

Navigation Committee

02 November 2023

Agenda item number 11

Local Plan- Replacement quay heading, Navigation section and proposed allocations for residential moorings.

Report by Planning Policy Officer

Purpose

The paper introduces and seeks comments on the navigation section of the Local Plan. It also seeks comments on the Replacement Quay Heading topic paper and policy, and on the proposed allocations for residential moorings.

1. Navigation Section of the Local Plan

- 1.1. The Local Plan contains policies relating to navigation. These have been reviewed and some amendments are proposed (see Appendix 1). The changes are summarised below:
 - 1.1.1. Policy POSP13: Navigable water space – the main change is to refer to ‘banks’ rather than ‘riverbanks’.
 - 1.1.2. Policy PODM31: Access to the water – the main changes are factual as well as reference to hook up points and charging points.
 - 1.1.3. Policy PODM32: Bank stabilisation – the main changes relate to referring to ‘banks’ rather than ‘riverbanks’ as well as factual changes.
 - 1.1.4. Policy POSP14: Mooring provision – the main change is inclusion of general text relating to new or replacement moorings as it previously referred to visitor moorings.

1.1.5. Policy PODM33: Moorings, mooring basins and marinas – the main changes relate to amending the threshold and standard for new short stay moorings provided at nil cost to the Authority as well as reference to hook up points and charging points. There are also factual changes.

1.2. **Comments from Members are welcomed.**

2. Replacement Quay Heading/Piling topic paper and policy

2.1. Replacement quay heading tends to be placed 10cm to 50cm in front of the old quay heading. Placing new quay heading in front of existing quay heading at a typical distance of 10cm to 50cm reduces the width of the river in that location. This is a particular issue in narrower waterways with high volumes of river traffic. Importantly, reducing navigable space impacts on the ability of users to navigate safely. Ideally, the old quay heading would be removed first, and the new quay heading would then go in its place or new quay heading could go behind the original quay heading which is then removed. This would ensure that there is no encroachment into the river. However, this is not always done because it may be costly and can be technically challenging.

2.2. This issue has been researched with internal officers and some local contractors. It was also explored in the first consultation on the Local Plan, towards the end of 2022.

2.3. A topic paper has been produced (See Appendix 2) that further explores this issue. It proposes a geographical, case by case basis – depending on the current width of the river, taking into account the likelihood of boats mooring there (as well as how they moor). It may be acceptable for replacement quay heading to be placed in front of old quay heading, or it may need to be in line/behind it.

2.4. **Comments from Members are welcomed.**

3. Residential Moorings

3.1. The following table shows the sites that are intended to be allocated for residential moorings. It shows a total of 53 residential moorings would be allocated. The need to be addressed in the Local Plan is 48 residential moorings. The proposed policy wording can be found here: [Local Plan - Preferred Options - Bitesize pieces \(broads-authority.gov.uk\)](#).

| Site | Number of residential moorings |
|--|--------------------------------|
| Brundall Gardens Marina – small marina | 2 |
| Brundall Gardens Marina – large marina | 6 |
| Greenway Marine, Chedgrave | 5 |

| Site | Number of residential moorings |
|--|--------------------------------|
| Hipperson's Boatyard, Gillingham | 5 |
| Loddon Marina | 10 |
| Somerleyton Marina | 15 |
| Richardson's Boatyard, Stalham Staithe | 10 |
| Total: | 53 |

3.2. Comments from Members are welcomed.

Author: Natalie Beal

Date of report: 13 October 2023

Appendix 1 – Navigation section of the Local Plan

Appendix 2 - Quay heading/piling in front of quay heading/piling Topic Paper and proposed policy



**Local Plan for the Broads - Review
Preferred Options bitesize pieces
November 2023**

Navigation section

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 POSP13: Navigable water space**
- 2 1) The water space will be managed in a strategic, integrated way and navigation and conservation
- 3 interests will be maintained and enhanced.
- 4 2) Opportunities for the extension or creation of navigable/recreational water space will be
- 5 promoted, subject to compliance with other policies in this plan.
- 6 3) Navigable water space will be protected and enhanced through:
- 7 i) The careful design of flood alleviation/protection projects; and
- 8 ii) Avoiding development and changes in land management which are detrimental to its use.
- 9 4) Adequate water depths will be maintained for safe navigation, and the disposal of dredged and
- 10 cut material will be carried out in ways that avoid adverse impacts on the environment with
- 11 appropriate mitigation measures implemented as required. Beneficial re-use of dredged
- 12 materials will be expected where practicable. Opportunities for the disposal of dredged
- 13 materials to enable the management of the navigation will be sought and promoted. Measures
- 14 to control sediment input from surrounding land, highways and ~~river~~ banks will be considered in
- 15 development proposals.

16 **Reasoned Justification**

17 The waterways as a whole are a core resource of the Broads. Promoting the enjoyment of the

18 Broads and protecting the interests of navigation are two of the Authority's statutory purposes, and

19 the water is one of the key attractions for local people and visitors. The waterways will be
20 maintained and protected, and development that would have an adverse impact on the enjoyment
21 of navigable water space will not be permitted.

22 This policy applies to the entire Broads area, not just the navigation area as defined under the
23 Broads Act.

24 There is considerable pressure in certain areas on the use of water space for navigation, recreation,
25 and nature conservation purposes. Its management therefore requires an integrated approach,
26 based on levels of use and importance (for example heads of navigation and **Very** important sailing
27 areas), and suitability and potential for different uses (such as water-skiing zones). The Authority
28 works with partner organisations and local communities, taking an integrated approach to
29 waterways management, to achieve improvements for people and wildlife.

30 Development proposals close to the navigation will be assessed against their impact on the use and
31 enjoyment of the navigation - for example, avoiding a reduction in the wind required for sailing,
32 and provision for lowering of masts.

33 Parts of the rivers and broads are subject to periodic dredging to keep the waterways open to
34 navigation, not only by the Authority but also by owners of private water space who may require
35 planning consent for disposal. Historically, the dredged materials have been disposed of on land
36 when ecological gain and agricultural benefits could be derived however there is also an increasing
37 awareness that these sediments are organic rich and therefore drying them out has a CO2 impact.
38 Dredging is guided by local and national legislation. Silt from bank erosion is a recurring issue with a
39 number of causes, and once these have been addressed action must be taken to restore and
40 protect banks. The Authority provides advice to landowners on appropriate **river** bank stabilisation¹
41 methods, encouraging the use of natural or 'soft' engineering techniques wherever possible.

42 The principles for sediment management of 'Reduce/Reuse/Recycle' should be adopted by relevant
43 bodies. Generic principles that should be adopted as a baseline approach are:

- 44 • Reduce – reducing specifications where appropriate or inputs, through varied source control
45 options.
- 46 • Reuse – direct reuse options include habitat creation, flood protection works, combined
47 schemes.
- 48 • Recycle – material can be used in wider construction schemes, but would usually require
49 treatment/reclamation/remediation.
- 50 • Disposal – land fill should only be considered as a last resort, and in any event minimised as
51 far as is possible.

52 **Of relevance are policies DM18 on excavated material and DM17 on land-raising.**

53 The [Water Management Strategy](#) may be of relevance to your scheme to help ensure protection of
54 National Site Network Sites. Any work in the waterways will also likely require an HRA given the
55 potential hydrological links to European sites.

56 **Reasonable alternative options**

¹ [River bank stabilisation guide \(broads-authority.gov.uk\)](http://broads-authority.gov.uk)

57 a) No policy

58 **Sustainability appraisal summary**

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

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|-------------------------|---|
| A: Keep original policy | 5 positives. 0 negatives. 0 ? Overall, positive. |
| B: No policy | 0 positives. 0 negatives. 5 ? |

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

62 According to recent Annual Monitoring Reports, the policy has been used and applications have
63 been determined in accordance with the policy.

