7						
ECO1	+	The land uses covered by the policy tend to be boatyards and this policy guides how those sites can develop.	+	The land uses covered by the policy tend to be boatyards and this policy guides how those sites can develop.	?	
ECO2	+		+		?	
ECO3	+		+		?	



**Local Plan for the Broads - Review  
Preferred Options bitesize pieces  
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**POTTER HEIGHAM BRIDGE**

This is a proposed draft section/policy for the Preferred Options Local Plan. Member's comments and thoughts are requested. This policy is already in the local plan, but some amendments are proposed.

Amendments to improve the policy are shown as follows: ~~text to be removed~~ and added text.

There is an assessment against the UN Sustainable Development Goals at the end of the policy.

The proposed Sustainability Appraisal of the policy is included at the end of the document. This would not be included in the Preferred Options Local Plan itself; this table would be part of the Preferred Options Sustainability Appraisal but is included here to show how the policy and options are rated.

**Policy POT1: Bridge Area**

**Policy Map 15: [15.-POTTER-HEIGHAM.pdf \(broads-authority.gov.uk\)](#)**

1. The area around Potter Heigham Bridge, as identified on the Adopted Policies Map, will be further developed and enhanced as a location for river related leisure and tourism to reflect flood risk in the area.
2. Within this area identified on the Adopted Policies Map:
  - i) Public realm and landscaping improvements are welcomed;
  - ii) Biodiversity enhancements will be expected;
  - iii) Appropriate measures to address surface water and fluvial flooding and improve resilience to flooding will be supported;
  - iv) New residential development will not be permitted; and
  - v) The amenity of existing residential occupiers will be protected.
3. New development should not harm Potter Heigham Bridge or its setting as a Scheduled Monument and Grade II\* listed building.
4. Proposals will be designed to avoid contributions to light pollution and address existing sources of light pollution.
5. In addition, the relevant policies of the Local Plan will apply with the following provisos:
  - a) At the Staithe:
    - i) Particular care will be taken to achieve improvements to the appearance and public realm of the area;
    - ii) Development which provides facilities supporting recreation and tourism will be supported; and

- 22 iii) Care will be taken to generally limit loss of existing car parking provision, and to ensure  
23 adequate car and cycle parking is provided to serve new facilities.
- 24 ~~b) At the former Bridge Hotel site:~~ At the southern bank area:
- 25 i) Particular care will be taken to achieve improvements to the appearance and public realm  
26 of the area;
- 27 ii) Proposals that are appropriate to the site's location in terms of flood risk and proximity to the  
28 Bridge will be supported.
- 29 ~~iii) Development which provides facilities supporting recreation and tourism will be supported; and~~  
30 ~~e) New holiday accommodation will only be permitted as part of a comprehensive scheme for the~~  
31 ~~site which includes other appropriate recreation and tourism related provisions.~~
- 32 d) At the large retail outlet:
- 33 i) The retail use of this site will be protected;
- 34 ii) Appropriate and well-designed improvements or changes to the site will be supported; and
- 35 iii) Care will be taken to avoid loss of existing levels of car parking provision, and to ensure  
36 adequate car and cycle parking is provided to serve these facilities.
- 37 6. In terms of traffic management in the area, opportunities to review the traffic management  
38 infrastructure and routes through and around the area in order to improve amenity and safety  
39 and better respect the historic bridge will be welcomed.

#### 40 **Constraints and features**

- 41 • Potter Heigham Bridge is a scheduled ancient monument and Listed Grade II\* building.
- 42 • Area close to SAC, SPA, SSSI, RAMSAR.
- 43 • Flood risk zones 2 & 3 by EA mapping; zones 1, 2, 3a, modelled 3b and indicative 3b by SFRA  
44 2017 mapping).
- 45 • Potential archaeological interest.
- 46 • Local Green Space nearby – Bridge Green.

#### 47 **Reasoned Justification**

48 The area around Potter Heigham Bridge is one of the most popular areas for visitors to the Broads.  
49 A range of attractions, including boatyards, cafe, public house, restaurant, shops, moorings and  
50 slipway, combined with direct access to and views of the River Thurne, contribute to its appeal.

51 Car parking in the area is privately controlled. With the number of visitors, boat hirers, workers and  
52 chalet occupiers wishing to park in the area, there is potential for the parking provision to come  
53 under significant pressure, particularly at peak times. Provision of further car parking is problematic  
54 given the sensitivity of the area. It is therefore important to make sure that none of the existing  
55 capacity is lost. The policy also seeks the provision of improved cycle parking of a useful design in  
56 accessible locations to aid visitors by means other than motor cars.

57 While environmental improvements and some upgrading of premises have occurred in recent  
58 years, there remains scope for further improvements and development. In particular the site of the  
59 former Bridge Hotel, at the southern end of the bridge, would benefit from a more attractive and  
60 permanent redevelopment that reflects its constraints, in particular flood risk and location near to  
61 the Bridge.



62 Parts of the area are at risk of flooding. The relevant Local Plan and National Planning Policy  
63 Framework policies will apply, and a site flood risk assessment may be required to establish the  
64 degree of risk.

65 The large retail outlet is an important visitor attraction in the area, drawing visitors from around  
66 the county and beyond. The policy seeks to protect this land use and allow appropriate and well-  
67 designed improvements or changes to the business.

68 The policy provides encouragement and guidance for further improvements and facilities for the  
69 area.

70 Proposals will need to meet the requirements of policy DM22 as the Potter Heigham Bridge area  
71 generally has good dark skies and is near to the area of darkest skies in the Broads.

72 Of particular relevance to changes in this area will be the Generic Retail Policy DM51.

73 **Reasonable alternative options**

74 a) The original policy, with no amendments.

75 b) No policy

76 **Sustainability appraisal summary**

77 The three options (of the amended policy, no policy and the original policy) have been assessed in  
78 the SA. The following is a summary.

A: Keep original policy	8 positives. 0 negatives. 0 ? Overall, positive.
B: Preferred Option - amend policy.	10 positives. 0 negatives. 0 ? Overall, positive.
C: No policy	0 positives. 0 negatives. 10 ? Overall, positive.

79 **How has the existing policy been used since adoption in May 2019?**

80 According to recent Annual Monitoring Reports, the policy has been used and schemes are in  
81 general conformity with the policies.

82 **Why have the alternative options been discounted?**

83 Given the importance of this area to the Broads and the local community and economy, a policy is  
84 prudent. The amendments emphasise the issue of flood risk as well as refers to traffic management  
85 in the area and the impact on the Bridge and is favoured.

86 **UN Sustainable Development Goals check**

87 This policy meets these [UN SD Goals](#):

None identified.

## Sustainability Appraisal

SA objectives:

- ENV1: To reduce the adverse effects of traffic (on roads and water).
- ENV2: To safeguard a sustainable supply of water, to protect and improve water quality and to use water efficiently.
- ENV3: To protect and enhance biodiversity and geodiversity.
- ENV4: To conserve and enhance the quality and local distinctiveness of landscapes and towns/villages.
- ENV5: To adapt, become resilient and mitigate against the impacts of climate change
- ENV6: To avoid, reduce and manage flood risk and to become more resilient to flood risk and coastal change.
- ENV7: To manage resources sustainably through the effective use of land, energy and materials.
- ENV8: To minimise the production and impacts of waste through reducing what is wasted, and re-using and recycling what is left.
- ENV9: To conserve and enhance the cultural heritage, historic environment, heritage assets and their settings
- ENV10: To achieve the highest quality of design that is innovative, imaginable, and sustainable and reflects local distinctiveness.
- ENV11: To improve air quality and minimise noise, vibration and light pollution.
- ENV12: To increase the proportion of energy generated through renewable/low carbon processes without unacceptable adverse impacts to/on the Broads landscape
- SOC1: To improve the health and wellbeing of the population and promote a healthy lifestyle.
- SOC2: To reduce poverty, inequality and social exclusion.
- SOC3: To improve education and skills including those related to local traditional industries.
- SOC4: To enable suitable stock of housing meeting local needs including affordability.
- SOC5: To maximise opportunities for new/ additional employment
- SOC6: To improve the quality, range and accessibility of community services and facilities and to ensure new development is sustainability located with good access by means other than a private car to a range of community services and facilities.
- SOC7: To build community identity, improve social welfare and reduce crime and anti-social activity.
- ECO1: To support a flourishing and sustainable economy and improve economic performance in rural areas.
- ECO2: To ensure the economy actively contributes to social and environmental well-being.
- ECO3: To offer opportunities for Tourism and recreation in a way that helps the economy, society and the environment.

## Assessment of policy

	A: Keep original policy	B: Preferred Option - amend policy	C: No policy
ENV1	+ Policy refers to the parking provision in the area.	+ Policy refers to the parking provision in the area. Also refers to traffic management in the area.	?
ENV2			
ENV3		+ Policy seeks biodiversity enhancements.	?
ENV4	+ Policy covers an area that is quite unique in character in the Broads.	+ Policy covers an area that is quite unique in character in the Broads.	?
ENV5		+ Policy refers to resilience.	?
ENV6	+ Policy refers to flood risk in the area.	+ Policy refers to flood risk in the area. Policy refers to resilience.	?
ENV7			
ENV8			
ENV9	+ Policy refers to the Bridge.	+ Policy refers to the Bridge.	?
ENV10			
ENV11	+ Policy includes reference to light pollution.	+ Policy includes reference to light pollution.	?
ENV12			
SOC1			
SOC2			
SOC3			
SOC4			
SOC5			
SOC6			
SOC7			
ECO1	+ Generally, the policy seeks	+ Generally, the policy seeks to	?
ECO2	+ to continue the types of	+ continue the types of land	?
ECO3	+ land uses that are there and these benefit to the economy and employment in the area.	+ uses that are there and these benefit to the economy and employment in the area.	?

