

Navigation Committee

Agenda 11 January 2024

10.00am King's Centre, 63-75 King Street, Norwich, NR1 1PH

John Packman, Chief Executive – Thursday, 04 January 2024

Under the Openness of Local Government Bodies Regulations (2014), filming, photographing and making an audio recording of public meetings is permitted. These activities however, must not disrupt the meeting. Further details can be found on the <u>Filming, photography and</u> <u>recording of public meetings</u> page.

Introduction

- 1. To receive apologies for absence
- 2. To receive declarations of interest
- 3. To note whether any items have been proposed as matters of urgent business
- 4. Public question time The following question was received from Mr Jamie Campbell:

"I note that the Navigation Committee has been asked to consider introducing mooring charges at Reedham Quay. This quay is registered with Norfolk County Council as common land ref. My questions on this topic are:

- i) Would the Navigation Committee see any difficulty in imposing charges on common land?
- ii) Would the Navigation Committee foresee any difficulty in renewing lease arrangements on common land as a corporate body?
- iii) Would the Navigation Committee see any difficulty in erecting structures on common land?"
- 5. To receive and confirm the minutes of the Navigation Committee meeting held on 2 November 2023 (Pages 3 - 14)
- 6. Summary of actions and outstanding issues following discussion at previous meetings (Pages 15 19)

Reports for information

- Chief Executive's report and current issues (Pages 20 40) Report by Chief Executive
- 8. **Proposed budget 2024/2025 and financial strategy to 2027/2028** (Pages 41 68) Report by Director of Finance
- 9. **Port Marine Safety Code audit findings and recommendations** (Pages 69 72) Report by Director of Operations
- 10. **Report on survey by Rangers** (Pages 73 76) Report by Director of Operations
- 11. **Pilotage review** (Pages 77 135) Report by Head of Ranger Services
- 12. Boat Safety Scheme management group (Pages 136 146) Report by Head of Safety Management
- 2023/2024 Health & Safety review and internal audit recommendations following review (Pages 147 - 153) Report by Head of Safety Management
- Construction, Maintenance, and Ecology work programme progress update (Pages 154 158)
 Report by Head of Construction, Maintenance, and Ecology
- 15. Integrated Access Strategy (Pages 159 166) Report by Waterways and Recreation Officer
- Planning application with implications for navigation BA/2023/0443/FUL, Richardsons, The Staithe, Stalham (Pages 167 – 170) Report by Planning Officer
- Planning application with implications for navigation BA/2023/0444/FUL Horizon Craft, Acle Bridge (Pages 171 - 173) Report by Planning Officer

Other matters

18. To note the date of the next meeting – Thursday 11 April 2024 at 10.00am at the King's Centre, 63-75 King Street, Norwich, NR1 1PH

For further information about this meeting please contact the Governance team



Navigation Committee

Minutes of the meeting held on 02 November 2023

1.	Apologies and welcome	2
	Openness of Local Government Bodies Regulations 2014	2
2.	Declarations of interest	2
3.	Matters of urgent business	2
4.	Public question time	2
5.	Minutes of last meeting	3
6.	Summary of actions and outstanding issues following discussions at previous meeting	gs3
7.	Chief Executive's report and current issues	3
8.	Proposed navigation charges for 2024/25 in the navigation area and adjacent waters	3
	Options analysis	6
9.	Construction, Maintenance and Ecology work programme – progress update	7
10.	Integrated Access Strategy – Consultation feedback	8
11.	Local Plan – Replacement quay heading and the Local Plan and Navigation section	9
12. Extens	Planning application with implications for navigation – BA/2023/0349 FUL Ribs of Bee sion of decked area	ef, 10
13.	Date of next meeting	10
14.	Exclusion of the public	10
15.	Exempt minutes of last meeting	10
Apper	ndix 1 – Declaration of interests: Navigation Committee, 02 November 2023	12

Present

Alan Goodchild – in the Chair, Peter Dixon, Harry Blathwayt (items 1 to 9), Stephen Bolt, Mark Collins, Leslie Mogford, Greg Munford, Bob Neate, Remus Sawyerr, Simon Sparrow, Daniel Thwaites.

In attendance

Natalie Beal, Planning Policy Officer (item 11), Jane Fox – Planning Officer (item 12), Dan Hoare – Head of Construction, Maintenance and Ecology, Bill Housden - Head of IT and Collector of Tolls, Emma Krelle – Director of Finance, John Packman - Chief Executive, Rob Rogers - Director of Operations, Cally Smith – Head of Planning (items 11 and 12), Lorraine Taylor, Governance Officer, Marie-Pierre Tighe – Director of Strategic Services, Sara Utting, Senior Governance Officer.

Others in attendance

Bill Dickson – Chair of the Broads Authority, Estelle Culligan – Deputy Monitoring Officer (items 1 to 8)

1. Apologies and welcome

The Chair welcomed everyone to the meeting.

Apologies were received from Michael Scott and Paul Thomas

Openness of Local Government Bodies Regulations 2014

The Chair explained that the meeting was being audio-recorded. All recordings remained the copyright of the Broads Authority and anyone wishing to receive a copy should contact the Governance Team. The minutes remained the formal record of the meeting. He added that the law permitted any person to film, record, photograph or use social media in order to report on the proceedings of public meetings of the Authority. This did not extend to live verbal commentary. The Chair needed to be informed if anyone intended to photograph, record or film so that any person under the age of 18 or members of the public not wishing to be filmed or photographed could be accommodated.

2. Declarations of interest

Members expressed their declarations of interest as set out in Appendix 1 of these minutes.

Having declared a Disclosable Pecuniary Interest in agenda item 8, Greg Munford, Simon Sparrow and Daniel Thwaites advised that they had been granted a dispensation by the Monitoring Officer to participate/speak and vote on that item.

3. Matters of urgent business

No items were proposed as a matter of urgent business.

4. Public question time

No public questions were raised.

5. Minutes of last meeting

The minutes of the meeting held on 07 September 2023 were signed by the Chair as a correct record of the meeting.

6. Summary of actions and outstanding issues following discussions at previous meetings

Members received a report summarising the progress of issues that had recently been presented to the Committee. The Chief Executive (CE) provided an update on the future of the hire boat industry and said that a meeting date had been agreed with the Hire Boat Federation and British Marine in December 2023.

A member asked whether there had been any progress in the bridge repairs in Norwich. The CE responded that the Authority was continuing to engage with Norwich City Council about the East Norwich Development Plan involved. Norfolk County Council have made repairs to the Carrow Bridge, so did not think that there were any immediate issues but will continue to watch the situation.

Members noted the report.

7. Chief Executive's report and current issues

The Chief Executive (CE) introduced the report and added that Autumn had been a good period both in terms of weather and use of the rivers and Broads. The decision that Members took to introduce charging at Ranworth had been a huge success. The income had been good, with only a very small number of people refusing to pay. The income received would contribute to the significant repairs needed to the corner of the staithe.

Members noted the report.

8. Proposed navigation charges for 2024/25 in the navigation area and adjacent waters

The Chair introduced the Deputy Monitoring Officer who was attending for this item remotely. He reported that correspondence had been received from BRAG and NSBA and this had been forwarded to Members. The Chair confirmed that he would acknowledge the correspondence and forward it to officers so that they could provide responses.

The Chief Executive (CE) introduced the report and added that there were a few key issues that were worth highlighting for the committee.

He said that the Broads Authority was fortunate in that it had an Act of Parliament which set out what its duties and powers were. One of the things it set out was how the Authority should consult in relation to the setting of charges and the Norfolk and Suffolk Broads Act 1988. The Navigation Committee was constituted to represent the different users and the Act required the Broads Authority to consult the Navigation Committee before determining the level of any charges in the discharge of its functions for navigation and under the Harbours Act. One of the things that the Authority had instituted, and had worked well, was that before the Authority arrived at the decision-making part of the process, a briefing was held for all Members when the financial position was examined, and various options considered. This was done in October and the paper that the Members of the committee had received reflects what was discussed.

The CE referred to the letter circulated to the Members which provided an example of a large private motorboat and the charges that it had to pay since 2007. It specifically looked at one side of the equation, what a large private motorboat paid over those sixteen years. It had not looked at the expenditure of the Broads Authority in that period, which has roughly doubled. The Retail Price Index has gone up by 84% in the same period. In this time, the maintenance of the navigation and the waterways had been completely transformed, not only from income from toll payers but also with funding from Europe.

Going back to 01 October 2007 when the May Gurney operation was transferred to the Broads Authority giving the Authority direct responsibility for the practical work throughout the system, on that date, the Dockyard was purchased, staff were transferred under TUPE regulations, and two wherries were purchased. In addition, May Gurney gave the Authority an amount of equipment which was nearing the end of its useful life. The Authority had therefore had to invest in new equipment over the last sixteen years, modernising the operation and using hydrographic surveys to make it the most efficient possible. In this period, the Authority had made huge steps forward in dredging and transformed the whole process, increased the number of moorings available, increased the riverside management of tree and scrub, and increased the amount of water plant cutting.