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

65 An alternative option is to not have a policy. Navigation is an important aspect of the Broads and
66 can be affected by schemes. To have a policy on navigation is therefore favoured.

67 **UN Sustainable Development Goals check**

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



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Policy PODM31: Access to the water

- 1) Developments that support and encourage the use of waterways, including the provision of supporting infrastructure for navigation such as the construction of moorings, jetties and walkways and the provision of electric hook up/charging points, will be permitted (subject to other policies in this Local Plan) provided that they:
 - a) Would not adversely impact navigation;
 - b) Would not result in hazardous boat movements;
 - c) Would not compromise opportunities for access to, and along, the waterside, access to and use of staites, or for waterway restoration;
 - d) Are consistent with the objectives of protecting and conserving the Broads' landscape and ecology, including the objectives of the ~~Water Framework Directive~~ Water Environment (Water Framework Directive) (England and Wales) Regulations 2017;
 - e) Are consistent with the light pollution policy; and
 - f) Would not prejudice the current or future use of adjoining land or buildings.
- 2) Proposals incorporating staites or slipways will be permitted (subject to other policies in this Local Plan) where:
 - a) The use of the slipway and any associated uses or facilities, including car parking, would not have an adverse effect on either the waterway or the adjacent riverside, including ecological, biodiversity or flood risk effects and significance and character of the historic environment; and
 - b) Access and other highway requirements for cars and trailers would be adequately provided for (in line with transport policies).
- 3) Development proposals for new freight wharves and for the provision of freight interchange on brownfield sites adjacent to the navigation will be permitted where these are in accordance with the other policies of the Local Plan.

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Reasoned Justification

The Broads is one of the most extensive and varied inland waterway systems in the UK. The Government has stated that it expects the Authority to continue to encourage a greater range of people to take up sailing, canoeing and fishing and other water related activities².

Accordingly, development proposals that support and encourage the use of waterways will be permitted where they would not have a detrimental impact on public safety on land or water or an unacceptable impact on other people's enjoyment of the Broads. Proposals should also be consistent with the objectives of the ~~Water Framework Directive~~ Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 and with protecting and conserving the Broads' landscape and wildlife. In particular, if a proposal is considered likely to have an effect on internationally designated sites, it will need to be considered in accordance with the Conservation of Habitats and Species Regulations 2017 (The Habitats Directive) and a project level Appropriate Assessment undertaken. **Development that could affect the integrity of a European site would not be in accordance with Policy PODM13 of the Local Plan.**

The waterways of the Broads have the potential to provide a sustainable and efficient mode of transporting freight. However, it is important that the use of waterways for this purpose does not affect the special qualities of the Broads. Consequently, proposals for infrastructure to support the

² [English national parks and the broads: UK government vision and circular 2010 - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

110 greater use of the waterways by freight will be permitted provided that they do not have an
111 adverse impact on landscape character, biodiversity, [dark skies](#), tranquillity or other people's
112 enjoyment of the Broads.

113 [The Water Management Strategy](#) may be of relevance to your scheme to help ensure protection of
114 [National Site Network Sites](#). Any work in the waterways will also likely require an HRA given the
115 [potential hydrological links to European sites](#).

116 **Reasonable alternative options**

117 a) No policy

118 **Sustainability appraisal summary**

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

| | |
|-------------------------|--|
| A: Keep original policy | 11 positives. 0 negatives. 0 ? Overall, positive. |
| B: No policy | 0 positives. 0 negatives. 11 ? |

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

122 According to recent Annual Monitoring Reports, the policy has been used and applications have
123 been determined in accordance with the policy.

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

125 An alternative option is to not have a policy. Navigation is an important aspect of the Broads and
126 can be affected by schemes. To have a policy on access to the water is therefore favoured.

127 **UN Sustainable Development Goals check**

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



129 **Policy PODM32: Riverbank Bank stabilisation**

- 130 1) Development proposals that include ~~river~~bank stabilisation will only be permitted (subject to
131 other policies in this local plan) where the need can be fully justified and it can be
132 demonstrated, through the submission of the Riverbank Stabilisation Checklist³ for Design, that
133 the proposal has been designed to take account of:
- 134 a) The nature of the watercourse;
 - 135 b) The scale of tidal range;
 - 136 c) Safe navigation;
 - 137 d) The character of the location;
 - 138 e) Existing uses in the area;
 - 139 f) Future maintenance of the ~~river~~bank stabilisation method proposed;
 - 140 g) A changing climate;
 - 141 h) Biodiversity; and
 - 142 i) The requirements of the ~~Water Framework Directive~~ Water Environment (Water Framework
143 Directive) (England and Wales) Regulations 2017.
- 144 2) ‘Soft’ engineering techniques shall be used as a first preference where appropriate.
- 145 3) Piling of banks will only be permitted where it takes account of criteria (a) to (i) and:
- 146 a) There is a proven need to prevent bank erosion by this method; or
 - 147 b) Where piling/quay heading is part of the character of the area; or
 - 148 c) The proposal is for replacement piling for a site that has been piled in the recent past and
149 where soft engineering techniques are unlikely to provide adequate protection; or
 - 150 d) The piling works are required for:
 - 151 i) navigation purposes (including moorings, but see mooring policies that follow);
 - 152 ii) compliance with the ~~Water Framework Directive~~ Water Environment (Water Framework
153 Directive) (England and Wales) Regulations 2017;
 - 154 iii) the prevention of diffuse pollution to the water environment; or
 - 155 iv) flood defence.
- 156 4) Mooring on banks that have been piled may not necessarily be permitted. Where mooring is
157 permitted, the number of craft allowed, type of mooring (e.g. private, visitor) and whether
158 stern-on or single alongside only mooring, will be specified.

159 **Reasoned Justification**

160 By leading to an enhanced rate of soil loss from ~~river~~banks, erosion can have a significant impact
161 on the appearance and ecological value of the waterways in the Broads. Bank erosion can also add
162 to the reduction of water quality and loss of open water, and release nutrients into the waterways
163 of the Broads. Bank erosion is expensive to repair and the sediment that enters watercourses
164 increases the amount and frequency of dredging to maintain adequate water depths for navigation.
165 The careful design of new or replacement bank edging is therefore crucial for protecting the special
166 landscape character and conservation value of Broads’ habitats and for maintaining the navigation
167 area to the required standard.

168 The wide variation in depth, width, boating activity, tidal ranges and bank construction on different
169 river sections in the Broads mean that no one ~~river~~bank stabilisation solution will be suitable for the

³ [Bank Stabilisation Pre application questionnaire \(broads-authority.gov.uk\)](https://broads-authority.gov.uk)

170 whole area. The appropriate technique will also depend on the objective behind the bank
171 protection. To help design proposals for **river**bank stabilisation, the Authority has adopted guidance
172 and a design checklist. Accordingly, development proposals that include **river**bank stabilisation
173 need to be accompanied by a completed Riverbank Stabilisation Checklist for Design that provides
174 justification for the choice of bank protection solution in relation to the issues listed in the policy
175 and guidance.