Not having a policy does not mean that these issues will not be considered or addressed. A policy does however provide more certainty.



**Broads Local Plan**  
**Dark Skies topic Paper**  
**January 2024**

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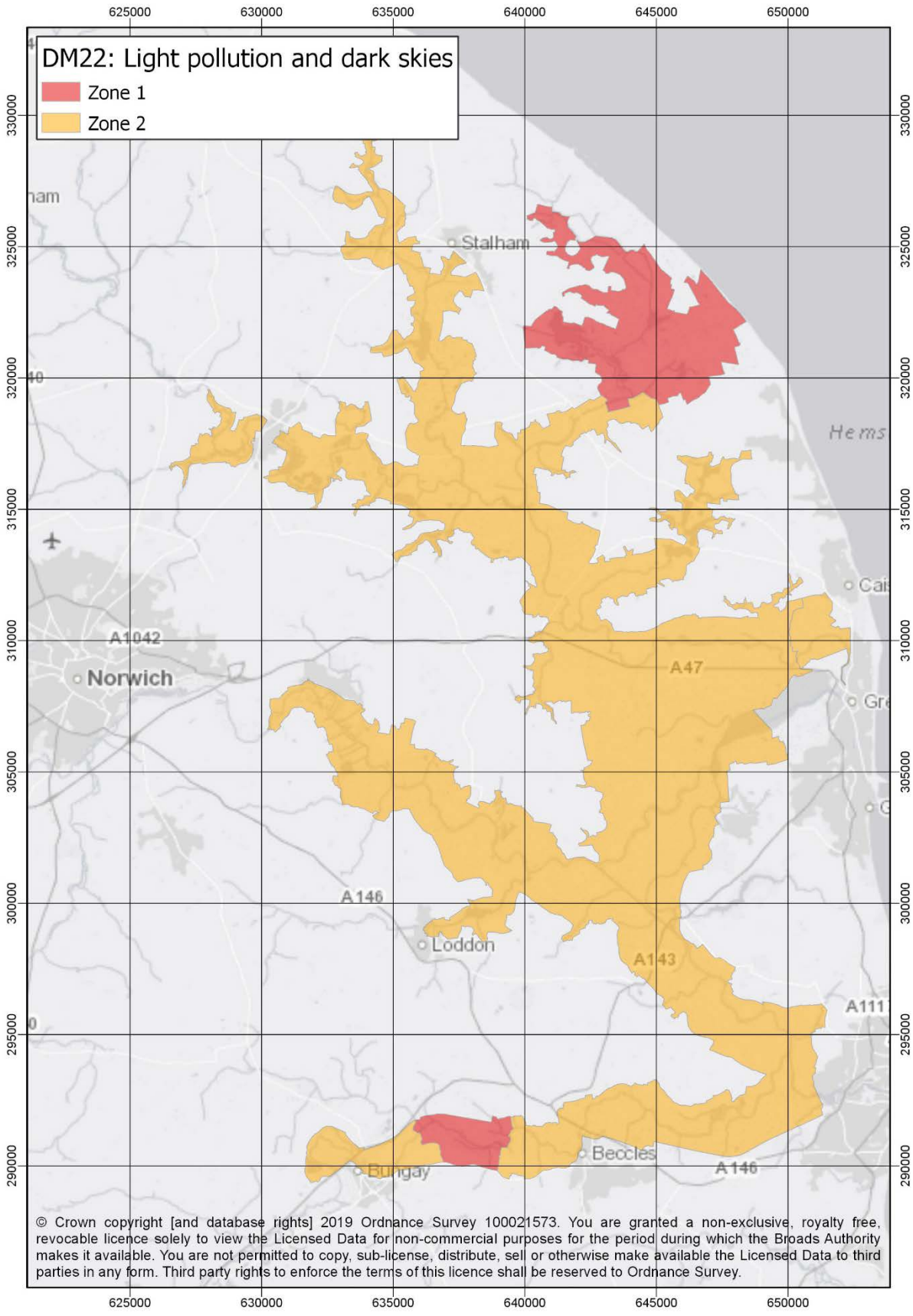
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**1. Introduction**

The Broads Authority has surveyed the dark skies of the Broads Authority Executive Area; the aim being to understand the quality of the dark skies in the Broads. The [2015/16 survey](#) identified that the Broads has intrinsically dark skies that need protecting. Indeed, a policy was included in the adopted Local Plan. Now that the Authority are reviewing the Local Plan, it is prudent to check that there are still dark skies of the Broads. This note provides detail on previous surveys as well as the sample testing of some sites in 2023.

**2. Assessment of the dark skies of the Broads – 2015/16**

Between October 2015 to March 2016 survey, 440 survey points around the Broads, on land and on water, were surveyed. The darkest areas were around the Hickling Broad and Heigham Holmes area as well as between Beccles and Bungay on the river Waveney. At the same time that the Authority were surveying by ‘looking up’, CPRE undertook work ‘looking down’ - [England's Light Pollution and Dark Skies Map \(cpre.org.uk\)](#). [The Dark Skies Topic Paper](#) explains in more detail the process and the findings and also combines the CPRE work with the Authority’s work. The dark skies map below was produced and subsequently included in the adopted Local Plan.



### **3. CPRE Night Blight data**

The other evidence ([Night Blight](#)) was completed by the CPRE in 2016 and used satellites to assess the light pollution around the whole country, by looking down at the earth. More information can be found here: [EB6-Assessment-of-Night-Blight-and-Dark-Skies-Survey-Data.pdf \(broads-authority.gov.uk\)](#).

### **4. Assessment of How Hill and St Benet's Abbey, 2021**

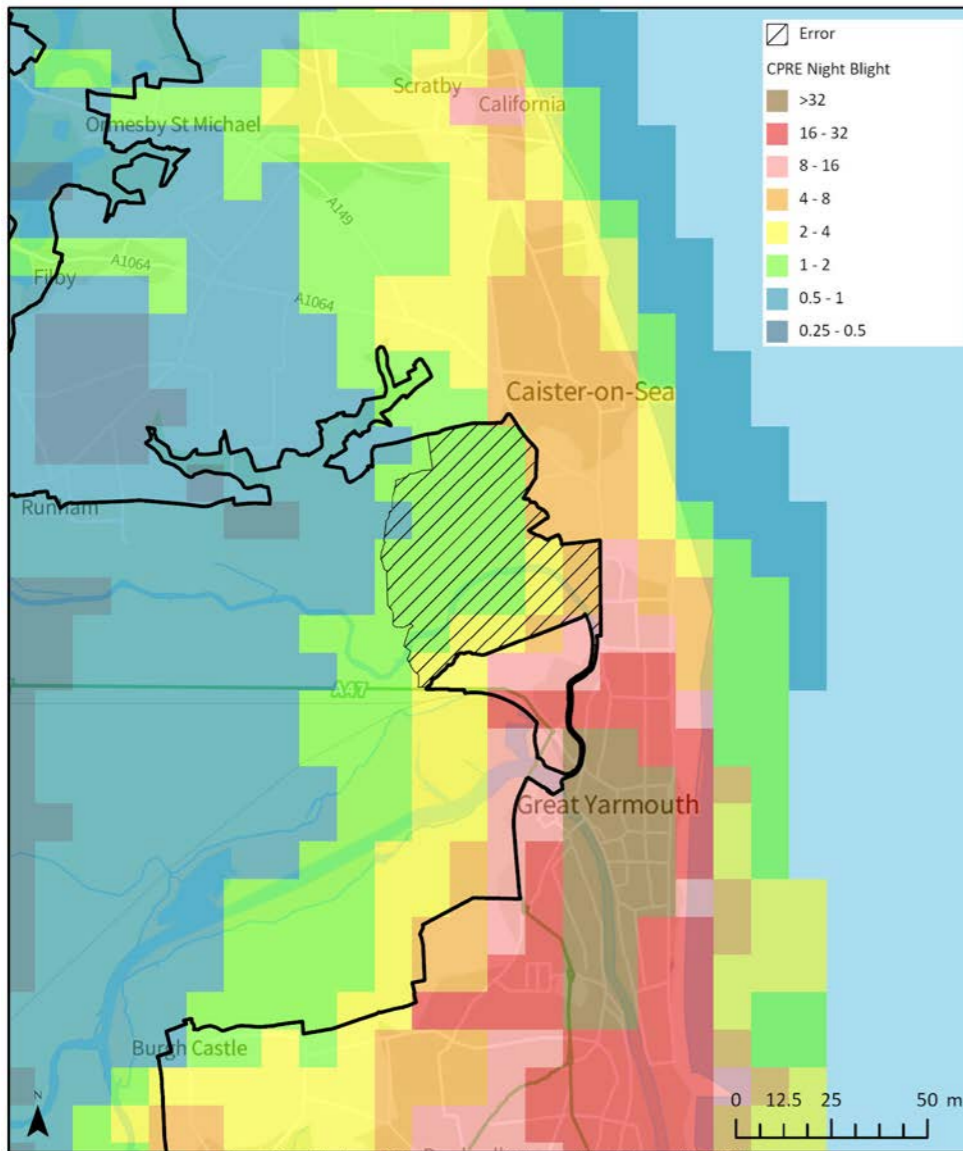
As part of the potential application for [Dark Sky Discovery Sites](#), some readings were taken in April 2021 at How Hill and St Benet's Abbey. These have been taken into consideration as part of the update/check of the dark skies of the Broads. The application was subsequently not progressed due to the scheme being paused because of resourcing issues.