Another key date was 01 June 2012 which was the date when the responsibility of Breydon Water was transferred to the Broads Authority from the Port Authority. The replacement of missing posts had perhaps understandably not been a priority for the Port Authority as its main activities had moved downstream, and it was left to the Broads Authority to take on the replacement of the old wooden posts with modern steel ones. The Authority now had the Spirit of Breydon on the water throughout the summer months which was double-manned, and all tides covered. In addition, the Authority would be installing 32 posts in March 2024 and a further 20 in April 2024.

Overall, the navigation was well maintained, but this came at a cost. The additional charges referred to in the report would be necessary because of the impact of inflation: not only were staff costs going up, but fuel, materials and other costs such as audit fees had gone up a significant amount above inflation.

In relation to Tolls, the CE said that there were two main items that had been taken out of the analysis of figures. First, the charges for hire boats had not gone up as much as the private fleet through a deliberate policy by Members – the hire fleet charges had gone up broadly in line with the Authority's expenditure. Second, in November 2016, the Members of the Broads Authority took a strategic decision to make the tolls fairer for all because the toll system that the Authority had inherited from the Port Authority was deliberately slanted in favour of

6

bigger boats. While the charges for a 40 square metre private motorboat had increased over the last 16 years above inflation this was not the case for smaller private boats. A 5 square metre private motorboat paid £77.20 in 2007 and £85.10 in 2023, an increase of £7.40 (9.5%) in 17 years. A similar sized sailing dinghy paid £51.46 in 2007 and £52.00 in 2023, an increase of just £0.54 (+1.0%) over that period.

The CE reported that the Authority had restructured the organisation and continued to monitor and reduce costs where it could. Any further reduction in staffing levels would have a direct impact on the services provided by the Broads Authority.

The biggest change in 2024 would be the vacation of 60% of the office space at Yare House, the cost to be funded by the National Park Grant. However, navigation expenditure would benefit as a result in terms of the reduced rent, facilities maintenance and management costs, and reduced Business Rates.

Following the MAIB report into the accident in Gt Yarmouth in August 2020, Members decided to increase the level of patrolling by employing Assistant Seasonal Rangers, ensuring that the launches were out every day throughout the season. One option put forward in the paper was not to re-employ those Assistant Rangers next year and return to the level of patrolling prior to 2020.

Another option was to not add to the earmarked reserves. However, the auditors were keen that the Broads Authority maintained the earmarked reserves. Not adding to the reserves in one year would have implications for the future. The Authority's fleet of patrol vessels were ageing and needed to be replaced, therefore, there would be a need for the earmarked reserves to be available for when this needed to happen.

The Director of Finance (DOF) talked the Members through a PowerPoint presentation and said that there was some degree of uncertainty over inflation, public sector costs etc. She reported that in terms of the pay award, two of the three unions have agreed the pay award of £1,925. The figure in the budget was 5%, however, the award represented an actual figure of 6.45% for the Broads Authority.

The Authority was unable to introduce the charges at Reedham this year, due to the lease agreement not being completed and it was hoped that it would be in place for the start of the season in 2024.

In terms of audit fees, the Authority belonged to the PSAA scheme which appointed the auditors for 99% of English local authorities. Being a member of this scheme should save authorities money and meant they did not have to procure their own auditors. However, as part of the last procurement round, the fees would go up approximately 151%.

In paragraph 1.4 of the report, it listed where the additional pressures on the Authority were and the DOF highlighted some of these.

A Member asked for clarification on audit fees. The DOF replied that the scale fee was set at £10,736 in 2018/19 for five years but scale fee adjustments had been submitted annually since 2019/20. The Authority was currently in negotiation over the scale fees adjustments for

2022/23 where the auditors had requested £55,000. The new scale fee for 2023/24, under the new five-year contract would be published soon (30/11/23).

A Member asked whether having two sides of the business made the audit harder. The CE confirmed that it made it more complex. In addition, the auditors had to carry out additional testing under the regulations in respect of property, plant and equipment.

In response to Members' questions about the exploration of reducing staffing costs, such as support services, and reduction in activities such as dredging, the CE said that the Authority would have to severely cut back output and it was not easy to achieve as toll payers wanted more moorings, more water plant cutting, and more tree cutting. He added that the works plan had been adjusted by the Head of Construction, Maintenance and Ecology which would see less dredging but more water plant cutting as well as bringing more repairs in-house rather than using contractors.

A discussion was had on the possibility of a reduction of ranger patrols due to fewer boats being on the Broads, and whether the Authority would be still able to carry out its duty in respect of safety. The CE said that in terms of safety, the Authority would still be able to carry out that duty, however it was impossible to know how many boats would be on the Broads in 2024, however, with uncertainty around the world, people may wish to stay in the UK for their holidays. He added that in terms of a ranger's duties, it was much more than going up and down a river. They provided a crucial role in dealing with sunken vessels, giving advice and guidance to paddleboarders, as well as providing support for winter work such as vegetation management. A Member commented that the Authority must not cut down on safety at Great Yarmouth due to the unique nature of that part of the navigation.

A Member commented that the issue of safety had also been addressed in other ways, which included the QAB scheme, which all boatyards need to comply with, and the Broads Authority safety videos which help people prepare for boating on the Broads.

A Member asked whether it was possible to use volunteers to cover the extra patrols. The Director of Operations (DOO) replied that 150 volunteers complimented the service that the Authority provided in a number of roles.

A Member commented that the Broads was an integrated ecological landscape, and that climate change would make things more challenging and asked whether there would be any further opportunity to obtain any further capital funding. The CE replied that the capital funding received in the previous financial year was the first time the Authority had received any and was seen as a pilot for the other Protected Landscapes. He therefore believed that getting any further capital funding from DEFRA was unlikely. A Member then commented that he would like the Authority to look into other areas of income, given that its dredging operations improved land drainage.

Options analysis

The Members were then asked by the Chair for their opinions on the three options presented. Each Member in turn stated which was their preferred option. A Member commented that he was worried about the cost-of-living impact on Broads users and if the tolls were too high, the boats were likely not to go on the water, however, his instinct was to go for Option A to maintain the level of service that the Authority provides. Two further Members commented that safety on the Broads was an important factor and were in favour of Option A or B.

A Member commented that he was in favour of Option C and added that there were concerns that tolls had risen over the cost of inflation since 2016. He added that dredging had decreased from approximately 20% of the Navigation income to 10%, and that finance and support services was 20% of the Navigation income. The CE replied that finance was 4% of the cost and total overheads were around 20%.

A Member commented that above inflation rises were not sustainable for the hire boat industry and with a 25-30% reduction in hire boats on the water, asked how extra rangers can be justified when there were fewer boats on the water.

There was a mix of views on the three options, however, a majority was in favour of Option C.

Simon Sparrow proposed, and Daniel Thwaites seconded that the committee support Option C.

It was resolved by 6 votes in favour and 4 against (with one abstention) to support Option C – a reduction in patrolling, nil contributions to the earmarked reserves and a 6.9% increase in navigation charges across the board for 2024/2025.

The views of the Navigation Committee would be reported to the Broads Authority at the 24 November 2023 meeting.

9. Construction, Maintenance and Ecology work programme – progress update

The Head of Construction, Maintenance and Ecology (HCME) highlighted some key areas of his report. He confirmed that dredging had now finished in Oulton Broad and that 42,500m³ of sediment had been collected and gone into Suffolk Wildlife Trust's (SWT) land at Peto's Marsh. The Authority would now work with the SWT using this material to create a reed bed. The next step in this project was a hydrographic survey across the whole of Oulton Broad so that the Authority can collect data on water depths achieved and to track sediment accumulation rates over time.

The Authority had planned to dredge Bargate Broad through the connecting dykes and across a nominal channel through the Broad in 2024. To enable the Authority to do that and define where the water plant cutting was planned for, there would be a series of buoys installed along that route to define where the marked channel will be.

In terms of the water plant cutting over 2023, the Authority had delivered a similar level of service as in 2022, but in a slightly less time. This was due to having the third water plant

cutting vessel which added efficiencies to the water plant cutting by having the vessels strategically located across the system.

In response to questions on where water plant cutting was needed more and if dredging reduced water plant growth, the HCME replied that it was in the upper reaches of rivers where cutting was required more. However, in the Upper Bure the water quality improvement had meant that water plants had progressively marched further down the river each year. In terms of dredging, it created a deeper channel and therefore water plants were less likely to have such an impact.

A Member commented about the installation of new posts at Breydon and that there was no reason that the Authority should not adopt the IALA's marine buoyage system of a cylinder on port marking posts and a cone on starboard marking posts. The HCME replied that he would feed this back.

In answer to questions relating to water plant cutting, the offloading of cut material and the removal of water plants, the HCME confirmed that the Authority was in conversation with Norfolk Wildlife Trust (NWT) in terms of using some of the area that they owned in the Hickling Staithe area as the NWT shared the Authority's thoughts on how to manage the problem long-term. He added that the Authority was not looking to remove water plants altogether as the plants helped stabilise the sediment and were valuable habitats and part of the ecosystem of the Broads. In addition, the Authority would struggle to get consent from Natural England or the Environment Agency.

The report was noted.