176 Some **river**banks in the Broads have been protected using timber or steel piling driven into the
177 **river**bed at the bank edge. However, this approach can damage **river**bank habitats, adversely affect
178 protected species, encourage boat mooring in inappropriate locations and create an urban feel in
179 an otherwise rural area. In many parts of the Broads, particularly those with an open rural location,
180 natural or less intrusive engineering techniques such as alder poles, faggots, willow spilling,
181 biodegradable geotextiles and vegetation will represent a more visually and ecologically
182 appropriate solution and should be used in preference to piling where technically feasible. The
183 Authority will ensure that the piling of banks only takes place where there is a demonstrable need
184 to prevent bank erosion by this means, where it is appropriate to the local character of the area or
185 for the use of the frontage for mooring. If a proposal is considered in the context of this policy to
186 potentially have an effect on an internationally designated site, then it will need to be considered
187 against the Habitats Regulations and a project level Appropriate Assessment undertaken.

188 Proposals relating to piling are directed to the Moorings Guide for information on materials and
189 other considerations.

190 A Works Licence, issued by the Broads Authority, will be necessary for the design and timing of
191 installation of works which affects areas that are publicly navigable. Full details can be found on the
192 Authority's website⁴. It is also important to note that works near a main river may require an
193 environmental permit. Further information is provided in paragraph 31.3. Indeed, other licences
194 (such as from Natural England or the Marine Management Organisation) may be required and
195 applicants should contact relevant authorities for more information.

196 The [Water Management Strategy](#) may be of relevance to your scheme to help ensure protection of
197 National Site Network Sites. Any work in the waterways will also likely require an HRA given the
198 potential hydrological links to European sites.

199 **Reasonable alternative options**

200 a) No policy

201 **Sustainability appraisal summary**

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

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|-------------------------|---|
| A: Keep original policy | 6 positives. 0 negatives. 0 ? Overall, positive. |
| B: No policy | 0 positives. 0 negatives. 6 ? |

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

⁴ [Works Licences \(broads-authority.gov.uk\)](http://broads-authority.gov.uk)

205 According to recent Annual Monitoring Reports, the policy has been used and applications have
206 been determined in accordance with the policy.

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

208 An alternative option is to not have a policy. Navigation is an important aspect of the Broads and
209 can be affected by schemes. To have a policy on bank stabilisation is therefore favoured.

210 **UN Sustainable Development Goals check**

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

14 LIFE
BELOW WATER



15 LIFE
ON LAND



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Policy POSP14: Mooring provision

- 1) All proposals for new or replacement moorings will be considered against relevant policies in this Local Plan, as well as the Mooring and Riverbank Stabilisation Guides (or successor documents).
- 2) The provision of a range of additional short term visitor moorings will be encouraged to ensure that visitor moorings are available in appropriate locations, and where they are most needed, and where they contribute to the management of a safe and attractive waterway. Existing short term visitor moorings will be protected.
- 3) The Authority will also ~~encourage~~ support the provision of residential moorings in appropriate locations, in line with details policies in this Plan.
- 4) The Authority encourages the provision of electric hook up points/charging points that are appropriately designed and located and address the dark skies policy.

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Reasoned Justification

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The provision of a network of moorings throughout the Broads system is essential for local communities, businesses and visitors to the Broads. A lack of moorings can restrict the use and enjoyment of the water, impede the local economy and, by resulting in the concentration of visitors where mooring is most plentiful, have an adverse effect on tranquillity and the quiet enjoyment of the Broads. The Authority will therefore protect existing moorings and encourage the provision of new moorings across the system.

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It is important that mooring basins and marinas are provided only in appropriate locations. New moorings support the local economy by protecting the economic viability of marinas and boatyards, thereby protecting ancillary services and facilities which might otherwise be lost. Riverside mooring can constrict the navigable waterways and lead to congestion and overcrowding on the rivers. New moorings will therefore be permitted only where they would not have a negative impact on navigation, for example in an off-river basin or within a boat yard. The quality of the waterways and surrounding landscape is vitally important to the wellbeing of the tourism industry and, by extension, the economy of the Broads. It is therefore essential that proposals for mooring basins or marinas do not impinge on the natural beauty, ecological value and local distinctiveness of the Broads or other people's enjoyment of it.

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The [Water Management Strategy](#) may be of relevance to your scheme to help ensure protection of National Site Network Sites. Any work in the waterways may require an HRA given the potential hydrological links to European sites.

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Also of relevance is Policy PODM37: New residential moorings.

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Reasonable alternative options

- a) Original policy
- b) No policy

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Sustainability appraisal summary

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

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|-------------------------|---|
| A: Keep original policy | 5 positives. 0 negatives. 0 ? Overall, positive. |
| B: Amended policy | 5 positives. 0 negatives. 0 ? Overall, positive. |
| C: No policy | 0 positives. 0 negatives. 5 ? |

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

253 According to recent Annual Monitoring Reports, the policy has been used and applications have
254 been determined in accordance with the policy.

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

256 An alternative option is to not have a policy. Navigation is an important aspect of the Broads and
257 can be affected by schemes. To have a policy on moorings is therefore favoured. The amendment
258 makes it clear this policy is relevant to all moorings and is favoured.

259 **UN Sustainable Development Goals check**

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

14 LIFE
BELOW WATER



15 LIFE
ON LAND



- 261 **Policy PODM33: Moorings, mooring basins and marinas**
- 262 1) In accordance with the Broads Integrated Access Strategy ([or successor document](#)), new
- 263 moorings will be permitted where they contribute to the network of facilities around the Broads
- 264 system in terms of their location and quality.
- 265 2) Proposals for new moorings, mooring basins and marinas, including changes to existing
- 266 provision, will be permitted where it can be demonstrated, through the submission of a
- 267 mooring questionnaire,⁵ that the proposal has been designed to take account of:
- 268 a) The nature of the watercourse;
- 269 b) The scale of tidal range;
- 270 c) The character of the location (including landscape character, features and the historic
- 271 environment);
- 272 d) Existing uses in the area;
- 273 e) Future maintenance of the mooring method proposed;
- 274 f) Biodiversity; and
- 275 g) The requirements of the ~~Water Framework Directive~~ [Water Environment \(Water Framework](#)
- 276 [Directive\) \(England and Wales\) Regulations 2017](#); and that
- 277 h) They would be located where they or their use would not have an adverse impact on navigation
- 278 (for example in an off-river basin or within a boat yard);
- 279 i) There is provision for an adequate and appropriate range of services and ancillary facilities, or
- 280 adequate access to local facilities in the vicinity;
- 281 j) The proposed development would not prejudice the current or future use of adjoining land or
- 282 buildings; and
- 283 k) The proposed development would not unacceptably impact the amenity of adjoining residents.
- 284 3) In addition, proposals for development at or within commercial mooring basins or marinas shall:
- 285 l) Not result in the loss of moorings available for visitor/short stay use;
- 286 m) Provide, manage, maintain and advertise new short stay moorings (visitor, tidal ([layby](#)), or de-
- 287 masting moorings as appropriate) at nil cost to the Broads Authority as follows. These moorings
- 288 shall be provided on-site, but in exceptional circumstances the Authority may consider off-site
- 289 contributions to any type of mooring.
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| <u>Size of scheme – length of moorings proposed (m)</u> | <u>Alongside and double alongside moorings</u> | <u>Stern on moorings</u> |
|---|--|--|
| | <u>Length/% provided and managed for short stay visitor moorings</u> | |
| <u>Less than 20m</u> | <u>none</u> | <u>none</u> |
| <u>More than 20m, less than 100m</u> | <u>10m permanent mooring</u> | <u>8m permanent mooring</u> |
| <u>More than 100m, less than 200m</u> | <u>20m permanent moorings</u> | <u>20m permanent moorings</u> |
| <u>More than 200m, less than 300m</u> | <u>30m permanent moorings</u> | <u>32m permanent moorings</u> |
| <u>More than 300m</u> | <u>15% of the length permanent moorings, rounded to the nearest whole number</u> | <u>15% of the length permanent moorings, rounded to the nearest factor of 4m – the</u> |