### **5. Sampled assessment of the darkest areas of the Broads, 2023**

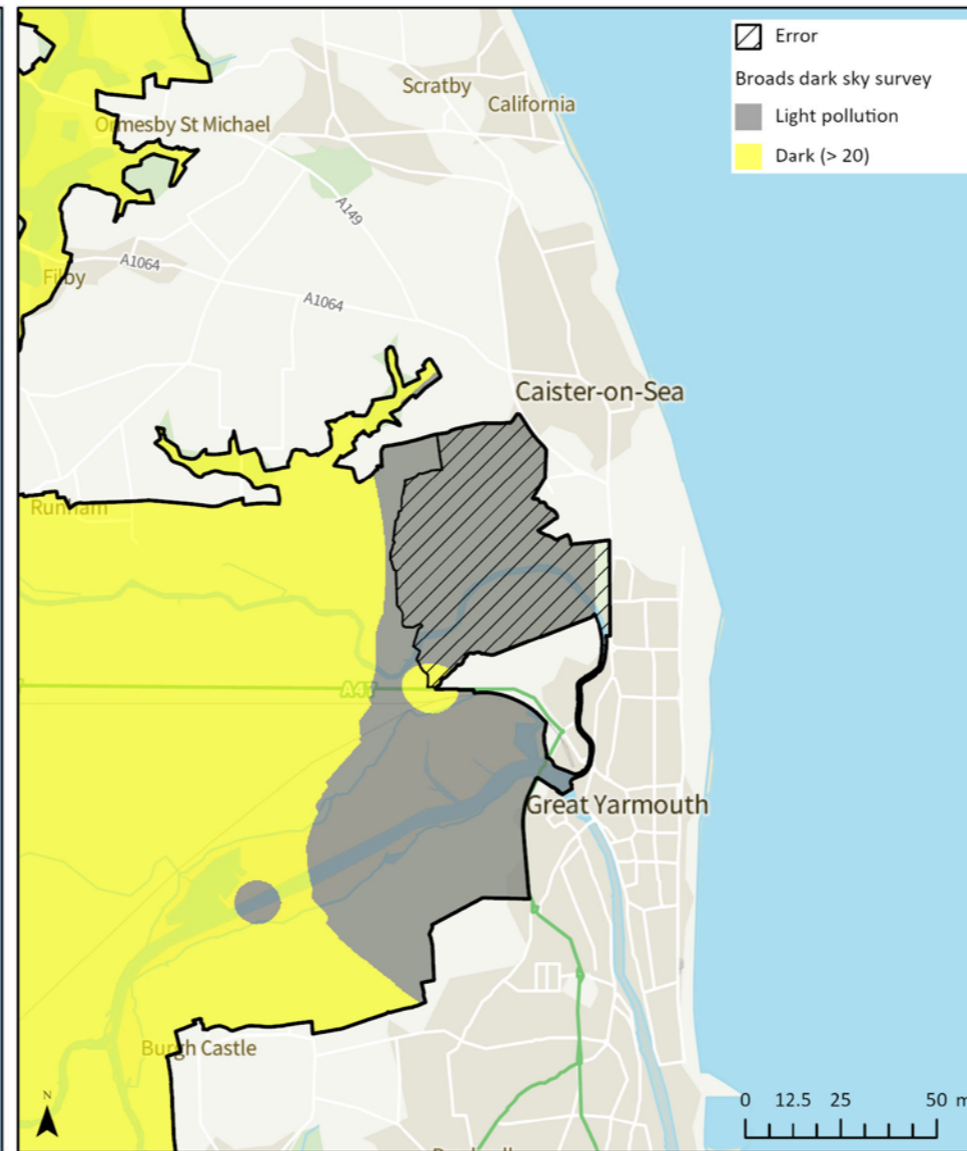
As part of the review of the Local Plan for the Broads, the Authority sample tested some survey points around the darkest areas of the Broads. The 2015/16, 2021 and 2023 data were mapped and compared with the CPRE work (as described previously). This work generally found that the readings were consistent with the 2015/16 survey.

### **6. Correction of error**

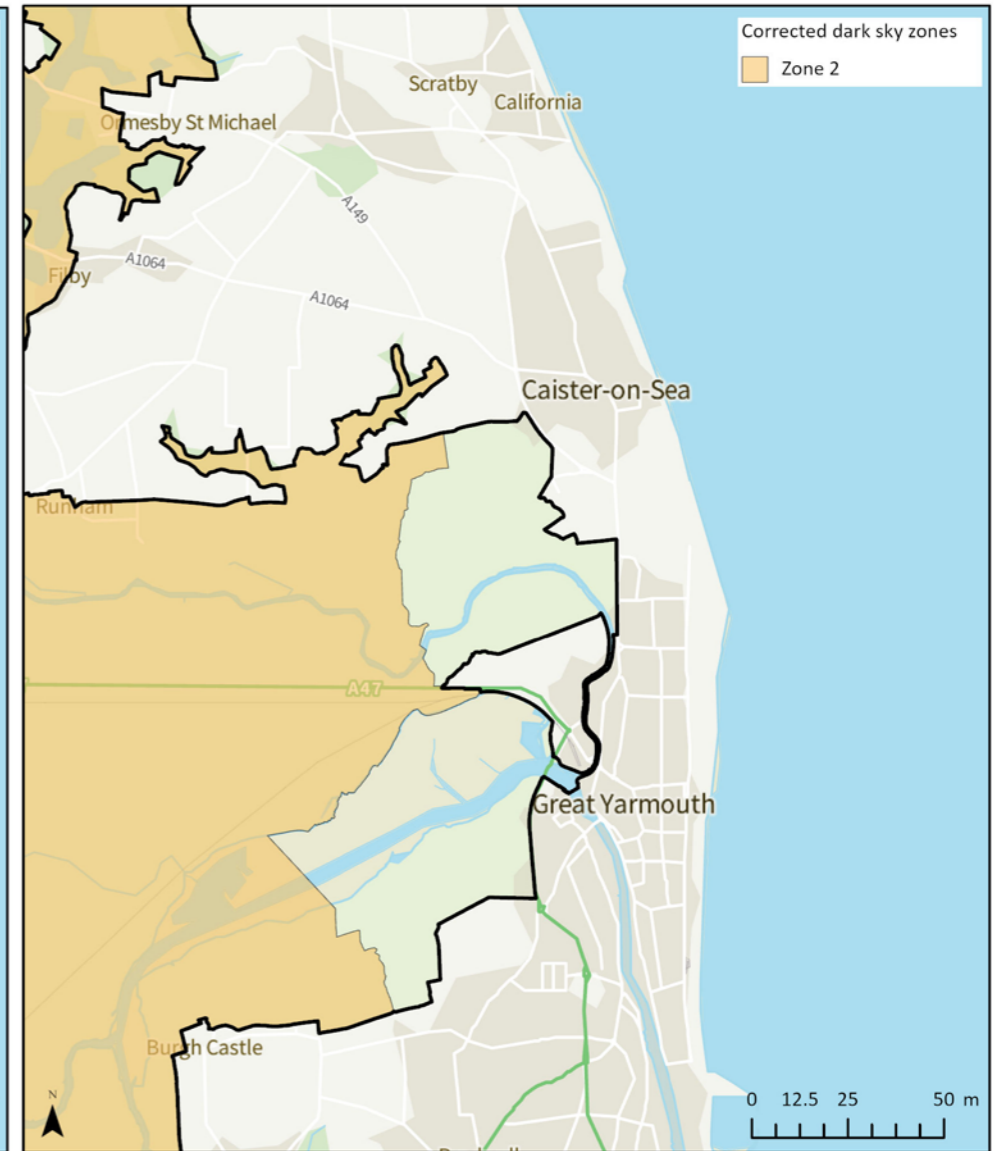
In the Local Plan for the Broads, an area near to Great Yarmouth is incorrectly classed as zone 2. The maps on the following pages show that according to our 2015/16 survey and the CPRE data, this area is not above 20 magnitudes per arc second and therefore should not be zone 2. The map at the end of this document corrects this error.