10. Integrated Access Strategy – Consultation feedback

Members received the report from the Head of Construction, Maintenance and Ecology (HCME). The HCME said that this was a joint report and introduced the new Waterways and Recreation Officer, Jo Thompson. The HCME confirmed that the next task was to complete the full strategy document with a five-year action plan, and it was planned for it to be presented at the Navigation Committee meeting in January 2024.

A Member asked whether the HCME would clarify whether there would be an opportunity for further engagement with Non-Government Organisations. The HCME responded that on 16 November 2023, draft strategy document would be issued and would be put out for public consultation on the Authority's website.

A Member asked whether it would be worth building into the strategy the growth of paddleboarding and the promotion of certain areas in the Broads suitable for this activity. The HCME responded that this was a more complex issue, however, it was included in the report.

The report was noted.

11. Local Plan – Replacement quay heading and the Local Plan and Navigation section

The Planning Policy Officer (PPO) introduced the report and explained in further detail about the Local Plan and the Navigation section of the Local Plan. The PPO highlighted the amendments to the text of the navigation section of the Local Plan, as well as new policy areas and residential moorings.

A Member asked about the policy DM33 requirements relating to schemes for new quay heading providing free visitor moorings and whether there would be a provision to deviate from the requirements under the Local Plan and deal with exceptions on a case-by-case basis. The PPO replied that potentially, yes as part of the planning application, but the policy tended to be quite successful. The Head of Planning (HOP) added that the Authority had this policy in place for the last eight or nine years and that the first objective would be to get the visitor moorings on the site of any new moorings proposed to meet demand. In the past, it had been asked whether the applicant would make a payment to provide moorings elsewhere, however, that approach had never been supported due to the size of the payment that would be required in order to purchase land and provide the moorings to the BA standard.

A Member asked whether the Moorings Design Guide was consulted on regularly because some moorings and quay headings that had been delivered recently were not usable by all types of vessels. The PPO responded that it had not been reviewed since 2016 due to the Local Plan being a priority. The review of that and other Design Guides would follow on from the adoption of the Local Plan. The PPO added that the Moorings Design Guide would be sent to Members following the meeting, for information. A Member asked whether this should be included in the Integrated Access Strategy and the HCME confirmed that this would be considered. The PPO highlighted that the Mooring and Riverbank Stabilisation Design Guides do not go into the type of detail such as heights and widths, but instead talk about the various types of moorings and stabilisation methods.

The PPO continued with section 2 of the report regarding replacement quay headings and piling. The PPO said that the concern was that with quay headings being replaced over time, the width of the navigation would be reduced. The suggestion would be to introduce policy and processes for areas less than 30m in width and would look at applications for replacement quay heading on a case-by-case basis as to whether those lengths of replacement quay heading need to be provided in line or behind the existing.

The Chair commented that he was happy for it to be on a case-by-case basis. He added that he would encourage the use of steel piling.

A discussion was had about the use of materials and quality of engineering in replacement quay heading. There was a general concern about pulling out old quay heading and land destabilisation. A Member commented that if timber was used, the quay heading would need to be replaced every ten years, whereas galvanised steel would be 40 years before any replacement would be needed. The PPO moved on to section 3 of the report. The 2016 Planning Act stated that the Authority needed to consider meeting the need for those living on boats and the Local Plan for the Broads does this through identifying the need for residential moorings and then allocating sites for residential moorings. The need was currently 48 residential moorings, and the Authority had planned to allocate 53.

Members' comments were noted.

12. Planning application with implications for navigation – BA/2023/0349 FUL Ribs of Beef, Extension of decked area

Members received the report from the Planning Officer (PO), supplemented by a PowerPoint presentation showing maps and photographs of the replacement and extension of decked area which was subject to the retrospective planning application. Members' views on any matters of relevance to navigation were sought and would be considered as part of the planning process.

The Members discussed the decked area and agreed that the waling was not suitable for small boats. The consensus was that the vertical posts needed to go below the water level and then horizontal planks be put across for safety so that small vessels could not hook up under the posts.

Members' comments were noted.

13. Date of next meeting

The next meeting of the Navigation Committee would be held on Thursday 11 January 2024 at The King's Centre, 63-75 King Street, Norwich, NR1 1PH, commencing at 10am.

14. Exclusion of the public

Stephen Bolt proposed, and Simon Sparrow seconded.

It was resolved unanimously that the public be excluded from the meeting under Section 100A of the Local Government Act 1972 for the consideration of the item below on the grounds that it involves the likely disclosure of exempt information as defined by Paragraph 3 (information relating to the financial or business affairs of any particular person (including the authority holding that information)) of Part 1 of Schedule 12A to the Local Government Act 1972 as amended by the Local Government (Access to information) (Variation) Order 2006, and that the public interest in maintaining the exemption outweighs the public benefit in disclosing the information.

The public left the meeting, and the recording was suspended.

15. Exempt minutes of last meeting

The exempt minutes of the meeting held on 07 September 2023 were signed by the Chair as a correct record of the meeting.

The meeting ended at 12:35pm.

Signed

Chairman

Appendix 1 – Declaration of interests: Navigation Committee, 02 November 2023

Member	Agenda/ minute	Nature of interest
Bob Neate, Mark Collins, Stephen Bolt, Leslie Mogford, Simon Sparrow (see below), Harry Blathwayt, Alan Goodchild and Peter Dixon	8	Private toll payer. The Member Code of Conduct allowed for these Members to participate and vote.
Greg Munford, Simon Sparrow and Daniel Thwaites	8	Commercial hire boat operators. Disclosable pecuniary interest. Granted a dispensation by MO to participate and vote.
Peter Dixon, Greg Munford, Bob Neate, Leslie Mogford, Simon Sparrow, Daniel Thwaites	11	Owner of quay heading. Non- registerable interest affecting own well-being but not to a greater extent than majority of inhabitants or reasonable member of the public would not consider it would affect view of wider public interest.

Navigation Committee

11 January 2024 Agenda item number 7

Summary of actions and outstanding issues following discussions at previous meetings

Title	Meeting date	Lead officer	Summary of actions	Progress so far	Target date
Network Rail Swing Bridge £10 million Refurbishment program	19/10/2017	John Packman	Network Rail Whole Life Strategy planning for swing bridges and replacing Trowse Swing Bridge with fixed bridge.	As expected, swing bridges expanded in July's high temperatures, with periods when they could not open. Somerleyton affected more than Reedham, which is kept cooler by prevailing wind. Following consultation with key user groups, 'High Impact' days (when groups on organised dates and higher usage of swing bridges expected) shared with Network Rail (NR), who had engineering staff on standby to respond to mechnical issues on these key dates. Officers continue to liaise with NR and communicate issues as they arise. Next meeting planned for Oct review performance of swing bridges during summer period.	
				Oct 2019: Need for display of red flags at bridges and Christmas and Boxing Day cover raised at meeting with local NR manager in Oct. Following consultation with NSBA and other stakeholders, officers reinforced importance of retaining red flags and agreed, based on last year's evidence, that bridge operators do not need to be on duty on Christmas Day and Boxing Day.	
				7 Jan 2020: Meeting held with NR, who are to examine business case for any replacement at Trowse bridge. Resignalling of whole system commences in February.	
				4 Feb 2020: BA in phone discussion with Network Rail re Trowse - update to be provided at agenda item 11.	
				May 2020: Following sensor replacement works at Somerleyton, Reedham & Oulton, Network Rail believes operational reliability of these bridges will be improved. As we enter Summer 2020 we will monitor opening and breakdowns to ascertain this reliability. BA and NR continue to discuss swing bridge issues. BA also in Working Group with Norfolk County Council, Norwich City Council, LEP, NR and Greater Anglia working on Trowse Bridge issues and gathering wider support and funding for replacement/ better operational reliability of this bridge.	



Title	Meeting date	Lead officer	Summary of actions	Progress so far	Target date
				Jul 2020: Trowse Rail Bridge Working Group continuing to meet. Next phase of project is to meet with Train Services Director for Southeastern - meeting to include spokespeople from working group, incl. John Packman. Further updates provided when meeting date confirmed.	
				Sep 2020: BA written officially to Norfolk County Council regarding Haven Bridge, Great Yarmouth.	
				Dec 2020: Update provided in CEO report (14/01/2021): Authority officers are involved in meetings to discuss the future of Trowse Swing Bridge and the development opportunities in East Norwich presented by three large brownfield sites, namely the Carrow Works, the Deal Ground and the Utilities Site. The Chief Executive and Director of Operations are members of a working group looking at the Trowse Bridge (along with Network Rail, Abellio Greater Anglia, Norfolk County Council, Norwich City Council and New Anglia). The Head of Planning and the Senior Planning Officer sit on another group looking at the development sites. There is an important relationship between the two issues and our officers are making sure that navigation interests are considered.	
				Mar 2021 : Director of Operations met with Network Rail (NR) to discuss the multi-million pound refurbishment of the swing bridges (Reedham, Somerleyton & Oulton due to commence in 2022. The NR scheme will see the lifting and turning mechanisms replaced to make the operation of opening and closing the swing bridges more reliable. At the start up meeting, the BA asked if the thermal expansion to the bridges in warm weather could also be addressed. This is being considered by NR. The BA is working with NR on communications, work planning and managing the navigation.	
				July 2021: Director of Operations met with Network Rail contractors undertaking the swing bridge refurbishment to discuss the initial navigational requirements of the works. The refurbishment has been further complicated by the timing of the track closure, which will coincide with the school Easter holidays in 2022. The BA continues to advise on construction and navigational matters.	
				Sep 2021: Network Rail's repair work of the swing bridges delayed to October 2022. Design work to commence beginning October 2021.	