⁵ [Mooring design guide pre-application questionnaire \(broads-authority.gov.uk\)](#)

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| <u>Size of scheme – length of moorings proposed (m)</u> | <u>Alongside and double alongside moorings</u> | <u>Stern on moorings</u> |
| | <u>Length/% provided and managed for short stay visitor moorings</u> | |
| | <u>(less than 0.5, round down, more than or equal to 0.5, rounded up)</u> | <u>Authority calculates the width of a typical stern on mooring as 4m.</u> |

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| Size of scheme – no. of moorings proposed | Number/% provided and managed for short stay visitor moorings |
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| 2-9 | 1 permanent mooring |
| 10-19 | 2 permanent moorings |
| 20-29 | 3 permanent moorings |
| 30 or more | 15% permanent moorings, rounded to the nearest whole number (less than 0.5, round down, more than or equal to 0.5, rounded up). |

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- n) Make adequate provision for car parking, waste and sewage disposal and the prevention of pollution⁶;
- o) Provide for the installation of pump-out facilities (where on mains sewer) unless there are adequate alternative facilities in the vicinity; and
- p) Provide an appropriate range of ancillary facilities on site (for example potable water, wastewater pumpout, and electricity) unless there is access to local facilities within walking distance.

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The Authority supports the provision of electric hook up and/or charging points where appropriate, subject to the impacts associated with their construction and operation being acceptable (for example, illumination and impact on dark skies and location of electricity supply).

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Reasoned Justification

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This policy applies to private and public moorings.

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Types of moorings

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In the Broads, mooring types⁷ traditionally fall under the following general categories:

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- **Private Moorings:** A mooring that comprises the usual base for a vessel from which it might or might not go cruising. This type of mooring will often be allocated to or occupied by a single, identifiable vessel. There is no 'residential use'. A charge is usually made for the use of a private mooring unless it forms part of a private dwelling/ leisure plot.
- **Visitor/Short Stay Moorings:** A mooring that is specifically designated to enable boats to stop-off or stay for short periods while cruising, usually for a maximum, specified period. This type of mooring is usually occupied by different visiting vessels in succession (not necessarily continuously). A charge may or may not be made for the use of visitor/short stay mooring.

⁶ Refer to [Water supply, wastewater and water quality - GOV.UK \(www.gov.uk\)](http://www.gov.uk) for information on pollution prevention measures.

⁷ Note: Residential Moorings are addressed separately under Policy DM37.

- 315 • **Casual/Informal Moorings:** A mooring where boats moor on a casual basis, anywhere along a
316 ~~river~~ bank, for a short period of time. These do not generally require the benefit of planning
317 permission.
- 318 • **Commercial Moorings:** A mooring (usually in a mooring basin or marina) used by a
319 commercial operator on a commercial basis, where boats may be moored for long or short
320 periods between cruising. The vessels may or may not be in the ownership of the commercial
321 operator.
- 322 • **Tidal (layby) moorings:** Used to moor a vessel while waiting for the correct state of tide to
323 proceed with the journey. These could be near to bridges for example. They do not have to
324 have access to the land.
- 325 • **De-masting moorings:** Used to moor a vessel in order to lower the mast to enable the
326 vessel to continue with the journey. Likely to be near bridges where the air draught (height
327 between water and bridge) means the mast must be lowered. Again, these do not have to
328 access land.

329 Supply of moorings

330 The analysis undertaken as part of the Broads Integrated Access Strategy highlighted that the
331 demand for visitor moorings exceeds supply. However, due to the conversion of boatyards to
332 alternative uses and engineering works associated with flood defence works, the quantity of
333 available visitor moorings across the Broads has been in decline for a number of years. To
334 encourage the use and enjoyment of the waterways and to support the valuable contribution made
335 by tourism to the local economy, the Authority will ensure that development proposals for
336 commercial basins and marinas do not result in the further loss of moorings available for visitor
337 use. Proposals for new commercial basins and marinas will also be expected to make an
338 appropriate provision for new visitor moorings.

339 Short stay moorings – ‘part m moorings’

340 With regards to the requirement to provide short stay visitor moorings as set out in part m of the
341 policy, the preference is to deliver these short stay moorings on site. ‘On site’ does not have to be
342 part of the development site; it could be elsewhere in an appropriately accessible and suitable part
343 of the marina or boatyard. Indeed, the applicant may wish to provide these moorings in a location
344 easily accessible by novice helms to minimise the potential for accidental damage. It is expected
345 that these moorings will be appropriately advertised, for example ~~perhaps~~ on websites or signed on
346 the river (in accordance with policy PODM49).

347 In exceptional circumstances, the Authority may accept off-site contributions towards mooring
348 provision. The contribution would be calculated to reflect the cost of delivering the moorings on
349 site. That is to say that the contribution in line with the standards set out in the policy would be
350 equal to the cost of delivering the same amount of moorings as part of that scheme. This reflects
351 that it would cost the Broads Authority this amount to deliver an equivalent provision in the same
352 location.

353 To support the delivery of the mooring berths contributions, the Authority is willing to consider
354 seasonal usage of moorings. A boatyard or marina may have moorings they only need for their own
355 use in the off-peak season (November to March) and could therefore allow them to be used for
356 short stay moorings, in accordance with ~~as per~~ the policy requirements, in the peak season only
357 (April to October). If this is the case, the Authority would consider this approach subject to agreeing
358 an appropriate and deliverable approach to operating, monitoring, managing and advertising the

359 seasonal moorings and would expect more short stay moorings than set out in part m to be
360 provided in the peak season.

361 Operators may wish to charge a fee for use of these moorings, but this should be commensurate
362 with the average mooring charges in the local area.

363 The table identifies three types of moorings – alongside, double alongside and stern on moorings.
364 The table in the policy uses an average 10m per mooring for alongside and double alongside and
365 4m for stern on moorings. These average lengths/widths are used elsewhere in the Authority and
366 so provides a consistent approach.

367 **Impact of mooring schemes**

368 The quality of the waterways and surrounding landscape is vitally important to the wellbeing of the
369 tourism industry and, by extension, the economy of the Broads. It is therefore essential that
370 proposals for mooring basins or marinas do not impinge on the natural beauty, ecological value and
371 local distinctiveness of the Broads or other people’s enjoyment of it. If a proposal is considered in
372 the context of this policy to potentially have an effect on an internationally designated site, it will
373 need to be considered against the Habitats Regulations and a project level Appropriate Assessment
374 undertaken.

375 **Relevant strategies, policies and guides**

376 The Broads Integrated Access Strategy is a starting point in regard to where moorings could be
377 delivered, paid for by the off-site contributions, and other opportunities will come about outside
378 that strategy.

379 The Authority has adopted a Moorings Design Guide, which sets out considerations for different
380 types of moorings.

381 Other policies of particular importance to proposals for new or reconfiguring moorings are:

- 382 ~~• The safety by the water policy, which sets out what the Authority requires in relation to egress~~
383 ~~from the water, life rings and so on.~~
384 • The boat wash down policy is of importance in relation to biosecurity and antifouling paint.
385 • Peat and archaeology policies.

386 The [Water Management Strategy](#) may be of relevance to your scheme to help ensure protection of
387 National Site Network Sites. Any work in the waterways will also likely require an HRA given the
388 potential hydrological links to European sites.