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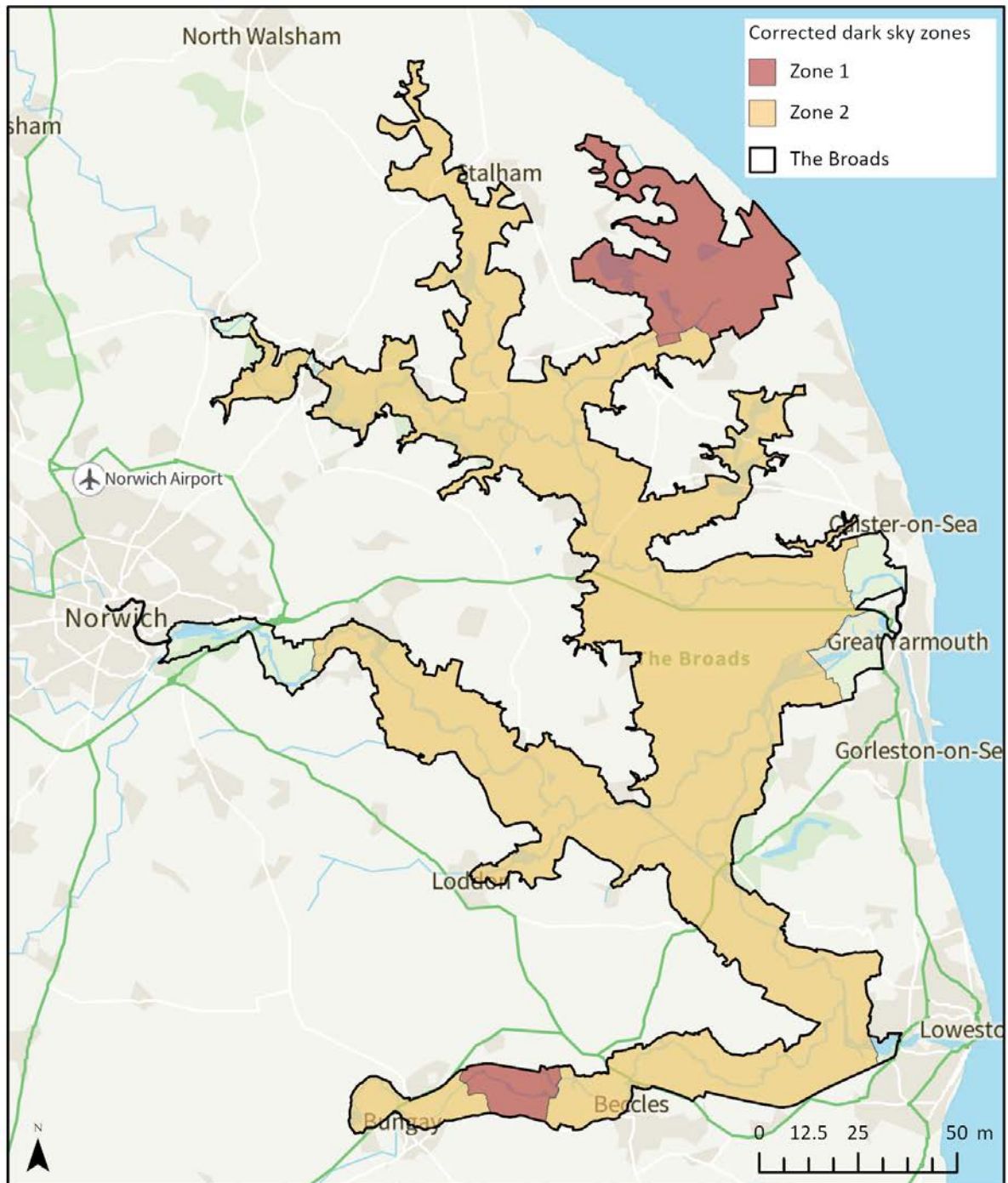
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## 7. Summary and conclusion

The Broads still has intrinsically dark skies which need to be protected. An amended policy is included in the Local Plan with the up-to-date data presented on a map. The Authority will continue to seek to protect the dark skies of the Broads.



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**Local Plan for the Broads - Review  
Preferred Options bitesize pieces  
January 2024**

**Light Pollution and Dark Skies**

1 **Information for Members**

2 The Authority has re-assessed the darkness of a sample of survey points from the 2015/16 dark  
3 skies survey. The dark Skies Topic Paper that is also before Planning Committee provides more  
4 information. The key message is that the Broads has areas of intrinsically dark skies.

This is a proposed draft section/policy for the Preferred Options Local Plan. Member's comments and thoughts are requested. This policy is already in the local plan, but some amendments are proposed.

Amendments to improve the policy are shown as follows: ~~text to be removed~~ and added text.

There is an assessment against the UN Sustainable Development Goals at the end of the policy.

The proposed Sustainability Appraisal of the policy is included at the end of the document. This would not be included in the Preferred Options Local Plan itself; this table would be part of the Preferred Options Sustainability Appraisal, but is included here to show how the policy and options are rated.

The currently adopted policy remains in place – these are proposed amendments and this section will form part of the Preferred Options version of the Local Plan.

5 **Policy PODM22: Light pollution and dark skies**

6 **See Policy map at [DM22 Light pollution and dark skies \(broads-authority.gov.uk\)](https://broads-authority.gov.uk)**

7 1. The tranquillity and dark sky experience of the Broads will be conserved and enhanced.

8 **Dark sky zones of the Broads**

9 2. Development proposals are required to address light spillage and eliminate all unnecessary  
10 forms of artificial outdoor lighting by ensuring that:

- 11 a) Dark Sky Zone category 1 as identified on the policies maps is protected from permanent  
12 illumination;
- 13 b) External lighting within the Dark Sky Zone category 2 as identified on the policies maps is  
14 strictly controlled; and
- 15 c) Good lighting management and design is applied throughout the Broads

16 **Development proposals involving lighting**

17 3. Development proposals will be required to identify sources of light and indicate how the  
18 scheme will look in the dark as part of any application. Proposals shall be accompanied by a

19 lighting strategy, with detailed specification of any proposed lighting units and demonstrating  
20 how consideration has been given to maintaining intrinsically dark skies.

21 4. The impact of introducing light to an area which previously had no lighting, regardless of how  
22 well designed the lighting it, will be a key consideration.

23 5. Development proposals that involve external lighting, outside the Dark Sky Zones category 1,  
24 will only be permitted where it can be demonstrated that they are required for a specific,  
25 identified and justified lighting task – see later in policy for requirements relating to design  
26 safety, security or community reasons and where the design minimise light spillage.

### 27 **Design of lighting**

28 6. If lighting is proven to be required, in line with the rest of this policy, development proposals  
29 must demonstrate that all opportunities to reduce light pollution (including sky glow, glare and  
30 light spillage) have been taken, including minimising impacts on local amenity, intrinsically dark  
31 landscapes and areas important for nature conservation and nature recovery.

32 7. Artificial lighting proposals (including outdoor lighting, floodlighting and new street lighting) will  
33 be minimised in terms of intensity and number of fittings.

34 8. The applicant must demonstrate that:

- 35 a) the minimum amount of lighting necessary to achieve its purpose is specified; and
- 36 b) the design and specification of the lighting would minimise sky glow, glare and light spillage in  
37 relation to the visibility of the night sky, local amenity and local character; and
- 38 c) the means of lighting would be unobtrusively sited and well-screened by landscaping; and
- 39 d) low energy lighting is used; and
- 40 e) there would not be an adverse impact on wildlife.

41 9. All lighting units provided must be downward facing and shielded to prevent upward emission  
42 of light; be no brighter than the minimum required for the lighting task and be fitted with PIR  
43 sensors.

44 10. All ground-based lighting units to mark pedestrian paths and similar areas, shall be located no  
45 higher than 1 metre above ground level and all wall mounted lighting units shall be located as  
46 low as practicable and shielded to prevent upward emission of light.

47 11. All lights need to be off when not needed and dimmed down when little human activity.

48 12. Applicants are required to demonstrate that they proposals meet or exceed the Institute  
49 Institution of Lighting Professionals guidance and other relevant standards or guidance for  
50 lighting<sup>1</sup>.

### 51 **Light spill from internal lighting**

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<sup>1</sup> For the purposes of the ILP lighting guidance (CIE 150:2003 Guide on the Limitation of the Effects of Obtrusive Light from Outdoor Lighting Installations [www.theilp.org.uk/documents/obtrusive-light/](http://www.theilp.org.uk/documents/obtrusive-light/)) the Broads Authority is included within Environment Zone 1 as a reflection of its protected status and its intrinsically dark skies.

- 52 13. Building design that results in increased light spill from internal lighting (through glazed facades,  
53 roof lights or windows) needs to be avoided, unless suitable mitigation measures are  
54 implemented.
- 55 14. Any proposals and designs that include roof lights, lantern lights, and/or floor to eaves and floor  
56 to gable glazing, will not be supported unless, as appropriate to the design of the building,  
57 integral blinds or louvres or external 'brise soleil'<sup>2</sup> fixed louvres, are provided as mitigation.
- 58 15. All such blinds and/or louvered units that are not easily accessible, must be provided with  
59 automatically operated, light sensor systems, to ensure closure at dusk.

## 60 Reasoned Justification

61 The natural environment and people's health and quality of life will be protected from  
62 unacceptable levels of light pollution.