Title	Meeting date	Lead officer	Summary of actions	Progress so far	Target date
				Mar 2022: Dialogue with Network Rails Contractor for the swing bridge refurbishment programmes continues (Murphy's). A date of October 2022 has been agreed for the contractors access and they are planning on 2 x 52hr weekend works and a 16 day blockade. During this time the swing bridge will operate but with 2 x set opening times daily, these will be published nearer the date.	
				May 2022: Senior Operations Officers continue to work with Murphy's to faciliate the delivery of this 10 million pound refurbishment of Reedham & Somerleyton Swing Bridges. Dates of the works have been shared with navigators and regular information will be supplied as the work dates get nearer.	
				Sept 2022: The contractors (Murphy's) reported that due to mechanical parts coming from Ukraine, a change to the work program is required. Swing Bridge works will start in September with weekend clousures. Main works will commence in March 2023. A NTM has been issued and swing bridge openings have been agreed during work periods.	
				Oct 2022: The initial phase of the swing bridge refurbishments have been completed, this work was making space within the existing plant room to accommodate the updated mechnical opening gear. Phase two is being planned and will commence in 2023 when parts are available to install.	
				Mar 2023: Recent update from Murphy's (Network Rail's contractors) is that the next phase of the refurbishment has been delayed until November 2023. Swing Bridges will operate (on demand) with no further restrictons in place until the work program commences again in Nov. No explanation has yet been given as to why the delay, The Director of Operations is chasing more information.	
				May 2023: Works completed to date on the swing bridges include: Installed a beam in the control box that houses the swing bridge machinery. This will make the building strong enough for a temporary opening to be made in the wall. The opening will allow the old and heavy machinery to be moved out and replaced with modern equipment during the next stage of the project.	
				Carried out much-needed, extensive brickwork repairs to reinforce the control box. Completed a full renewal and upgrade of the electrical system.	

Title	Meeting date	Lead officer	Summary of actions	Progress so far	Target date
				Upgraded and replaced the manual winch system. This allows the bridge to be swung open manually by the bridge operator if there are problems with the machinery, keeping trains and boat users moving.	
				Network Rail now expects further work on Reedham and Somerleyton swing bridges to take place in late 2023 and 2024. Boat users will be advised of any changes to the usual operation of the bridges via the Broads Authority. December 2023: No further update.	
Carrow Road Bridge Repairs	15/04/2021	John Packman	Briefing provided at Navigation Committee meeting in April, outlining Norfolk County Council's proposals for the repair of Carrow Road bridge. Further information is awaited from the County Council.	 10 Jun 2021: report on the Carrow Road bridge repairs presented to members with the Norfolk County Council (NCC) options report. The Navigation Committee is of the view that NCC's proposal to carry out a minimal repair to Carrow Road bridge, effectively welding it shut so it is unable to open to tall vessels, is totally unacceptable. It would be contrary to NCC's legal obligations under the Norwich Corporation Act 1920, which are to maintain and operate the bridge to allow vessels that require passage to pass. In our view, officers should refuse any Works Licence application for this superficial repair work and NCC should be encouraged to perform repairs in a way that maintains navigation rights to this historic and important gateway to Norwich, in accordance with the legislation. The Broads Authority would like to work with NCC to find a solution that meets the statutory obligations of both organisations. Aug 2021: The Chief Executive and Director of Operations met with officers of Norfolk County Council on 17 August to discuss the road bridge repairs following the report to Navigation Committee and NCC wanting to temporarily seal the bridge close for 5 years. The BA is offering collaborative working to find an agreeable solution that protects the rights of navigation. Oct 2021: Norfuch City Council, Norfolk County Council and The Broads Authority met on 8 December to discuss the works proposal submitted for licensing. It was a positive meeting with all partners understanding the different issues each organisation faced with the proposed construction methods and the timing of the repairs to see if these can better link with the City Council's planned route 	10/06/2021

Title	Meeting date	Lead officer	Summary of actions	Progress so far	Target date
				improvements and still maintain the ability to open the Carrow Bascule bridge. An update was made in the Chief Executive's report, item 7 on the 13 January 2022 Navigation Committe agenda.	
				Mar 2022: Following discussion between the Broads Authority and Norfolk County Council a report to 7 March County Council Cabinet meeting will contain the following short statement: Carrow Bridge, NorwichIn last year's Highway Capital Report, the need to establish a longer-term solution for Carrow Bridge was highlighted. Discussions are ongoing with key partners, including the Broads Authority, to agree short-term and longer-term options for improvement at this sensitive part of the transport network. The programme of ongoing maintenance works continues on a regular basis. March 2023: The Authority has not received any further communications from NCC of additional repairs to Carrow Bridge.	
				December 2023: No further update.	
New on-line tolls software	07/09/2023	Bill Housden	Strategic Priority for 2023 and 2024. Scoping work complete.	September 2023: Currently engaged on pre-market engagement on upgrade of internal system.	24/01/2024
				Progress report on viability of updating internal system to the latest software due in January 2024.	
				October 2023: Progress report on viability of updating internal system to the latest software due in January 2024.	
				December 2023: Schedule of works received to upgrade internal system to latest software version. Meeting has taken place to discuss possible future cloud hosting and costs of hosting have been requested. Printing and database adhoc reporting for cloud based hosting under investigation.	
Future of the Hire Boat Industry	07/09/2023	John Packman	Commission study to review 2001 report and examine the prospects for the industry going forward and what actions could be taken to	October 2023: Engaged with the Broads Hire Boat Federation and British Marine. Both supportive of a half-day workshop. Awaiting response from British Marine on potential dates.	11/04/2024
			encourage. Stage 1 – Discuss with the Broads Hire Boat Federation Prepare a brief for the work and consult the Committee on the content.	December 2023: A meeting was held with the Broads Hire Boat Federation and British Marine on December 6th 2023. Agreed to prepare a paper seeking Government funding for the maintenance of the navigation. See Chief Executive's report.	

Date of report: 19 December 2023

5



Navigation Committee

11 January 2024 Agenda item number 7

Chief Executive's report and current issues

Report by Chief Executive

Purpose

To provide a briefing on significant matters relating to the maintenance and management of the waterways.

Broads Plan context All strategic actions under Theme C: Maintaining and enhancing the navigation.

Recommendation

To note the report.

Contents

1.	Broads Authority Meeting	2
2.	Funding the Waterways of the Broads National Park	2
3.	Navigation patrolling and performance targets	4
4.	Sunken and abandoned vessel update	4
5.	Planning enforcement update	4
Appe	ndix 1 – Funding the waterways of the Broads National Park	6
Conc	lusion	8
	ndix 2 – Responses from British Marine, Broads Society, Norfolk and Suffolk Boating ciation and the Broads Hire Boat Federation	9
Арре	ndix 3 – Rangers' exercise of powers analysis October – December 2023	15
Appe	ndix 4 – Ranger duties: total time allocated and actual days	17
Appe	ndix 5 – Sunken and abandoned vessels current position as at 05 December 2023	19
Appe 2023	ndix 6 – Prosecutions dealt with in court for non-payment of tolls since 02 November	20

Navigation Committee, 11 January 2024, agenda item number 7

Appendix 7 – Prosecutions dealt with in court for navigation offences since 02 November 2023 21

1. Broads Authority Meeting

1.1. At the Broads Authority meeting on 24 November on the item considering navigation charges for 2024/25, it was resolved to support Option B – Nil contributions to Navigation Earmarked Reserves for property plant and equipment and an 8.5% increase in navigation charges across the board for 2024/2025. The reason for taking a different view to that of the Navigation Committee was that "Members wanted to retain the seasonal Rangers in the interests of public safety particularly in light of the tragic accident in Great Yarmouth in 2020, the increase in paddleboarding, and the increased risk of climate change."

2. Funding the Waterways of the Broads National Park

- 2.1. A productive meeting was held with representatives of British Marine and the Broads Hire Boat Industry on 6 December. At that meeting it was agreed that a paper would be prepared arguing the case for Government financial support towards the Authority's costs of maintaining the waterways.
- 2.2. This is important and urgent because in the short term there is an opportunity to request capital funding for equipment. It is also critical because in the medium-term Defra has indicated it will be reviewing the basis for the allocation of National Park Grant and it is desirable that any future formula takes account of the special qualities and expense involved in managing Britian's most important wetland and includes funding for the maintenance of the waterways.
- 2.3. The intended audience for the paper is Ministers and their officials. A copy of the draft is included in Appendix 1.
- 2.4. Using the arguments set out in the paper a bid has been submitted to Defra for £706,500 of capital funding from the *Water in Protected Landscapes* programme. Many of the items are used for the maintenance of the waterways as well as delivering National Park purposes.