389 **Reasonable alternative options**

- 390 a) Original policy
391 b) No policy

392 **Sustainability appraisal summary**

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

| | |
|-------------------------|---|
| A: Keep original policy | 8 positives. 0 negatives. 0 ? Overall, positive. |
|-------------------------|---|

| | |
|-------------------|---|
| B: Amended policy | 8 positives. 0 negatives. 0 ? Overall, positive. |
| C: No policy | 0 positives. 0 negatives. 8 ? |

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

396 According to recent Annual Monitoring Reports, the policy has been used and applications have
397 been determined in accordance with the policy.

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

399 An alternative option is to not have a policy. Navigation is an important aspect of the Broads and
400 can be affected by schemes. To have a policy on moorings is therefore favoured. The amendment
401 makes it clear this policy is relevant to all moorings and is favoured.

402 **UN Sustainable Development Goals check**

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



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 POSP13: Navigable water space

| | | A: Keep original policy | B: No policy |
|-------|---|---|--------------|
| ENV1 | + | Policy relates to navigation of the waterways. | ? |
| ENV2 | | | |
| ENV3 | | | |
| ENV4 | | | |
| ENV5 | | | |
| ENV6 | | | |
| ENV7 | | | |
| ENV8 | + | Policy seeks beneficial re use of dredged material. | ? |
| ENV9 | | | |
| ENV10 | | | |
| ENV11 | | | |
| ENV12 | | | |
| SOC1 | | | |
| SOC2 | | | |
| SOC3 | | | |
| SOC4 | | | |
| SOC5 | | | |
| SOC6 | | | |
| SOC7 | | | |
| ECO1 | + | Navigable waterways are important to the local economy. | ? |
| ECO2 | + | | ? |
| ECO3 | + | | ? |

Not having a policy does not necessarily mean that navigation would be lost as the Authority does have some legal powers regarding navigation. A policy is another way of protecting navigation.

Policy PODM31: Access to the water

| | | A: Keep original policy | B: No policy |
|-------|---|---|--------------|
| ENV1 | + | Policy relates to navigation of the waterways. | ? |
| ENV2 | + | Policy refers to water quality regulations. | ? |
| ENV3 | + | Policy refers to impact on biodiversity. | ? |
| ENV4 | + | Policy refers to landscape character impact. | ? |
| ENV5 | | | |
| ENV6 | + | Policy refers to flood risk. | ? |
| ENV7 | | | |
| ENV8 | | | |
| ENV9 | + | Policy refers to impact on the historic environment. | ? |
| ENV10 | | | |
| ENV11 | + | Policy refers to light pollution and provision of electric hook up/charging points that will mean diesel engines not turned on when boats moored. | ? |
| ENV12 | | | |
| SOC1 | + | Reference to hazardous movements is made in the policy. | ? |
| SOC2 | | | |
| SOC3 | | | |
| SOC4 | | | |
| SOC5 | | | |
| SOC6 | | | |
| SOC7 | | | |
| ECO1 | + | Access to the water is important to the local economy. | ? |
| ECO2 | + | | ? |
| ECO3 | + | | ? |

Not having a policy does not necessarily mean that proposals for access to water will affect the sustainability objectives. A policy however provides more certainty.

Policy PODM32: Bank stabilisation

| | | A: Keep original policy | B: No policy |
|-------|---|--|--------------|
| ENV1 | + | Policy relates to navigation of the waterways. | ? |
| ENV2 | + | Policy refers to water quality regulations. | ? |
| ENV3 | + | Policy refers to impact on biodiversity. | ? |
| ENV4 | + | Policy refers to landscape character impact. | ? |
| ENV5 | + | Policy refers to a changing climate | ? |
| ENV6 | + | Policy refers to flood risk. | ? |
| ENV7 | | | |
| ENV8 | | | |
| ENV9 | | | |
| ENV10 | | | |
| ENV11 | | | |
| ENV12 | | | |
| SOC1 | | | |
| SOC2 | | | |
| SOC3 | | | |
| SOC4 | | | |
| SOC5 | | | |
| SOC6 | | | |
| SOC7 | | | |
| ECO1 | | | |
| ECO2 | | | |
| ECO3 | | | |

Not having a policy does not necessarily mean that banks cannot be stabilised. Having a policy emphasises the considerations and provides certainty.

Policy POSP14: Mooring provision

| | A: Keep original policy | | B: Amended policy | | B: No policy | |
|-------|-------------------------|--|-------------------|--|---|---|
| ENV1 | | | | | <p>Not having a policy does not necessarily mean that mooring will not be provided in an acceptable way. A policy provides clarification.</p> | |
| ENV2 | | | | | | |
| ENV3 | | | | | | |
| ENV4 | + | Policy refers to an attractive waterway. | + | Policy refers to an attractive waterway. | | ? |
| ENV5 | | | | | | |
| ENV6 | | | | | | |
| ENV7 | | | | | | |
| ENV8 | | | | | | |
| ENV9 | | | | | | |
| ENV10 | | | | | | |
| ENV11 | | | | | | |
| ENV12 | | | | | | |
| SOC1 | + | Policy refers to a safe waterway | + | Policy refers to a safe waterway | | ? |
| SOC2 | | | | | | |
| SOC3 | | | | | | |
| SOC4 | | | | | | |
| SOC5 | | | | | | |
| SOC6 | | | | | | |
| SOC7 | | | | | | |
| ECO1 | + | Moorings are important to the local economy. | + | Moorings are important to the local economy. | | ? |
| ECO2 | + | | + | | ? | |
| ECO3 | + | | + | | ? | |

Policy DM33: Moorings, mooring basins and marinas

| | A: Keep original policy | | B: Amended policy | | B: No policy | |
|--------|-------------------------|---|-------------------|---|--------------|--|
| ENV1 | + | Policy relates to navigation of the waterways. | + | Policy relates to navigation of the waterways. | ? | Not having a policy does not necessarily mean that mooring will not be provided in an acceptable way. A policy provides clarification. |
| ENV2 | + | Policy refers to water quality regulations. | + | Policy refers to water quality regulations. | ? | |
| ENV3 | + | Policy refers to impact on biodiversity. | + | Policy refers to impact on biodiversity. | ? | |
| ENV4 | + | Policy refers to landscape character impact. | + | Policy refers to landscape character impact. | ? | |
| ENV5 | | | | | | |
| ENV6 | | | | | | |
| ENV7 | | | | | | |
| ENV8 | | | | | | |
| ENV9 | | | | | | |
| ENV10 | | | | | | |
| ENV11 | + | Policy refers to provision of electric hook up/charging points that will mean diesel engines not turned on when boats moored. | + | Policy refers to light pollution and provision of electric hook up/charging points that will mean diesel engines not turned on when boats moored. | ? | |
| /ENV12 | | | | | | |
| SOC1 | | | | | | |
| SOC2 | | | | | | |
| SOC3 | | | | | | |
| SOC4 | | | | | | |
| SOC5 | | | | | | |
| SOC6 | | | | | | |
| SOC7 | | | | | | |
| ECO1 | + | Moorings are important to the local economy. | + | Moorings are important to the local economy. | ? | |
| ECO2 | + | | + | | ? | |
| ECO3 | + | | + | | ? | |



Replacement Quay Heading/Piling Topic Paper

November 2023

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1. Introduction

Across the Broads area, the banks of the rivers, Broads, dykes and inlets vary in terms of the treatment of the edge. Mostly, the banks are natural with the land sloping down to the water, often with a wide, reeded fringe. Where the tidal flow is strong, or there is erosion or protection is required, the bank may be piled. The piling may be steel or timber and the material used often depends on the age of the piling and its primary function. The term ‘piling’ tends to be used where there is primarily an engineering purpose for the piling. Where mooring is required, the bank is often piled so that vessels can be tied alongside the bank, and there is often a walkway constructed parallel to the bank to facilitate access. Where the purpose of the piling is primarily to enable a mooring use, it tends to be referred to as ‘quay heading’. ‘Quay heading’ can cover commercial, visitor, residential, householder and other types of moorings.