63 No or low levels of light pollution are an important aspect of tranquillity.

64 Light pollution/obtrusive light comes in many forms:

- 65 • **Obtrusive light** can take several forms:
- 66 • **Sky Glow:** the brightening of the night sky. Sky glow is a product of light being scattered by  
67 water droplets or particles in the air.
- 68 • **Glare:** the uncomfortable brightness of a light source when viewed against a darker  
69 background. Glare is created by light that shines horizontally.
- 70 • **Light Spill:** the spilling of light beyond the boundary of the area being lit.
- 71 • **Light trespass Light Intrusion:** the presence of light from sources outside the affected person's  
72 property. Intrusive light occurs when unwanted artificial light illuminates an area that would  
73 otherwise be dark.
- 74 • **Over illumination** refers to the use of artificial light beyond what is required for a specific  
75 activity.
- 76 • **Light Presence:** sources of light in otherwise dark views.

77 These are all forms of obtrusive light, which may cause nuisance to others, or adversely affect fauna  
78 and flora as well as waste money and energy.

79 There is firm evidence of issues arising as a result of artificial lighting. Wildlife and human health  
80 can be affected and inefficient use of lighting wastes money and energy, affecting homes and  
81 businesses.

82 Artificial lighting is not detrimental in all cases, and the solution to light pollution is not necessarily  
83 turning off all lighting. Light pollution refers to artificial light that is excessive or intrudes where it is  
84 not wanted or expected. For example, some older street lights emit light pollution, as do security  
85 lights mounted at an angle above the horizontal. Well-designed lighting, on the other hand, sends  
86 light only where it is needed without scattering it elsewhere - "The right amount of light and only  
87 when and where needed" (Campaign for Dark Skies motto).

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<sup>2</sup> Brise soleil is a type of solar shading system that uses a series of horizontal or vertical blades to control the amount of  
sunlight and solar heat that enters a building. The name 'brise soleil' comes from the French word 'sun breaker'.

88 The NPPF says that Local Plans ‘*should limit the impact of light pollution from artificial light on local*  
89 *amenity, intrinsically dark landscapes and nature conservation*’.

90 The Authority has assessed the Broads Authority Executive Area and results show that most of the  
91 area has good quality dark skies, with the majority of readings being over 20 magnitudes per arc  
92 second<sup>3</sup>. While the Authority’s survey looked upwards, the CPRE<sup>4</sup> undertook a study that looked  
93 down to the earth. Both datasets were assessed and compared and have informed the final zones  
94 as set out in the policies map. A report explaining the assessment between the two datasets has  
95 been produced.

96 The Authority therefore considers that the Broads is an intrinsically dark landscape which must be  
97 preserved.

98 Dark Sky Zone Category 1 is the darkest area within the Broads Authority Executive Area reaching  
99 over 21 magnitudes per arc second. In this zone, permanent illumination is not allowed in order to  
100 protect the darkness of the sky. On occasions, there may be a need to have external lighting for  
101 short periods of time but the design of this lighting is expected to not add to light pollution when  
102 used and not expected to be lit for long periods of time. The design of any lighting is expected to  
103 meet tests that follow.

104 Dark Sky Zone Category 2 is the second darkest area within the Broads reaching over 20 magnitudes  
105 per arc second, but less than 21. These skies are still intrinsically dark and as stated in the NPPF the  
106 impact from artificial light needs to be limited. As such, the design of any lighting is expected to not  
107 add to light pollution and meet the tests that follow.

108 The current International Dark-Sky Association criteria consist of Five Principles for Responsible  
109 Outdoor Lighting and this implicitly includes indoor lighting that illuminates the outside. These are:  
110 1. All light should have a clear purpose. This purpose should be identified before a light is installed  
111 or replaced. Consider the impact of the light on wildlife and the environment and consider the use  
112 of reflective or luminous markers for signs, curbs and steps.

113 2. All light should be targeted. Use shielding and careful orientation so that light does not spill  
114 beyond where it is needed.

115 3. Light should be no brighter than necessary. Use the lowest light level required and consider  
116 whether the lit surfaces will reflect light into the sky. Use dimmers if different light levels are  
117 needed.

118 4. Light should be used only when it is useful. Use timers and motion detectors (e.g. PIRs) to ensure  
119 that light is available when it is needed and is turned off at other times. Lights should turn off a  
120 maximum of 5 minutes after motion ceases.

121 5. Use the warmest colour with the lowest *Correlated Colour Temperature [CCT]* possible. In  
122 practice, this means that external lighting should have a maximum CCT of 2700K (2200K preferred)  
123 unless there is an identified requirement for a higher CCT.

124 Essentially there are two ways of avoiding light pollution in new developments. Firstly, at the design  
125 stage, features that have the capacity to contribute to light pollution are either not included or

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<sup>3</sup> To be considered a dark sky of sufficient quality by the International Dark Sky Association, values of 20 magnitudes per arc second must be achieved.

<sup>4</sup> Night Blight: [www.nightblight.cpre.org.uk/](http://www.nightblight.cpre.org.uk/) Night Blight 2016: Mapping England's Light Pollution and Dark Skies - CPRE

126 'designed out' of the scheme at an early stage or are effectively mitigated. Secondly, any required  
127 lighting follows the 'right light, right place, right time' philosophy. The key message therefore is that  
128 'designing out' is avoiding the problem, which is the preferable solution, whilst the provision of  
129 blinds or louvres is 'mitigation'.

130 When considering lighting as part of a scheme, applicants need to consider the following early on in  
131 the design of a scheme, with an assessment and plan showing lighting proposed and how it will look  
132 at night, submitted with the planning application:

- 133 ➤ Which zone are you located in?
- 134 ➤ Do you need light in the first place, and if so why?
- 135 ➤ What is the lighting task/area to be lit?
- 136 ➤ Are you over lighting? What is the minimum lighting you require?
- 137 ➤ If lighting is required, is it designed to not add to sky glow and minimise glare and  
138 not result in intrusive light trespass, and ~~so that glare does~~ not over illuminate?  
139 How?
- 140 ➤ How will you ensure the lighting only be on/activated when it is needed?
- 141 ➤ For windows, rooflights and glazed facades, what mitigation will be included in the  
142 scheme?

143 Windows need effective curtains or blinds, and internal light units that are lower than the top of  
144 windows need to be appropriately shaded. Those 'windows' that are angled upwards, such as roof  
145 lights and lantern lights, either need to be designed out of the structures or to have integral blinds  
146 or louvres that can be closed at night to prevent light pollution. In some situations, extensive floor  
147 to ceiling or floor to gable glazing, which can be common in some modern dwelling designs, may be  
148 proposed. Whilst passive energy gain can be beneficial, extensive areas of floor to ceiling glazing  
149 also clearly have the capacity to emit a considerable amount of light at night above the horizontal,  
150 which is not acceptable. Therefore, for buildings on the edge of villages or in relatively isolated  
151 locations, large areas of extensive glazing can detract significantly, and arguably disproportionately,  
152 from the objectives of mitigating the negative impacts of artificial light at night. In addition, when  
153 lantern and roof lights are proposed in relatively inaccessible positions, this makes the manual  
154 operation of blinds or louvres impracticable. In these situations, the blinds or louvres should be  
155 automatically operated by light sensitive switches, to close at dusk.

156 In terms of the information required as part of planning applications, the Authority requires  
157 illustrated and written description of the detailed Lighting Concept for all external lighting including  
158 street and amenity lighting, illuminated signage and media, building and landscape lighting and the  
159 illumination of art and internal lighting. For larger scale developments, it will be necessary for  
160 planning authorities to require that a lighting strategy and a specification is included within  
161 applications, to demonstrate that schemes, would be Dark-Sky compliant, once implemented.

162 Lighting schemes on their own do not always need planning permission. If the Authority seeks and  
163 is awarded Dark Sky Status, work will be undertaken in key areas to reduce the impact of light  
164 pollution, in partnership with the local community.

### 165 **Important guides**

166 Guidance Note 1 for the reduction of obtrusive light, ILP, 2021:

167 <https://theilp.org.uk/publication/guidance-note-1-for-the-reduction-of-obtrusive-light-2021/>

168 Guidance Note 8 Bats and Artificial Lighting, ILP, 2023  
169 <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>

170 Guidance Note 9 Domestic exterior lighting: getting it right, ILP, 2019  
171 <https://theilp.org.uk/publication/guidance-note-9-domestic-exterior-lighting-getting-it-right/>

172 PLG05 The Brightness of Illuminated Advertisements, ILP, 2023  
173 <https://theilp.org.uk/publication/plg05-the-brightness-of-illuminated-advertisements/>

174 PLG04 Guidance on undertaking environmental lighting impact assessments, ILP, 2013  
175 [https://theilp.org.uk/publication/plg04-guidance-on-undertaking-environmental-lighting-impact-](https://theilp.org.uk/publication/plg04-guidance-on-undertaking-environmental-lighting-impact-assessments/)  
176 [assessments/](https://theilp.org.uk/publication/plg04-guidance-on-undertaking-environmental-lighting-impact-assessments/)

177 CIE Obtrusive Light 2nd edition  
178 [http://cie.co.at/publications/guide-limitation-effects-obtrusive-light-outdoor-lighting-installations-](http://cie.co.at/publications/guide-limitation-effects-obtrusive-light-outdoor-lighting-installations-2nd-edition)  
179 [2nd-edition](http://cie.co.at/publications/guide-limitation-effects-obtrusive-light-outdoor-lighting-installations-2nd-edition)

180 CIE Minimising Skyglow  
181 <http://cie.co.at/publications/guidelines-minimizing-sky-glow>

182 Dark Sky Status  
183 ~~The International Dark Sky Places Program promotes preservation and protection of night skies~~  
184 ~~across the globe. It is an award administered by the International Dark Skies Association (IDA). In~~  
185 ~~dark sky places, local planning authorities, landowners, businesses, individuals and communities~~  
186 ~~work together to reduce light pollution. There are three types of places: Reserve (large areas), Park~~  
187 ~~(small with large population) and Community (smallest). The Broads Authority is exploring the~~  
188 ~~potential for applying to be a dark sky place.~~

189 **Reasonable alternative options**

- 190 a) Original policy  
191 b) No policy

192 **Sustainability appraisal summary**

193 The options of no policy, the original policy and having a policy have been assessed in the SA. The  
194 following is a summary.