Item	Cost	Use
Industrial concrete pump	£190,000	Dredging the rivers and broads
Doosan long reach excavator	£165,000	Dredging the rivers and broads
Extension arm & weed bucket for excavator	£16,000	Watercourse and drainage management in Protected Sites

Item	Cost	Use
Hitachi Crawler Crane	£80,000	Replacement of marker posts in Breydon Water benefitting wildlife and boating
4 x Nato floats	£30,000	Mounting equipment on the water
NEW Steel welfare unit	£7,000	For operational staff in remote locations
Diggers mats	£8,000	Stabilise heavy equipment on soft ground
Replace 6 vehicles	£193,500	Replace operational vehicles
New launch development	£10,000	Patrol launches at the end of their life need replacement
Harlequin 9250 Litre HVO Fuel Dispenser with Fuel Management	£7,000	Enable the Spirit of Breydon to use HVO fuel and reduce carbon emissions
Total	£706,500	

- 2.5. Most of the items are used partly for National Park purposes and partly for the maintenance of the navigation. For example, the old concrete pump used in the CANAPE project for dredging sediment from the navigation channel in Hickling was employed to recreate reedbed for the benefit of biodiversity and improve water depth for boating.
- 2.6. The demise of commercial traffic into the Port of Norwich at the end of the 1980s means that all navigational use of the Broads is for recreational purposes and is consistent with the Authority's purpose of *"promoting opportunities for the understanding and enjoyment of the special qualities of the Broads by the public"*. The way the public largely enjoy the special qualities of the Broads is through getting on the water either in their own boats, hired ones or passenger vessels.
- 2.7. Officers are therefore suggesting to Defra that the capital items listed above can be described as "funding primarily used to deliver National Park purposes, with a cobenefit to navigation". If successful it will make a significant difference to the Authority's future capital replacement requirements for navigation.
- 2.8. The approach set out in the draft paper arguing for additional Government funding to support the Authority's key role in maintaining the waterways is supported by British Marine and the Broads Society. It is disappointing that the NSBA seems to have missed the point about the need and opportunity to seek Government funding to support the maintenance of the waterways. The Broads Hire Boat Federation (BHBF) "would welcome additional external funding in recognition of the public benefits provided by the Broads" and raises several other matters. Their letters are to be found in Appendix 2.

- 2.9. The proposition in the BHBF letter that the Authority should levy the constituent local authorities is a non-starter because Defra has specifically replaced that levy and in any case our partner local authorities are under huge financial pressure.
- 2.10. The BHBF letter suggests that additional dredging by the Authority might help alleviate flooding. For clarity about roles and responsibilities, the Environment Agency has operational responsibility for managing the risk of flooding. The Broads Authority takes responsibility for maintenance dredging for navigation purposes. The scope and scale of maintenance dredging (i.e. removal of recently accumulated silt) is to achieve appropriate river depths for navigational access and safety. The Broads Authority's dredging does not aim to deepen the river channels beyond that needed for navigational access.
- 2.11. My understanding from colleagues in the Environment Agency is that for dredging to have any significant impact on the release of water from the upper catchment it would have to be on a massive scale and would have the negative impact of allowing more saline water and flood risk into the system in times of a tidal surge. Even if the Environment Agency or the Broads Authority had the necessary resources my understanding is that it would be undesirable.
- 2.12. Officers will continue to work with Defra colleagues to identify opportunities for further capital and revenue funding to support the work of the Authority.

3. Navigation patrolling and performance targets

3.1. The report of the significant use of powers by the Rangers is in Appendix 3, and the range of duties undertaken by the Ranger Team in Appendix 4. While average navigation/countryside splits are still higher on the navigation side, with planned work now underway on the countryside sites this figure is moving into line with the target.

4. Sunken and abandoned vessel update

4.1. The sunken and abandoned update is in Appendix 5. The high-water levels and rainfall amounts have led to several vessels being sunk, particularly on the Rivers Wensum and Yare. Notices have been placed on vessels where the owner has been unable to raise the vessel in the first instance.

5. Planning enforcement update

5.1. There are no further enforcement matters with navigation implications to report.

Author: John Packman

Date of report: 18 December 2023

Broads Plan strategic actions: All strategic actions under Theme C

Navigation Committee, 11 January 2024, agenda item number 7

Appendix 1 – Funding the Waterways of the Broads National Park

Appendix 2 - Responses from British Marine, Broads Society, Norfolk and Suffolk Boating Association and the Broads Hire Boat Federation

- Appendix 3 Rangers exercise of powers analysis
- Appendix 4 Ranger duties total time allocated and actual days
- Appendix 5 Sunken and abandoned vessels current position as at 05 December 2023
- Appendix 6 Prosecutions dealt with in court for non-payment of tolls since 02/11/2023
- Appendix 7 Prosecutions dealt with in court for navigation offences since 02/11/2023

Appendix 1 – Funding the waterways of the Broads National Park

FUNDING THE WATERWAYS OF THE BROADS NATIONAL PARK

Summary

The current funding model for maintaining the waterways of the Broads National Park is outmoded and unsustainable and must change if this national asset is to be preserved for future generations. In an era of climate change, biodiversity loss and a recent pandemic, the rivers and broads are acknowledged to be beneficial for public well-being, wider ecosystem services, and recreational boating. Far from being an entirely private benefit to boat owners the waterways are undeniably a public asset. With Defra's recent commitment to review the funding model for Protected Areas (National Parks and AONBs), now is the time to present Ministers with the reasoned justification for a contribution from public funds towards the maintenance of the waterways.

Background

When the Broads were recommended for National Park status in 1949 it was recognised that the "Broads have a special claim to selection as a National Park quite apart from their natural beauty, by reason of their holiday and recreational value and the interest of their plant and animal life. ... On this great system of waterways, thousands of people annually enjoy the quiet adventure and refreshment of water-borne holidays, under sail or in cabin cruisers; while others find waterside accommodation with small-boat sailing, fishing or bathing at their garden's end." (Report of the National Parks Committee July 1947).

From the beginning, it was recognised that boating was an integral part of the special qualities justifying National Park designation, and yet, in the summer of 2007, when the Broads Authority Bill was proceeding through Parliament, the Minister's position, contrary to that of the Authority, was that the use of the waterways was a separate, private benefit and "*The Government's policy is that it does not think it should routinely contribute towards navigation costs in the Broads*" (House of Commons Committee 18th July 2007).

We now know that freshwater rivers and broads are the reason why the Broads National Park has a higher biodiversity than any other, despite being the smallest. About 17% of Britain's 65,000 – 70,000 species are found here, 1,500 of them threatened, and most of them dependent on freshwaters. We also recognise the great importance of wetlands in sequestering carbon and adapting to flood, drought, and sea-level rise.

The Authority has two main sources of income. In 2022/23, the National Park Grant (including capital funding, access money and Farming in Protected Landscapes grant aid) provided £5.39 million to the Broads Authority, while navigation tolls from boat owners amounted to £3.81 million. The requirement that the Authority must ensure that navigation expenditure equals navigation income in any one year and be accounted for separately from National Park expenditure represents an expensive, risky, and artificial distinction. Only a few lines in the Authority's budget are devoted solely to National Park or Navigation expenditure. Most budget items are a mixture, and evidence-based judgments must be made.

For example, while the cost of staff collecting tolls is clearly 100% navigation, and the planning service is chargeable 100% to the National Park Grant, the picture is less clear when considering the allocation of Ranger expenditure. Their activities are a blend of National Park functions such as providing guided walks and tending conservation sites, and navigation roles such as patrolling the rivers, marking hazards, managing moorings, giving advice to boaters, and removing overhanging trees. To take another, a recent restoration project at Hickling Broad improved biodiversity and water depths for navigation through the restoration of reedbeds using dredged sediment from the channel.

Adapting to Change

Boating on the Broads is often wrongly perceived as exclusively for the rich. This is not the case. The visitor profile of the Broads has changed since Covid, with more first-time visitors and young families engaging with the landscape and nature. While land-based activities remain popular in the Broads, enjoyment of the water is essential too, and we have seen massive increases in 'entry-level' activities such as paddleboarding and kayaking. The number of short visit tolls for paddle/rowing craft has increased by 72% since 2016 and membership of British Canoeing has increased by 259% between 2018 and 2022. This welcome development has a minimal impact on navigation income but increases the demand for the Authority's services to ensure safety for everyone.

When the Authority was hit by above-average inflation in the price of materials and salary increases, it became essential to review the allocation of shared expenditure to ensure it reflected the reality of time and resources spent on activities. This revealed that there were some areas where, over time the split tended to tilt mixed expenditure lines in favour of navigation and was mitigating the impact on toll charges. As a result the National Park budget was in some cases inadvertently cross-subsidising navigation activities. With the National Park Grant in 2023/24 representing just 51.4% of its value in 2005/06, the budget reached breaking point. Activities were assessed objectively and in order to redress the issue costs were shared more fairly between the respective budgets. For example, 80% of the costs of the Rangers are now funded from tolls and 20% from National Park Grant reflecting the time spent on the different activities.