Planning permission is usually required to install piling and quay heading as it is an engineering operation. The Broads Authority treats like-for-like replacement of quay heading as ‘maintenance’, subject to a 25m maximum length and the replacement being on the same alignment, height and depth as the previous and being in the same materials.

Landowners may want to improve a quay heading in a particular area to maintain it in a good condition, to enable a change in the way an area is used, or to replace the quay heading at the end of its life. They may do this by placing new quay heading in front of the original quay heading, rather than removing the original quay heading. The new quay heading tends to be placed 10cm to 50cm in front of the old quay heading. Timber quay heading tends to be replaced every 10 to 15 years and steel quay heading every 20 to 30 years.

Placing new quay heading in front of existing quay heading at a typical distance of 10cm to 50cm reduces the width of the river in that location. This is a particular issue in narrower waterways with high volumes of river traffic. Importantly, reducing navigable space impacts

on the ability of users to navigate safely. One of the statutory purposes of the Broads Authority is to protect the interests of navigation. The Local Plan for the Broads has a strategic policy (SP13) that seeks to protect and enhance the navigable water space.

There are some stretches of rivers that are both narrow and have quay heading. In some areas, a small encroachment could have a significant impact on the available channel space. Another issue to consider is how busy a stretch of water is and the typical size of vessels that use that stretch. Therefore, any policy approach could apply to certain areas.

Ideally, the old quay heading would be removed first, and the new quay heading would then go in its place or new quay heading could go behind the original quay heading which is then removed. This would ensure that there is no encroachment into the river. However, this is not always done because it may be costly and can be technically challenging.

This Topic Paper explores the issue as well as proposes a way forward for the Local Plan.

2. Issues and Options

This Issue was discussed in the [Issues and Options Local Plan document](#) that was consulted on at the end of 2022.

In planning terms, we tend to use the strategic policy SP13. Under the Broads Act 1988, certain schemes require a Works Licence and one of the considerations in issuing these licences is the impact on navigation. Taking these together, we usually request that replacement quay heading is not placed more than 30cm in front of the original. However, the reason we are raising this as an issue is that in some areas we are at a critical point and need to safeguard navigation from further encroachment.

The options and related question we included in the Issues and Options document are as follows.

- a. No specific policy approach to address quay heading in front of quay heading.
- b. Geographic risk-based approach. Map areas where the rivers are narrow and where there is already quay heading – through assessment of channel width and river usage, areas where new quay heading being placed in front of old quay heading would impact navigation would be identified. In the areas identified as being most impacted from encroachment, the approach could be to hold the existing line of the quay heading.
- c. Have a policy that applies to all the Broads, regardless of river width. This seeks to minimise the impact through set criteria for how far quay heading could be in front of existing.

Question 23: Do you have any comments on the issue of new quay heading in front of old quay heading?

Here are the responses:

| Organisation | Comment |
|---|---|
| Bradwell Parish Council | We should adopt option C. |
| Broads Society | The Society favours the 'Geographic risk-based approach' detailed in 'Option b'. |
| Brooms Boats | Option B however economic viability regarding business needs is vital and hence requires a collaborative approach. |
| East Suffolk Council | East Suffolk Council's view is that the Broads Authority are best placed to determine which of the options best deliver against the statutory purposes of the Broads Authority in protecting the interests of navigation. However, an approach based on the evidence of risk (option b) would seem sensible as this will allow for the policy to focus on those areas where a critical point has been reached. |
| Mrs S Lowes | Old quay heading should be removed. |
| RSPB | <p>Prioritisation for replacement of quay head must go to locations where the heading protects bank integrity first and foremost and provision of mooring facilities second.</p> <p>We recommend the construction cost in terms of CO2 becomes part of the validation process, just as for materials and design of residential developments.</p> |
| Sequence UK LTD/Brundall Riverside Estate Association | <p>We note the issues that have been raised within the consultation document but are concerned that this is a matter that does need to be considered on a site-by-site basis and therefore the options set out within b) or c) are too prescriptive and inflexible, particularly where navigation matters will also be a factor.</p> <p>Therefore, we would recommend that no specific policy would be more appropriate, although guidance only could be provided within the Design Guide or an SPD (Supplementary Planning Document) to ensure there is some form of assistance on this issue.</p> |

3. Research – technical issues and costs

To further understand the impact of placing quay heading in the same place or even behind the existing quay heading, the Authority contacted two contractors who operate in the

Broads and are often hired to replace quay heading. The key information from the contractors is as follows:

- a) To understand the potential for piling to be removed, it is important to understand the piling type (timber, plastic, steel), location (can the quay heading be reached by an excavator? By road or river?), condition of the piling to be removed (is the piling likely to break, particularly at the waterline making extraction difficult) and waste disposal/transport costs.
- b) In many ways the outcomes are very site specific. But in general, there are more risks with piling behind the original line. The chance of encountering debris that hampers or prevents piles being driven behind is greater when you pile behind. It is not unusual to find old revetments, old anchors, services, or aggregate backfill behind the piles. If these items are encountered, then it can add considerable time to the project or change the end results.
- c) If there are no such items behind the piles and the piles drive freely then the additional costs would be the excavation and disposal of the material between the old and new. It will cost less if the material is allowed to be spread on site, but if it must be taken away, assuming a collection vehicle can get to within a few yards for the source, then that would cost more.
- d) The old piles would also need extracting. If they come out freely and intact and a collection vehicle can get close to the site then the scrap metal cost would go some way to covering the cost, but this is an additional cost.
- e) The advantage of piling behind existing piling is that the importing of material needed to fill the void between the old and new piles is not necessary. There is a cost of providing and placing this material.
- f) One consequence of removing old works first is that in most cases, once the old work is removed, the material directly behind the removed quay heading immediately starts to fall away. This does then require the land to be reinstated behind the new quay heading either by dredging the original material back out of the water, or by bringing additional material back to the site. There could be an additional cost because of the material falling away. The likelihood of this happening will depend on the local soil type and conditions as well as the rate of river flow.