A: Original	7 positives. 0 negatives. 0 ? Overall, positive.
B: No policy	0 positives. 0 negatives. 7 ?
C: Preferred Policy	7 positives. 0 negatives. 0 ? Overall, positive.

195 **Why has the alternative option been discounted?**

196 The Broads has intrinsically dark skies. The dark skies are part of the character of the Broads. Given  
197 the area of the Broads, with many urban areas nearby, it is important to have a policy that protects  
198 the dark skies of the Broads. The amendments provide clarity and further considerations relating to  
199 if lighting is required.

200 **UN Sustainable Development Goals check**

201 This policy meets these [UN SD Goals](#):

**3** GOOD HEALTH  
AND WELL-BEING



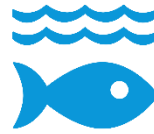
**11** SUSTAINABLE CITIES  
AND COMMUNITIES



**12** RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION



**14** LIFE  
BELOW WATER



**15** LIFE  
ON LAND



202

203 **Appendix 1 - Technical Lighting Information - Correlated Colour Temperature**

204 Modern LED lighting now comes with an indication of its “Correlated Colour Temperature” (CCT),  
205 which is an indication of the temperature to which a glowing filament would need to be raised in  
206 order to produce a similar quality of white light. It is measured in Kelvin (K) which is the  
207 international standard unit for temperature.

208 Paradoxically, the cooler the colour temperature, the warmer the light appears. Light with a CCT of  
209 5000K or more appears harsh, bright, and cold; light with a CCT of 3000K or less appears soft and  
210 warm. The glowing filament analogy is that red hot is cooler than white hot.

211 The higher the CCT, the bluer light will be in the spectrum. This is important for several reasons:

- 212 • Blue light is scattered more by the atmosphere. This not only means that it contributes more to  
213 skyglow, but it also exacerbates the other harmful effects.
- 214 • Insects are more attracted to blue-rich light than to “cooler” colours. When this happens, they  
215 are not foraging, reproducing, or pollinating, and are more likely to be predated upon. Fruit flies  
216 (*drosophila*) left exposed to blue light for 24 hours will simply die.
- 217 • The effect on insects has a knock-on effect on insectivores; it modifies their behaviour.
- 218 • The presence of blue-rich light causes levels melatonin (the “sleep hormone”) to plummet,  
219 disturbing sleep and causing a variety of health problems in many vertebrates, including  
220 humans.

221 For these reasons, the CCT of external lighting should be limited to 2700K, with 2200K preferred.  
222 3000K should be reserved for purposes for which 2700K or lower lights are not available. Anything  
223 in excess of 3000K should be used only in exceptional, very limited, circumstances with full  
224 mitigation (shielding, duration-control) being implemented.



## Sustainability Appraisal

### SA objectives:

- ENV1: To reduce the adverse effects of traffic (on roads and water).
- ENV2: To safeguard a sustainable supply of water, to protect and improve water quality and to use water efficiently.
- ENV3: To protect and enhance biodiversity and geodiversity.
- ENV4: To conserve and enhance the quality and local distinctiveness of landscapes and towns/villages.
- ENV5: To adapt, become resilient and mitigate against the impacts of climate change
- ENV6: To avoid, reduce and manage flood risk and to become more resilient to flood risk and coastal change.
- ENV7: To manage resources sustainably through the effective use of land, energy and materials.
- ENV8: To minimise the production and impacts of waste through reducing what is wasted, and re-using and recycling what is left.
- ENV9: To conserve and enhance the cultural heritage, historic environment, heritage assets and their settings
- ENV10: To achieve the highest quality of design that is innovative, imaginable, and sustainable and reflects local distinctiveness.
- ENV11: To improve air quality and minimise noise, vibration and light pollution.
- ENV12: To increase the proportion of energy generated through renewable/low carbon processes without unacceptable adverse impacts to/on the Broads landscape
- SOC1: To improve the health and wellbeing of the population and promote a healthy lifestyle.
- SOC2: To reduce poverty, inequality and social exclusion.
- SOC3: To improve education and skills including those related to local traditional industries.
- SOC4: To enable suitable stock of housing meeting local needs including affordability.
- SOC5: To maximise opportunities for new/ additional employment
- SOC6: To improve the quality, range and accessibility of community services and facilities and to ensure new development is sustainability located with good access by means other than a private car to a range of community services and facilities.
- SOC7: To build community identity, improve social welfare and reduce crime and anti-social activity.
- ECO1: To support a flourishing and sustainable economy and improve economic performance in rural areas.
- ECO2: To ensure the economy actively contributes to social and environmental well-being.
- ECO3: To offer opportunities for Tourism and recreation in a way that helps the economy, society and the environment.

		A: Original policy	B: No policy	C: Preferred Policy		
ENV1			Not having a policy does not mean that these issues will not be considered or addressed; a policy provides certainty.			
ENV2						
ENV3	+	Light pollution can affect wildlife and biodiversity.		?	+	Light pollution can affect wildlife and biodiversity.
ENV4	+	The area has intrinsically dark skies.		?	+	The area has intrinsically dark skies.
ENV5	+	Less lighting or more efficient lighting or lighting that is not on all the time, saves energy,		?	+	Less lighting or more efficient lighting or lighting that is not on all the time, saves energy,
ENV6						
ENV7	+	Less lighting or more efficient lighting or lighting that is not on all the time, saves energy,		?	+	Less lighting or more efficient lighting or lighting that is not on all the time, saves energy,
ENV8						
ENV9						
ENV10	+	The policy requires well designed lighting if it can be justified.		?	+	The policy requires well designed lighting if it can be justified.
ENV11	+	The policy fundamentally addresses light pollution.		?	+	The policy fundamentally addresses light pollution.
ENV12						
SOC1	+	Light pollution can affect health		?	+	Light pollution can affect health
SOC2						
SOC3						
SOC4						
SOC5						
SOC6						
SOC7						
ECO1						
ECO2						
ECO3						



**Local Plan for the Broads - Review  
Preferred Options bitesize pieces  
January 2024**

**Agriculture development – way forward**

## Introduction

One of the sections of the Issues and Options consultation talked about the need for a specific policy on agriculture development.

## Section of Issues and Options

### 24.1 Introduction

Agriculture is a key land use in the Broads and is important to the local economy. Indeed, we tend to receive a number of applications each year for development relating to agriculture that does not fall within the scope of Agricultural Permitted Development rights. The adopted Local Plan has policies relating to rural enterprise dwellings (DM38) and business and farm diversification (DM27). Currently, other types of agriculture development would be assessed against various policies in the Local Plan; we wonder if there is a need for a policy that helps guide agriculture development.

### 24.2 Issues

Policy DM1 of the current Local Plan relates to development that can impact on the Broads – Major Development. It says ‘for the purposes of this policy, ‘major development’ is defined in this Local Plan as development which has the potential to have a significant adverse impact on the Broads and its special qualities due to the development’s nature, scale and setting’.

With agriculture-related development often being at a large scale, it may have an impact on the special qualities of the Broads. On the other hand, agricultural development in some ways typifies the character and appearance of parts of the Broads. Subject to sympathetic siting and design considerations, this type of development can be less visually intrusive than a similar footprint of commercial or residential development. Agricultural development tends not to be exceptional; they tend to be standard buildings. Arguably, agricultural development may pass the tests in DM1 and the NPPF, such as being in the public interest and this being the exceptional circumstance. However, perhaps the Local Plan needs a policy specific to agricultural buildings to ensure the assessment is as clear and comprehensive as possible while still allowing for sustainable development.

Other potential issues include:

- a) After a few years in place, there may be pressure to convert the agricultural buildings into another use. While the conversion options through PD regulations are limited in the Broads Authority Executive area, is there a need to prove a longer-term financial case for the building?
- b) There are areas of intensive farming in the Broads, and the point at which an application is made for new development at a farm might be an opportunity to address issues with an existing site. The development itself may seek to address these issues, but would this be an opportunity to seek wider biodiversity/social etc benefits?
- c) Is there scope for agricultural development to aid in the production of low carbon/renewable energy?
- d) Some agriculture related applications result in new tracks/bridges. Is there scope for these to be open for the public to use?
- e) Another issue to consider is run off from farms into water courses.