Following the fatal accident at Great Yarmouth in August 2020 the Marine Accident Investigation Branch made recommendations to the industry and the Authority to improve safety on the Broads. Under the Port Marine Safety Code, the Members of the Board are individually and collectively responsible for safety as the 'Duty Holder'. One of the actions the Authority took was to increase the number of Rangers patrolling in the summer. In the debate on the charges for 2024/25 a majority of the Members believed that retaining the additional Rangers was essential in the interests of public safety, which inevitably meant that tolls had to increase above inflation.

One current major challenge which illustrates the growing demands on navigation resources is the exponential increase in the need to manage plant growth within the navigation, caused by improvements in water clarity and the effects of climate change. This activity alone has stretched our operational resources requiring us to reprioritise our ongoing navigation works programme. Doing less is not an option. The Authority's income from tolls has also suffered from the long-term decline in the number of weekly hire boats in the face of competition from cheaper overseas holidays. In the last ten years they have fallen by 25% from 869 to 647 registered hire boats, a loss in tolls income of around £325,000. The Authority has had no option but to increase tolls above inflation to pay for the essential maintenance of the waterways. Not to do so would lead to the decay of both the navigation and the landscape, placing the future of the National Park itself in jeopardy.

Conclusion

With waterways management costs rising above inflation, the need to accommodate a wider range of users of the waterways, and the challenges of climate change, the budget will come under inexorable strain, with inevitable consequences for toll payers and, ultimately, the National Park itself. If we consider that visitors to the Broads contribute over £711 million annually to the area's economy, supporting around 7,500 jobs, and that it is largely the waterways that draw 7.5 million people to the National Park each year, the argument of the Minister in 2007 that the "navigation is a private benefit" is incorrect and the notion that it should be funded entirely by its users, is not justified.

Funding the navigation from tolls income alone is unsustainable, and the continuing appeal and prosperity of the National Park and its associated businesses, both water and land-based, is at serious risk. The funding model is a precarious and improper basis for preserving what is a public asset, rather than purely a private benefit, and the maintenance of the navigation should attract a substantial contribution from public funds befitting the unique status of this precious landscape.

Appendix 2 – Responses from British Marine, Broads Society, Norfolk and Suffolk Boating Association and the Broads Hire Boat Federation

Sent: Tuesday, January 2, 2024 4:15 PM To: John Packman <<u>John.Packman@broads-authority.gov.uk</u>> Subject: Support for funding

Dear John,

British Marine would like to add our support to the Broads Authority's bid for a contribution from public funds towards the maintenance of the waterways and specifically to receive capital funding for dredging equipment under DEFRA's Water in Protected Landscapes Programme. This efficient use of public funds will allow the Authority to deliver all its statutory duties including the conservation, enjoyment and protection of navigation interests on the Broads.

I wish you good luck in your application

Brian Clark Head of Public Affairs, Member Relations & Research



Registered Charity No. 1078434



02 January 2023

Dear John,

Funding the Waterways of the Broads

Thank you for the opportunity to comment on your draft NavComm paper. I write on behalf of the Broads Society to support your appeal to local MPs and your approach to the government for additional short-term resources and a sustainable financial strategy for the Broads. We agree that the income from tolls and the annual Defra grant are insufficient, and we note that the Broads Act S.15 allows for additional resources to be granted by the Minister, in consultation with Natural England.

We agree that the Broads wetlands are principally of public benefit. The ecological services that the rivers and broads provide for the landscape are undervalued and warrant higher investment in line with the recommendations of Glover's *Landscapes Review* and the government's *10-Point Plan for Financing Biodiversity*. The vulnerability of the Broads and the impact of biodiversity loss and climate change on the agricultural, recreational and economic infrastructure are clear to see, but the response has not been enough, despite warnings as long ago as the 2010 Making Space for Nature report, and the 2011 *Broads Biodiversity Audit*. We would welcome a determined response to the government's 2023 *Environmental Improvement Plan*, and to the call for a *Nature Recovery Network* to conserve vital natural resources and provide services in the public interest, as well as for sustainable development.

The Broads are largely man-made and equitable arrangements are necessary for those who privately purchase a navigation service from the Broads Authority through tolls. This might be a good time for a review of tolls and what they can deliver, particularly considering the unforeseen impact of COVID on society and the changing needs and demographics of navigators. It's important to extend the accessibility of the Broads freshwaters to all types of craft, and particularly to vulnerable and young people. The Broads Society is exploring some ideas in partnership with the Inland Waterways Association, and we will report on this early in 2024. Meanwhile, we hope to see the Authority working constructively and amicably alongside private boat owners, their federations and associations, recognising the historical and present-day importance of the navigation.

Our members wish to see the freshwater Broads preserved and protected, and we look forward to working alongside the Broads Authority in these endeavours.

Yours sincerely

Mark Collins, MA MBA PhD Chair, The Broads Society

John Packman PhD Chief Executive, The Broads Authority 62-64 Thorpe Road, Norwich NR1 1RY

Navigation Committee, 11 January 2024, agenda item number 7



THE NORFOLK & SUFFOLK BOATING ASSOCIATION

Tuesday, 26 December 2023

Members of the Broads Authority Broads Authority Yare House 62-64 Thorpe Road Norwich NR1 1RY

Dear Member

FUNDING THE WATERWAYS OF THE BROADS NATIONAL PARK.

You will be aware of the latest draft paper produced by Dr Packman.

Having considered this matter with my colleagues, I have to inform you that the NSBA cannot possibly agree to ceasing separate accounting for Navigation Revenue/Expenditure and would oppose any attempt at amending legislation to give effect to such a change as hinted at in the paper.

As you are aware, the ring fencing of tolls revenue was a *sine qua non* for the passage of the 1988 Act. We regard the provisions of Section 17 of that Act to be even more necessary today than they were in 1988. It is not reasonable to expect toll payers to be paying for environmental matters such as environmental dredging necessary to alleviate flooding or visitor centres, no matter how the Authority may choose to dress them up.

The Secretary of State already has powers to give grants for any purpose he chooses under Section 15 of the Norfolk and Suffolk Broads Act 1988. So if further funding is needed, a request under that section should be the Authority's first consideration.

I respectfully submit that the present proposal is a distraction from the open letter sent to the Authority by 5 MPs asking for a reconsideration of another increase in Navigation Tolls well above inflation. We await with interest the Authority's considered reply to that letter.

Yours faithfully

Ben Falat Chairman NSBA



The Broads Hire Boat Federation

John Packman Chief Executive Broads Authority Yare House 62-64 Thorpe Road Norwich NR1 1RY

31st December 2023

Dear John

Funding the Waterways of the Broads

Many thanks for giving us the opportunity of commenting on your draft briefing note.

Although we agree with some of your general comments concerning the public benefit of the Broads navigation, and the contribution to the local economy, we are unable to support the underlying thrust of the paper, which appears to propose the repeal of the "ring fence" provided under Section 17 of the 1988 Act.

Although your briefing note states that "separating these expenditure streams is not straightforward", the 1988 Act does in fact (at Section 10 and Schedule 5) set out very clearly the navigation functions which are to be funded by navigation income; these principally relate to maintenance and improvement of the navigation (including moorings), dredging, vessel registration and the making of byelaws to support the Authority's statutory functions. Section 17(8) expressly states that expenditure incurred wholly or mainly in connection with non-navigation functions shall not be classed as navigation expenditure – even where there is an ancillary navigation benefit – and there is no provision for general expenditure to be apportioned between navigation and non- navigation functions. It appears to the BHBF that it should be relatively straightforward to identify items of expenditure which fall under these statutory provisions – as was clearly the intention of Parliament.

We do agree that the welcome growth in entry-level boating activities – such as the use of kayaks and SUPs – may present additional challenges to the Authority, especially relating to safety, which are disproportionate to the income directly received from those users of the navigation. However, we question whether any costs associated with those activities ought properly to be classed as a navigation expense – given that the costs do not relate to the maintenance of the navigation, but to public safety and access from the land. Perhaps these are areas where funding might justifiably be obtained from a source other than navigation charges.

Navigation Committee, 11 January 2024, agenda item number 7

We also agree that dredging of the waterways has wider benefits than simply the maintenance of the navigation – not only might there be conservation benefits, but adequate dredging is essential in ensuring that rivers fulfil their function of transporting rainwater run-off out to sea. Recent events have thrown this into sharp relief, with the high – and often record-breaking – flood levels seen throughout the Broads for the past 2 months demonstrating that high levels of rainfall simply cannot escape between tides. Although there are, no doubt, several contributory factors, we believe that there is a strong case to be made for additional dredging to allow increased water flows, and this too may be a candidate for additional funding from Government.

Since section 15 of the 1988 Act provides that the Secretary of State can "make grants to the Authority for such purposes, and on such terms and conditions, as he thinks fit", it is unclear why the Authority could not make application to DEFRA in respect of these matters without altering the current model of funding – which would probably require primary legislation. Since dredging to alleviate flooding is undeniably an environmental matter, it must surely fall to DEFRA to fund it.