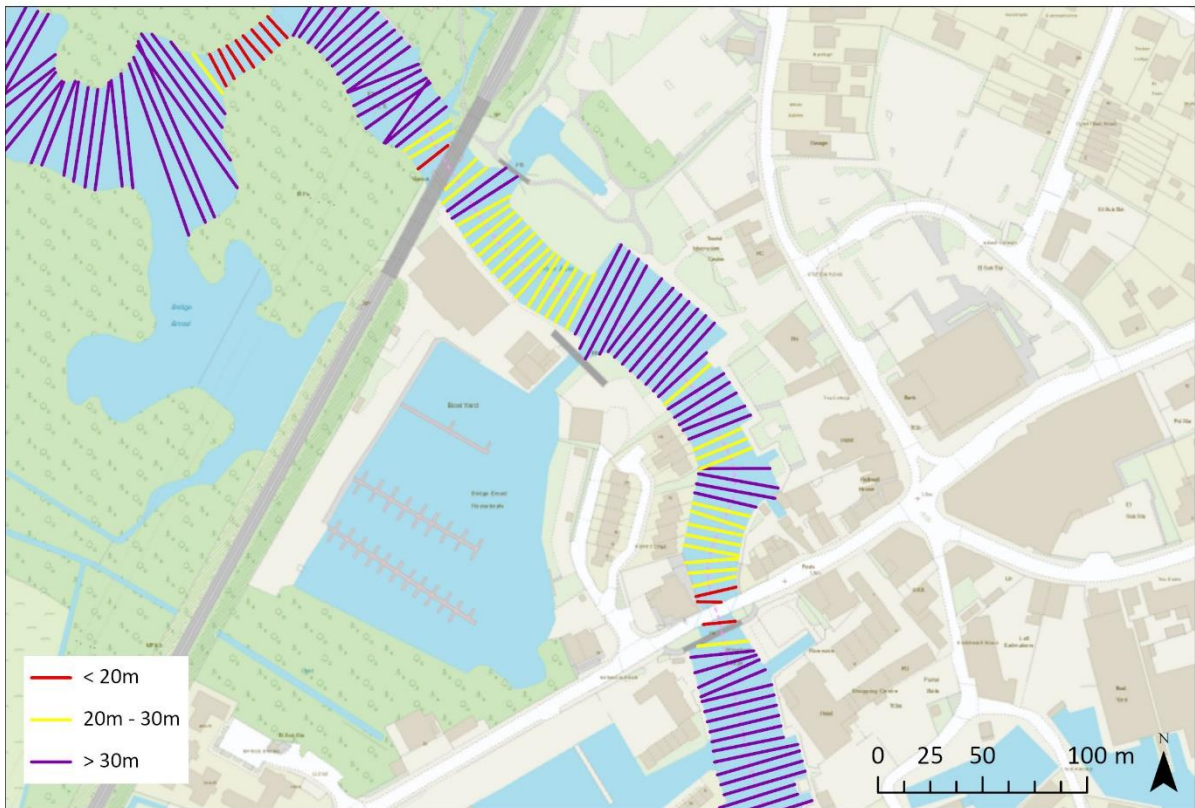
In summary, from a theoretical point of view, if there are no obstacles behind the piles, there is little difference in the cost and work required to place piling in line or behind the existing quay heading. However, given the risk of obstacles and access for vehicles having a potentially pivotal impact, site specific assessment is really needed. The issue of material falling away if piling removed first is another consideration and cost.

| Placing quay heading in place of or behind | |
|--|--|
| Additional costs | <ul style="list-style-type: none"> • Removing piling • Excavation and disposal of material • Material falling away and then being dredged |
| Potential costs | <ul style="list-style-type: none"> • Encountering debris |
| Cost savings/offset | <ul style="list-style-type: none"> • Scrap metal value of piling • Back filling of material/importing material |

4. Width of waterways

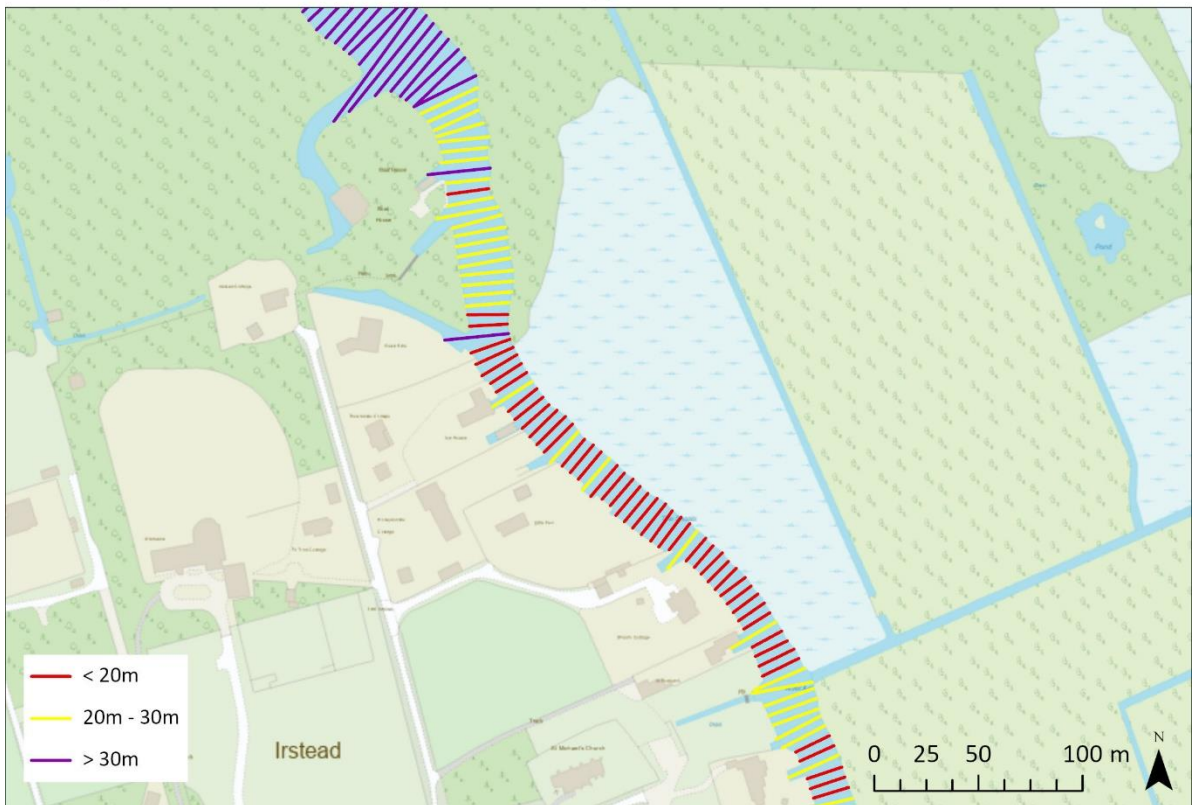
The widths calculated are based on Ordnance Survey MasterMap data which is the most accurate large-scale mapping available. Transects have been created at 5m intervals perpendicular to the Broads Authority centreline dataset and clipped to the extent of the water body. Each transect has been assigned one of the following 3 categories based on the length across. Less than 20m wide, More than 20m wide, but less than 30m, More than 30m. Some examples are included here:

Showing width of the river at 5m intervals though Wroxham/Hoveton



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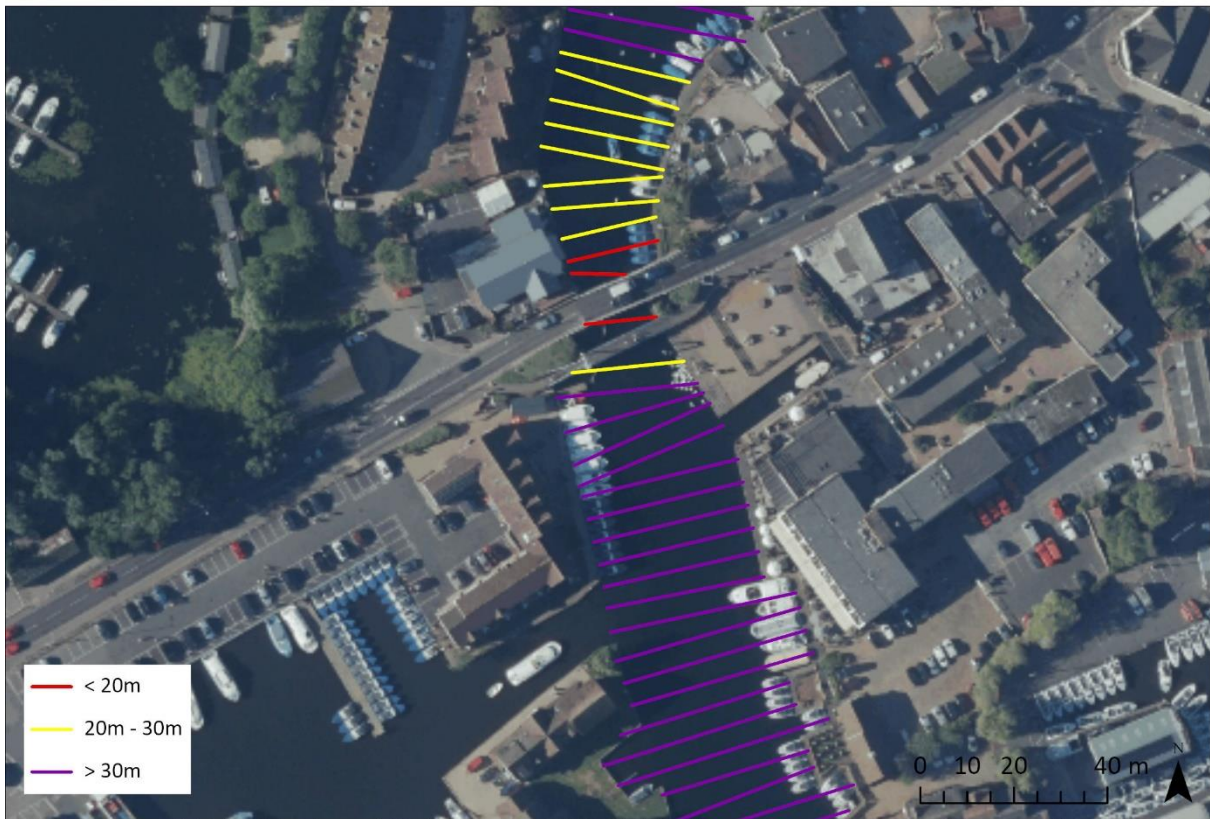
Showing width of the river at 5m intervals though Irstead



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It is not just the width of the channel that we need to consider; we also need to understand if boats do or will moor either on one side or both sides of the stretch of water. The aerial imagery below shows that boats can moor on one or both sides of the waterways.

Showing width of the river at 5m intervals though Wroxham/Hoveton



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Because the areas where stern on moorings are known, they have also been mapped.

Showing width of the river at 5m intervals though Chedgrave



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5. Way forward

It is proposed that there is a policy approach in the Local Plan to address this issue.

It is proposed that the approach is a geographic risk-based approach.

The 5m segments would be a starting point to consider the impact of any proposal, and aerial imagery would be used to indicate if boats are moored at the site in question. The Development Management Officer would then measure the width using GIS, taking into account the boat(s) moored there.

There is potential for the mapping system to be public facing.

In the areas identified as being most impacted from encroachment, the approach would be to hold the existing line of the quay heading.

Appendix 1: Proposed draft policy.



**Local Plan for the Broads - Review
Preferred Options bitesize pieces
November 2023**

The impact of replacement quay heading on navigation.

This is a proposed draft section/policy for the Preferred Options Local Plan. Member's comments and thoughts are requested. This policy is a new policy.

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.

1 **Policy x: The impact of replacement quay heading on navigation.**

- 2 1. Proposals for replacement quay heading that adversely impact on the navigable
3 waterways will be refused.
- 4 2. Replacement quay heading proposals on waterways that are less than 30m in width, as
5 indicated by the navigation transect dataset, will be assessed, on a case-by-case basis, to
6 ascertain whether the replacement quay heading needs to be placed in line with or
7 behind the existing quay heading in order to not erode the width of the navigable
8 waterway.

9 Reasoned justification

10 Schemes involving replacement quay heading often place the new quay heading in front of
11 the original quay heading, rather than removing the original quay heading first. The new
12 quay heading tends to be placed 10cm to 50cm in front of the old quay heading. Timber
13 quay heading tends to be replaced every 10 to 15 years and steel quay heading every 20 to
14 30 years.

15 Placing new quay heading in front of existing quay heading at a typical distance of 10cm to
16 50cm reduces the width of the river in that location. This is a particular issue in narrower

17 waterways with high volumes of river traffic. Importantly, reducing navigable space impacts
18 on the ability of users to navigate safely. One of the statutory purposes of the Broads
19 Authority is to protect the interests of navigation. The Local Plan for the Broads has a
20 strategic policy (SP13) that seeks to protect and enhance the navigable water space.

21 There are some stretches of rivers that are both narrow and have quay heading. In some
22 areas, a small encroachment could have a significant impact on the available channel space.
23 Another issue to consider is how busy a stretch of water is and the typical size of vessels
24 that use that stretch.

25 Ideally, the old quay heading would be removed first, and the new quay heading would then
26 go in its place or new quay heading could go behind the original quay heading which is then
27 removed. This would ensure that there is no encroachment into the river. However, this is
28 not always done because it may be costly and can be technically challenging.

29 Under the Broads Act 1988, certain schemes require a Works Licence and one of the
30 considerations in issuing these licences is impact on navigation.

31 The **Replacement Quay Heading/Piling Topic Paper** explores this issue in more detail and
32 seeks to justify the policy approach.

33 Delivering the policy

- 34 1. When a proposal for replacement quay heading is received, the Broads Authority will
35 use the Waterway Width Mapping System to ascertain the width of the waterway.
- 36 2. The mapping system will also include aerial imagery from the last few years, and these
37 will be used to ascertain if vessels usually moor along the stretch of waterway in
38 question and indeed, how they moor (stern on, alongside or double alongside).
- 39 3. The aerial imagery will be used to understand the actual width of the river, considering
40 moored vessels.
- 41 4. The Authority will also assess accident data and data relating to how busy a stretch of
42 water is.
- 43 5. All this information will be combined to determine whether the new quay heading needs
44 to be in line or behind the existing quay heading.

45 **Reasonable alternative options**

- 46 a) No policy.
- 47 b) No quay heading is allowed in front of quay heading across the entire system.
- 48 c) Proposed policy.

49 **Sustainability appraisal summary**

50 The three options have been assessed in the SA. The following is a summary.

| | |
|--|---|
| A: No policy | 0 positives. 0 negatives. 3 ? |
| B: No quay heading allowed in front of quay heading across the entire system | 3 positives. 0 negatives. 0 ? Overall, positive. |
| C: Preferred Option – proposed policy | 3 positives. 0 negatives. 0 ? Overall, positive. |

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

52 Placing new quay heading in front of existing quay heading at a typical distance of 10cm to
53 50cm reduces the width of the river in that location. This is a particular issue in narrower
54 waterways with high volumes of river traffic. Importantly, reducing navigable space impacts
55 on the ability of users to navigate safely. So having a policy is favoured and having a policy
56 that judges schemes on a case-by-case basis is favoured.

57 **UN Sustainable Development Goals check**

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

59 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: No policy | B: No quay heading allowed in front of quay heading across the entire system | C: Preferred Option – proposed policy |
|-------|---|--|--|---|
| ENV1 | | Not having a policy does not mean that these issues will not be considered or addressed. A policy does however provide more certainty. | | |
| ENV2 | | | | |
| ENV3 | | | | |
| ENV4 | | | | |
| ENV5 | | | | |
| ENV6 | | | | |
| ENV7 | | | | |
| ENV8 | | | | |
| ENV9 | | | | |
| ENV10 | | | | |
| ENV11 | | | | |
| ENV12 | | | | |
| SOC1 | | | | |
| SOC2 | | | | |
| SOC3 | | | | |
| SOC4 | | | | |
| SOC5 | | | | |
| SOC6 | | | | |
| SOC7 | | | | |
| ECO1 | ? | | + Navigable waterways are fundamental to many businesses in the Broads. | + Navigable waterways are fundamental to many businesses in the Broads. |
| ECO2 | ? | | + | + |
| ECO3 | ? | | + | + |