It therefore seems there is potential for a new policy to cover particular aspects relating to agricultural development in the Broads that also links to the two existing farming related policies of rural enterprise dwellings and business and farm diversification.

### 24.3 Options

- a) No specific policy. Use existing policies to guide and determine applications for agricultural development.
- b) A new development management policy, specifically on agricultural buildings which would cover design, longevity of use, landscaping and environmental considerations as well as the justification for development and potential benefits through contributions/access/biodiversity/flood improvements.

**Question 31. What are your thoughts on the need to address agriculture development in the new Local Plan? Are there any other issues to address if a policy were to be produced?**

### Responses to Issues and Options

Bradwell Parish Council	Option b.
Broads Society	The Society's preference is for 'Option a' to allow for a less constrained approach to any developing trends in the future. A specific policy might hamper an agricultural business from implementing speedier changes to the operation)
Designing Out Crime Officer, Norfolk Police	AS Q5 response - Consideration of condition of planning that the development and physical security meet Secured by Design standards.
East Suffolk Council	As the consultation document rightly sets out, agriculture is a key land use in the Broads and is important to the local economy. Within that context, there may be value in the Broads Authority giving further consideration to the

	feasibility of developing a new development management policy, specifically relating to agricultural buildings (option b).
Norfolk Wildlife Trust	Agricultural development – whilst we have no comments in principle on this question, we would recommend that any new development or renovation includes integral features of benefit for wildlife such as swift, bat and bee bricks, in order to help turn around the decline in these important species.
RSPB	Option b) should be chosen. A specific consideration relates to the creation of winter storage reservoirs to enable irrigation of arable crops and other forms of horticulture. Given the pressure on water resources and the Restoring Sustainable Abstraction decision made by Environment Agency facilitating the creation of new water storage reservoirs to capture winter rain and excess (perhaps reverse pumped storm flows) is paramount. This is especially attractive if farm clusters operate to create a shared structure as a single reservoir, which if sited appropriately is likely to have a lower impact on the landscape than several such structures if located on many individual farms. Obtaining planning permission for such structures is often a long-winded process and given these reservoirs protect both cropping and maintenance of groundwater sources, they should be applauded and supported.

## Proposed way forward

Taking into account the responses as well as what a policy could include, it is felt that the generic policies that cover various aspects like landscape impact and design are adequate to cover proposals for agricultural development. It is therefore not proposed to have a specific policy.



**Local Plan for the Broads - Review  
Preferred Options bitesize pieces  
January 2024**

1 **Energy efficiency of the existing housing stock – way forward**

2 **Introduction**

3 This paper looks into the issue of the energy efficiency of the existing stock.

4 **Issues and Options section**

5 **Introduction**

6 When new buildings are built, they will need to meet the Building Regulations in place at the time  
7 of the build. In terms of replacement dwellings, this will likely result in an improvement in the  
8 energy performance of the building compared to what was there before. Sections [29.3](#) and [29.4](#)  
9 explore energy performance of new build.

10 **Issues**

11 Local Plans and policies can influence buildings that are yet to be built, but many more have already  
12 been built. We would like to explore how we can influence existing buildings to use less energy and  
13 use energy wiser.

14 In the past, there have been grants from the Government or local authorities that aid with aspects  
15 of building energy performance like insulation and boilers. Recently, there was the Green Homes  
16 Grant scheme<sup>1</sup>.

17 **Question 15: Do we need to do more about the existing housing stock to encourage energy**  
18 **efficiency?**

19 On occasion, applicants propose extending their existing buildings. The extensions will be built to  
20 the Building Regulations in place at the time of construction<sup>2</sup> and so the extension may well use  
21 much less energy than the existing main dwelling.

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<sup>1</sup> [Green Homes Grant: make energy improvements to your home - GOV.UK \(www.gov.uk\)](#)

<sup>2</sup> Broadly, the Part L requirements apply to buildings, or extensions of such buildings (except those of Class 7 type (see below)), or the carrying out of any work to or in connection of any such building or extension where the building:

- is a roofed construction having walls; and
- uses energy to condition the indoor climate

Source: [Exemptions from building regulations | Building Regulations | Planning Portal](#)

Class 7: The extension of a building by the addition at ground level of—

(a) a conservatory, porch, covered yard or covered way; or

(b) a carport open on at least two sides;

where the floor area of that extension does not exceed 30m<sup>2</sup>, provided that in the case of a conservatory or porch which is wholly or partly glazed, the glazing satisfies the requirements of Part N of Schedule 1

Source: [The Building Regulations 2010 \(legislation.gov.uk\)](#)

22 **Question 16: Is there scope to require an existing building that is to be extended to use less**  
23 **energy?**

24 **Permitted development**

25 There are some types of extension that do not need planning permission and so any policy  
26 approach would not apply to those schemes.

27 **Energy Performance Certificates**

28 Energy Performance Certificates (EPCs) tell you how energy efficient a building is and give it a rating  
29 from A (very efficient) to G (inefficient). They tell you how costly it will be to heat and light your  
30 property, and what its carbon dioxide emissions are likely to be. An EPC also includes information  
31 on what the energy efficiency rating could be if you made the recommended improvements and  
32 highlights cost effective ways to achieve a better rating<sup>3</sup>. Of course, if the EPC already rates the  
33 building as efficient, there may not be a requirement to move up the EPC ratings<sup>4</sup>.

34 **Question 17: Is there potential to require a building that is to be extended to improve its EPC**  
35 **level – perhaps it is required to move up one level on the EPC ratings?**

36 **Buildings that may be difficult to make more energy efficient/use less energy**

37 The age and style of buildings in the Broads is varied. As such, it may be that some buildings are  
38 harder to make more energy efficient than others; perhaps they are designed to have the very  
39 ventilation that some energy efficiency measures may seek to address, for example. This would be  
40 an area to explore if a policy approach is taken forward.

41 **Benefits to occupier**

42 Improving energy efficiency and reducing operational carbon emissions has the benefit of lowering  
43 utility bills for occupants.

44 **Options**

- 45 a) Do not seek to address the energy efficiency of the existing housing stock through the Local  
46 Plan – instead, rely on any Local or National Government approaches.
- 47 b) Require the building to move up the EPC rating.
- 48 c) Require that a certain percentage of the budget spent on the extension is spent on improving  
49 the energy performance of the existing building.

50 **Question 18: Do you have any thoughts on the issue of energy efficiency? Do you have any**  
51 **preference on the options listed above, and are there any other options to consider?**

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<sup>3</sup> [Guide to Energy Performance Certificates - Energy Saving Trust](#)

<sup>4</sup> Access to Energy Performance Certificates and Display Energy Certificates data for buildings in England and Wales: [Energy Performance of Buildings Data England and Wales \(opendatacommunities.org\)](#)

52 Response to questions

Part of document	Organisation	Comment
15	Bradwell Parish Council	We should look carefully at higher energy efficiency for existing house stock.
15	Broads Society	the Society feels that the Authority should not seek to address the energy efficiency of the existing housing stock through the Local Plan – instead, rely on any Local or National Government approaches.
15	Brooms Boats	Local or National Government approaches together with Building Regulations should prevail.
15	Designing Out Crime Officer, Norfolk Police	(regarding extensions) where required Norfolk Constabulary will continue work with applicants and planning officers to ensure that any significant re-builds or extension to existing premises for the purposes of reduction in energy use (both commercial and domestic) are also meeting security standards detailed in Secured by Design guidance.
15	East Suffolk Council	Given the current cost-of-living/ energy crisis, it is likely that more people will be looking for advice on how to improve their home’s thermal efficacy and reduce energy consumption. Where appropriate, there may be opportunities to include such advice (or links to advice) within the Local Plan or in supporting documents (SPDs). The Net Zero Carbon Toolkit and information provided on Energy Saving Trust website may be of use regarding the retrofitting of existing homes. <a href="http://www.greensuffolk.org/net-zero-carbon-toolkit-housing/">www.greensuffolk.org/net-zero-carbon-toolkit-housing/</a> <a href="https://energysavingtrust.org.uk/energy-at-home/">https://energysavingtrust.org.uk/energy-at-home/</a>
15	East Suffolk Council	Some thermal upgrades may not require planning permission but will require Building Regulation Approval. East Suffolk Building Control provide an advice sheet on thermal upgrades: <a href="http://www.eastsuffolk.gov.uk/assets/Planning/Building-Control/Common-projects-guidance/Thermal-upgrades-to-your-house.pdf">www.eastsuffolk.gov.uk/assets/Planning/Building-Control/Common-projects-guidance/Thermal-upgrades-to-your-house.pdf</a>
15	Norfolk Wildlife Trust	we support this in principle due to the benefits it will bring for the conservation of Norfolk’s wildlife in the future, but are unable to offer any technical comments on how this would be achieved.
15	RSPB	Yes. Comments as for Q11 above. Householders need to be encouraged morally and supported financially to plan for and bring about change in how they use and provide energy for their homes. Currently ground and air source heat pumps are probably too expensive for most homeowners to consider installing (even with grant support). As time passes and technological advances are made leading to reduced cost, householders need to be persuaded to convert. Creating model households as exemplars and case studies for householders to follow will be essential.
15	Sequence UK LTD/Brundall Riverside Estate Association	2.41This would appear to be a matter that would fall outside the scope of planning, and is more of a campaign or financial support that could be brought forward by the Broads Authority. However the current planning system cannot, and in our view should not, look to impose standards upon existing houses.