The briefing note also states that the Authority has two main sources of income – but, according to the 1988 Act, it has three. Section 14 authorises the imposition of a levy on each of the participating district and county councils to meet expenditure for which provision is not otherwise made. In other words, where the Authority's grant funding is insufficient to allow it to fulfil its statutory non-navigation functions, it can impose a levy on the participating authorities. Whilst the BHBF appreciates that such a levy might be controversial, and would result in considerable scrutiny of the financial justification from those authorities, it would have the advantage of encouraging a greater degree of collaboration between the BA and those authorities than is currently the case.

As a prerequisite for the provision of any additional external funding – either from central or local Government – the Broads Authority will need to demonstrate three things:

- 1. That navigation income is being used solely for funding navigation expenditure as defined in the Broads Act 1988.
- That the Authority's income is being used solely to fund the statutory functions of the Authority, rather than other activities which may be desirable but are not required by statute.
- 3. That best value is obtained in carrying out its statutory duties, and that some functions cannot be provided at lower cost by other suitably qualified organisations or statutory authorities.

In conclusion, whilst we appreciate that the Authority is facing financial challenges, the same is true of our members – who do not have the luxury of being able to pass additional costs on to their customers, or of seeking additional "free" money from government. The Authority must be seen to be cutting its cloth according to its means, rather than simply trying to protect the jobs of its own employees – either at public cost, or at the expense of jobs in the private sector. Of course we would welcome additional external funding in recognition of the public benefits provided by the Broads, but – first – toll payers need to be confident that the Authority is complying with its financial obligations as set out above. Furthermore, we do not see any reason why the provision of additional funding should require a change in the overall funding model – the Secretary of State can make additional grants within the existing framework, and the Authority can impose levies on the participating authorities.

Navigation Committee, 11 January 2024, agenda item number 7

We look forward to continuing to work closely with the Authority to identify resolutions to these matters, which are causing considerable concern amongst our members and other toll payers.

Kind regards

Tony Howes	Matthew Thwaites	James Knight
Secretary	Chairman	Vice-Chairman

Appendix 3 – Rangers' exercise of powers analysis October – December 2023

Table 1

Verbal warnings	Wroxham launch Wroxham and upper Bure	Irstead launch Ant	Ludham launch Hickling, Potter Heigham, upper Thurne	Ludham launch 2 lower Thurne and lower Bure	Norwich launch Norwich and upper Yare	Hardley Launch Reedham, Chet and middle Yare	Burgh St Peter launch Oulton Broad and upper/ middle Waveney	Breydon launch Breydon water, lower Waveney and Yare
Care and caution	1		5	10	1			
Speed	132		53	64	9			5
Other	39		8	12	9			

Table 2

Written warnings	Wroxham launch	Irstead launch	Ludham launch	Ludham launch 2	Norwich launch	Hardley Launch	Burgh St Peter launch	Breydon launch
Care and caution	1	1						
Speed		1						
Other	1	6	2			1	5	
Special directions					7			

Navigation Committee, 11 January 2024, agenda item number 7

Table 3

Launch patrols	Wroxham launch	Irstead launch	Ludham launch	Ludham launch 2	Norwich launch	Hardley Launch	Burgh St Peter launch	Breydon launch
Launch staffed by ranger	42	32	32	30	43	19	36	35
Volunteer patrols	1			1				
IRIS reports	2	1	2	2	2	1	1	5

Table 4

Broads Control total calls October – December 2023

Contact method	Number of calls
Telephone	3580
VHF	339
Total	3919

Appendix 4 – Ranger duties: total time allocated and actual days

Table 1

Broads Authority corporate duties

Work area	Annual allocation (days)	Actual days to date
Training	122	204.32
Broads Control	362	269.09
Team meetings, work planning	318	253.95
Partnership working	76	18.65
Assisting other sections	76	33.14
Billets and boatsheds	25	22.36
Launch – general		5.41
Trailers - general		2.50
Vehicle maintenance		4.46
Other equipment repair		10.61
Total	979	824.49

Table 2

Navigation duties

Work area	Annual allocation (days)	Actual days to date
Patrolling	2136	1670.41
Escorts	44	17.36
Prosecution files		9.97
Bankside tree management	108	61.96
Obstruction removal	26	21.28
Channel markers and buoys	30	12.36
Signs and boards maintenance	34	25.14
Adjacent waters	96	70.14
Reactive mooring maintenance	100.5	16.62
Total	2574.5	1905.24

Conservation, recreation, countryside maintenance

Work area	Annual allocation (days)	Actual days to date
Fen management	146	28.11
Lake, riverbank restoration	100	
Invasive species control	32.5	2.97
Other conservation work	145	34.86
Pollution response		7.09
Visitor site maintenance	194	158.07
Public Engagement	97	38.92
Public footpath work	38	7.84
Education work	69	3.85
Total	821.5	281.72

Team total up to 04 December 2023

Percentage Navigation: 87% Percentage National Park: 13%

Appendix 5 – Sunken and abandoned vessels current position as at 05 December 2023

Description	Location found	Action	Notice affixed	Result
Motor Cruiser	Old River Yare, Thorpe	Vessel sunk at owners moorings	No	Not affecting the navigation
Motor Cruiser	Sutton/Stalham cut	Hull only, marked with yellow posts	No	Not affecting the navigation
Motor Cruiser	River Yare, Thorpe	Vessel Sunk at owners mooring	Yes	Notice has expired. Will be raised when Authority kit is available.
Motor Cruiser	River Wensum, Trowse	Vessel sunk behind rail bridge wooden fenders	Yes	Unable to raise due to difficult access. Not affecting the navigation. Investigating options.
Aux Yacht	Barton Broad	Vessel sunk on Broad	Yes	Will remove once notice has expired.
Motor Cruiser	Hickling	Vessel sunk at mooring	No	Wrote to owner, vessel was raised and removed.
Motor Cruiser	River Wensum, Deal Ground	Vessel Sunk	No	Liaising with owner over raising vessel.
Aux Yacht	River Wensum	Fire on board, vessel sunk	Yes	Notice has expired, Authority will raise when kit available.

Appendix 6 – Prosecutions dealt with in court for non-payment of tolls since 02 November 2023

Type of vessel	Fined	Costs awarded	Victim surcharge	Compensation
Motor Cruiser	£220.00	£270.00	£88.00	£714.94

Appendix 7 – Prosecutions dealt with in court for navigation offences since 02 November 2023

Type of vessel	Offence	Fined	Costs awarded	Victim surcharge	Compensation
No new cases this period					



Navigation Committee

11 January 2024 Agenda item number 8

Draft budget 2024/25 and financial strategy to 2026/27

Report by Director of Finance

Purpose

To:

- i. inform the Committee of the actual Navigation income and expenditure for the eightmonth period to 30 November 2023, and provide a forecast of the projected expenditure at the end of the financial year (31 March 2024).
- ii. consult on the preparation of the Draft Budget for 2024/25 and Financial Strategy to 2026/27 prior to its consideration by the Broads Authority on 26 January 2024.

Broads Plan context

All strategic actions under Theme C: Maintaining and enhancing the navigation.

Recommended decision

- To note the actual Navigation income and expenditure for the eight-month period to 30 November 2023, and the forecast of the projected expenditure at the end of the financial year (31 March 2024).
- ii. To review the preparation of the Draft Budget for 2024/25 and Financial Strategy to 2026/27 prior to its consideration by the Broads Authority on 26 January 2024.

Contents

1.	Introduction	2
2.	Overview of actual income and expenditure	2
3.	Latest Available Budget	4
4.	Overview of Forecast outturn 2023/24	5
5.	Reserves	5
6.	2024/25 budget proposals	6

7.	Operations	7
8.	Strategic Services	8
9.	Finance and Support Services	8
10.	Central and shared costs and cost apportionment	8
11.	Assumptions used for the budget and financial strategy	10
12.	Earmarked reserves	11
13.	Risk implications	12
14.	Conclusion	12
Apper	ndix 1 – Navigation actual income and expenditure charts to 30 November 2023	14
Apper	ndix 2 – Financial monitor: Navigation income and expenditure 2023/24	16

1. Introduction

- 1.1. This report covers two items: Navigation Income and Expenditure and the draft budget.
- 1.2. Sections 2 to 5 give a summary of the income and expenditure for the Navigation budget up until 30 November, any amendments to the Latest Available Budget (LAB), Forecast Outturn (predicted year end position) and the movements on the earmarked reserves.
- 1.3. Section 6 onwards contains the updated draft budget for 2024/25 and the draft financial strategy to 2026/27. The draft budget for 2024/25 was the basis of determining the navigation charges for 2024/25 considered by this committee on 2 November 2023. This is based on the 8.5% increase in navigation charges adopted formally by the Authority on 24 November 2023.