Part of document	Organisation	Comment
15	South Norfolk Council	Improving the energy efficient of housing stock is clearly important, both in terms of the cost to the individual and in terms of achieving climate change objectives. However, it is unclear how this could or would be achieved through the authority's development plan policies. It may be that this is something that needs to be achieved through other interventions of the authority. There are limitations to how much can be achieved directly through a local plan and management of development that requires planning permission.
15	Wroxham Parish Council	yes, needs to be more focus on insulating existing properties and grants need to be open to more people. We understand that this is the case at Norwich City Council.
15	Broadland Council	Improving the energy efficient of housing stock is clearly important, both in terms of the cost to the individual and in terms of achieving climate change objectives. However, it is unclear how this could or would be achieved through the authority's development plan policies. It may be that this is something that needs to be achieved through other interventions of the authority. There are limitations to how much can be achieved directly through a local plan and management of development that requires planning permission.
16	Bradwell Parish Council	Plans to extend should have a requirement for higher energy retention.
16	Broads Society	the Society feels that the Authority should not seek to address the energy efficiency of the existing housing stock through the Local Plan – instead, rely on any Local or National Government approaches.
16	Brooms Boats	Local or National Government approaches together with Building Regulations should prevail.
16	East Suffolk Council	East Suffolk council would support the inclusion of support, encouragement and guidance on improving the existing buildings energy use in either the Local Plan or a supporting Supplementary Planning Documents.
16	RSPB	Yes. For older build these situations might provide an opportunity for a complete rethink of energy provision for such houses where an extension is proposed.
16	Sequence UK LTD/Brundall Riverside Estate Association	2.43It is noted that any extension is likely to be built to higher energy performance standards than the host, where there have been advances in the building regulations. However again there is no mechanism within the planning process to allow for upgrades to the host building and we would suggest it would not be reasonable in any event. Such a policy is likely to have to be administered by a condition on any extension planning approval but such a condition would not meet the tests under paragraph 56 of the Framework as they would not be necessary (to make the development acceptable), relevant to the development to be permitted, enforceable and reasonable in all other respects.

Part of document	Organisation	Comment
16	South Norfolk Council	As with question 10, careful consideration will need to the risks of duplication or repetition when imposing, and future proofing, local standards where other legislation requires certain industry standards, for example in relation to energy efficiency, including in terms of the viability and deliverability of development. This is particularly relevant given the high house prices referred to in the threats section of the SWAT analysis that may limit resident's ability to move within their local area in order to meet changing housing needs and demands, that might otherwise be address through the extension of their existing home.
16	Wroxham Parish Council	yes, see WNP ENV5, although this needs updating to reflect the rapidly changing climate situation. WPC will look to review the WNP in 2023 after the May elections.
16	Broadland Council	As with question 10, careful consideration will need to the risks of duplication or repetition when imposing, and future proofing, local standards where other legislation requires certain industry standards, for example in relation to energy efficiency, including in terms of the viability and deliverability of development. This is particularly relevant given the high house prices referred to in the threats section of the SWAT analysis that may limit resident's ability to move within their local area in order to meet changing housing needs and demands, that might otherwise be address through the extension of their existing home.
17	Bradwell Parish Council	Ideally all homes should have an A EPC so the minimum requirement should be for a improvement of one level e.g. a D to a C rate EPC.
17	Broads Society	the Society feels that the Authority should not seek to address the energy efficiency of the existing housing stock through the Local Plan – instead, rely on any Local or National Government approaches.
17	Brooms Boats	Local or National Government approaches together with Building Regulations should prevail.
17	East Suffolk Council	Again, East Suffolk council would support the inclusion of support, encouragement and guidance on improving existing buildings EPC levels either the Local Plan or a supporting Supplementary Planning Documents.
17	RSPB	Yes. This provides another opportunity to educate and influence homeowners to adopt the best ways to power and insulate their homes.
17	Sequence UK LTD/Brundall Riverside Estate Association	2.45For the same reasons as question 16 above, this policy could not be enforced as it would fall outside the scope of planning and it would not meet the tests for conditions. As a general principle, conditions and planning obligations can only be used to make the development that is being applied for acceptable. It is therefore not appropriate to use that planning permission to resolve existing issues, for example the energy performance of the host property.

Part of document	Organisation	Comment
17	South Norfolk Council	<p>As with other questions in this section, it is slightly unclear how the authority is proposing to achieve the change it is seeking through the local plan.</p> <p>Even if this could be achieved, without knowing the differences between the different levels of EPC ratings, including cost implications, then it is considered that it would be difficult to understanding what would be reasonable in terms of setting a standard, again taking account of housing affordability challenges and effects on viability.</p> <p>The Council also considers that careful consideration would need to be given to ensuring that any requirement would comply with the relevant test for conditions and obligations.</p>
17	Broadland Council	<p>As with other questions in this section, it is slightly unclear how the authority is proposing to achieve the change it is seeking through the local plan.</p> <p>Even if this could be achieved, without knowing the differences between the different levels of EPC ratings, including cost implications, then it is considered that it would be difficult to understanding what would be reasonable in terms of setting a standard, again taking account of housing affordability challenges and effects on viability.</p> <p>The Council also considers that careful consideration would need to be given to ensuring that any requirement would comply with the relevant test for conditions and obligations.</p>
18	Bradwell Parish Council	Adopt option B and C.
18	Broads Society	the Society feels that the Authority should not seek to address the energy efficiency of the existing housing stock through the Local Plan – instead, rely on any Local or National Government approaches.
18	Brooms Boats	Local or National Government approaches together with Building Regulations should prevail.
18	East Suffolk Council	<p>The Committee on Climate Change ‘UK housing: Fit for the future?’(2019) report outlines that decarbonising and adapting the UK's housing stock is critical for meeting legally binding emissions targets by 2050. As already outlined in other answers, East Suffolk Council recently adopted a Sustainable Construction Supplementary Planning Document (April 2022), which is available to view here: <a href="https://www.eastsuffolk.gov.uk/assets/Planning/Planning-Policy-and-Local-Plans/Supplementary- documents/Sustainable-Construction-2022/FINAL-Sustainable-Construction-SPD.pdf">https://www.eastsuffolk.gov.uk/assets/Planning/Planning-Policy-and-Local-Plans/Supplementary- documents/Sustainable-Construction-2022/FINAL-Sustainable-Construction-SPD.pdf</a>. This SPD includes specific guidance on energy efficiency but does note the difficulties of applying new standards to the existing housing stock when retrofitting works generally sits outside of the planning system and is therefore not affected by planning policy. The East Suffolk SPD encourages developers to be aware of the requirements of the Building Regulations in this regard.</p>

Part of document	Organisation	Comment
18	Mrs S Lowes	Many properties in the area have old heating systems and the residents rarely have the funds to change these. How many people have the funds to make their existing homes efficient? Some may need extra room but not have sufficient funds to do both.
18	RSPB	Option b) is our preferred choice
18	Sequence UK LTD/Brundall Riverside Estate Association	2.47We would suggest that option a is appropriate here to await other initiatives as options b and c cannot be delivered through the current planning system and indeed we would consider it unreasonable to do so.
18	South Norfolk Council	Overall, the Council is minded that in many instances the best option is to rely on Local or National Government changes. Any proposal to extend an existing regulatory regime would need to be carefully considered to ensure that it is reasonable and proportionate and does not result in undesirable consequences, such as making it less desirable or affordable for local people to remain in their existing house and community.
18	Suffolk County Council	As set out above under section 13 – Climate Change, Suffolk County Council would support policies aimed at improving the energy efficiency of existing homes in line with the aims and actions set out in the Suffolk Climate Emergency Plan. Improving the energy efficiency of houses would also improve the quality of these homes, particularly in terms of heat retention and reduction of damp. This in turn is known to have significant benefits for the physical and mental wellbeing of residents. Policies could also support renewable energy generation, with caveats for historic buildings to account for impacts to historic fabric, setting and significance of heritage assets.
18	Broadland Council	Overall, the Council is minded that in many instances the best option is to rely on Local or National Government changes. Any proposal to extend an existing regulatory regime would need to be carefully considered to ensure that it is reasonable and proportionate and does not result in undesirable consequences, such as making it less desirable or affordable for local people to remain in their existing house and community.

## 53 Summary and conclusion

54 It seems that there is general support for the principle of addressing the energy efficiency of the  
55 existing stock. But it is not really clear if the Local Plan is the mechanism to address the issue. At  
56 this stage, it is proposed to not take forward anything in the Local Plan that seeks to require energy  
57 efficiency improvements to existing dwellings, but rather rely on national and local approaches and  
58 schemes.

59 As the sustainable development policies in the Local Plan are worked up, ways to weave in wording  
60 that seeks to encourage or highlight the potential to upgrade the existing dwelling when there are  
61 extensions will be explored. Although this would be on a voluntary basis.