2. Overview of actual income and expenditure

Table 1

Actual Navigation income and expenditure by Directorate to 30 November 2023

Directorate	Profiled Latest Available Budget £	Actual income and expenditure £	Actual Variance £
Income	(4,254,468)	(4,199,934)	- 54,534
Operations	2,248,840	1,998,554	+ 250,286
Strategic Services	285,722	294,272	- 8,550
Finance & Support Services	722,137	748,261	- 26,124

Directorate	Profiled Latest Available Budget £	Actual income and expenditure £	Actual Variance £
Projects, Corporate Items and Contributions from Earmarked Reserves	(233,087)	(105,374)	- 127,713
Net (Surplus) / Deficit	(1,230,856)	(1,264,221)	+ 33,365

- 2.1. Core Navigation income is below the profiled budget at the end of month eight. The overall position as at 30 November 2023 is a favourable variance of £33,365 or a 2.71% difference from the profiled LAB. This is principally due to:
 - An overall adverse variance of £54,534 within toll income:
 - Hire Craft Tolls is £9,600 below the profiled budget.
 - Private Craft Tolls is £75,273 below the profiled budget.
 - $\circ~$ Short Visit Tolls and Other Toll income is £3,052 below the profiled budget.
 - Investment income is £33,391 above the profiled budget.
 - An underspend with Operations relating to:
 - Construction, Maintenance and Ecology salaries is under the profiled budget by £35,662 due to the pay award not being implemented until December 2023.
 - Equipment, Vehicles & Vessels is under the profiled budget by £38,867 due to delays in expenditure from the earmarked reserves. This is offset by the overspend on fuel, repairs and maintenance.
 - Practical Maintenance is under the profiled budget by £55,947 due to a grant being received for the installation of electric charging points, the expenditure has yet to take place.
 - Ranger Services is under the profiled budget by £55,737 due to the pay award not being implemented until December 2023.
 - Premises is under the profiled budget by £42,349 due to delays in expenditure at the Dockyard from the earmarked reserves.
 - An overspend within Strategic Services relating to:
 - Visitor Centres and Yacht Stations is above the profiled budget by £20,994 due to mooring income being less than budgeted and the lease at Reedham Quay not being finalised so charging this season could not commence. This is offset

by the underspend on salaries due to the pay award not being implemented until December 2023.

- An overspend within Finance & Support Services relating to:
 - Legal is over the profiled budget by £19,598 due to increased costs for Reedham Quay lease, Monitoring Officer recharges and increased prosecution costs.
 - \circ ICT is under the profiled budget by £17,902 due to timing differences.
 - Premises is over the profiled budget by £39,157 due to an increase in service recharges relating to 2022/23.
- An underspend within reserves relating to:
 - Premises is under the profiled budget due to delays on Dockyard expenditure.
 - Plant, Vessels and Equipment is under the profiled budget due to delays in vehicle and equipment replacements.
 - Computer Software reserve is under the profiled budget due to delays in the toll system replacement project.
- 2.2. The charts at Appendix 1 provide a visual overview of actual income and expenditure compared with both the original budget and the LAB.

3. Latest Available Budget

3.1. The Authority's income and expenditure is monitored against the Latest Available Budget (LAB) for 2023/24. The LAB is based on the original budget for the year, with adjustments for known and approved budget changes such as carry-forwards and budget virements. Full details of movements from the original budget are in Appendix 2.

Table 2

Adjustments to Navigation LAB

Item	Authorisation reference	Amount £
Original navigation budget 2023/24 – deficit	Broads Authority 20/01/23 Agenda item number 11	55,320
LAB as at 30 November 2023	n/a	55,320

3.2. The LAB therefore provides for a navigation deficit of £55,320 in 2023/24 as at 30 November 2023.

4

4. Overview of Forecast outturn 2023/24

- 4.1. Budget holders have been asked to comment on the expected income and expenditure at the end of the financial year in respect of all budget lines for which they are responsible.
- 4.2. As at the end of November 2023, the forecast indicates that:
 - The total forecast income is £4,315,034.
 - Total expenditure is forecast to be £4,427,819.
 - The resulting deficit for the year is forecast to be £112,785.
- 4.3. The forecast outturn reflects the following changes from the LAB as shown in Table 3. The forecast deficit represents an adverse variance of £57,465 against the LAB. The resulting deficit for the year is forecast to be £112,785.

Table 3

Adjustments to Forecast Outturn

Item	Amount £
Forecast outturn deficit per LAB	55,320
Previously reported 2/11/23	56,013
Increase to Hire Craft Tolls	(3,428)
Decrease to Private Craft Tolls	4,481
Increase to investment income	(10,000)
Salary recharges to external funded projects	(4,725)
Increase to legal fees	10,000
Increase to bank charges	5,124
Forecast outturn deficit as at 30 November 2023	112,785

5. Reserves

Table 4

Navigation Earmarked Reserves

Reserve Name	Balance at 1 April 2023 £	In-year movements £	Current reserve balance £
Property	(514,394)	(26,462)	(540,856)
Plant, Vessels and Equipment	(482,308)	(29,371)	(511,679)
Premises	(164,294)	(25,131)	(189,425)

Reserve Name	Balance at 1 April 2023 £	In-year movements £	Current reserve balance £
CANAPE	(231,693)	9,765	(221,928)
Computer Software	(110,605)	(9,600)	(120,205)
Total	(1,503,294)	(80,799)	(1,584,093)

- 5.1. As in previous years, the Authority's contributions to the reserves have all been made in full at the end of quarter one. This has resulted in the reserves showing increased balances.
- 5.2. The Property reserve contains the income from the land rental at Oulton Broad. Items funded from the Plant, Vessels and Equipment reserve includes three replacement vehicles and a new crane. The Premises reserve has funded the deposit for the replacement hut at Reedham Quay and the electric works. The CANAPE reserve contains the income and expenditure relating to those projects. Full details can be found in Appendix 4.

6. 2024/25 budget proposals

- 6.1. The draft budget is set out in Appendix 3 and the financial strategy to 2026/27 to provide context.
- 6.2. As with the 2023/24 budget the draft for 2024/25 has been prepared by Management Team rather than the zero-based approach taken in previous years. The main objective of this approach is to reduce underspends at the end of the financial year.
- 6.3. The draft budget takes account of the following factors:
 - A provision pay increase of £1,925 per full time equivalent (FTE) member of staff, this is in line with the pay increase for 2023/24.
 - Despite falling CPI and RPI material and staff costs will continue to increase.
 - Boat numbers will remain at 2023/24 levels.
 - National Park Grant remains at 2019/20 level. This is subject to confirmation from DEFRA.
 - The Authority will move to a smaller Head Office from 1 April 2024 subject to the lease being finalised at the beginning of January.
 - No contributions will be made to the earmarked reserves except for vehicles.
 - £50,000 will be transferred from Navigation reserves annually to repay the £250,000 payment from National Park reserves.
 - Maintaining the Navigation reserve at 10% of net expenditure.

- 6.4. Total core Navigation income for 2024/25 is budgeted to be £4,624,930, including £1,436,000 for hire craft tolls and £3,006,000 for private craft tolls. This income takes account of the latest available information on boat numbers. Net navigation expenditure is budgeted at £4,510,636. This will result in a budget surplus of £114,294. After taking into account the transfer of £54,000 interest to earmarked reserves, and the third instalment of the £50,000, reserves at the end of March 2025 are forecast to be £554,524, 12.3% of net expenditure for the year.
- 6.5. Table 5 sets out an overview of the proposed 2024/25 budget, which is provided in more detail in Appendix 3.

Draft 2024/24 Budget

Source	National Park £	Navigation £	Consolidated £
National Park Grant	(3,414,078)	0	(3,414,078)
Navigation Tolls	0	(4,534,930)	(4,534,930)
Investment Income	(90,000)	(90,000)	(180,000)
Total Income	(3,504,078)	(4,624,930)	(8,129,008)
Operations	1,531,562	3,408,924	4,940,486
Strategic Services	1,434,554	482,086	1,916,640
Finance & Support Services	986,052	1,137,763	2,123,815
Contributions from earmarked reserves & corporate items	(462,841)	(518,137)	(980,978)
Total Expenditure	3,489,327	4,510,636	7,999,963
Net (Surplus) / Deficit	(14,751)	(114,294)	(129,045)
Opening Reserves (Forecast)	(828,406)	(544,230)	(1,372,636)
(Surplus) / Deficit for the year	(14,751)	(114,294)	(129,045)
Interest transfer	54,000	54,000	108,000
Contribution to National Park (General) Reserve	(50,000)	50,000	0
Closure of HLF reserve	(151,602)	0	(151,602)
Closing Reserves (Forecast)	(990,759)	(554,524)	(1,545,283)

7. Operations

7.1. The Operations budget has seen an increase to staff costs to reflect the provisional £1,925 per FTE pay increase, subject to negotiations by the NJC. Practical Maintenance has seen an increase to expenditure in Mutford Lock repairs and maintenance and

gauge boards replacements. Launches has seen an increase to maintenance and fuel costs.

7.2. As with previous years, however, it is important to recognise that the Operations budget has no capacity to take on additional projects or ad-hoc work in 2024/25.

8. Strategic Services

8.1. As with the Operations budget, staff costs have increased for the same reasons. Visitor Centres and Yacht Stations has seen a reduction to income to reflect the drop-in mooring fees, although this does assume charging at Reedham will start from the beginning of the season. Again, there is little capacity to take on additional projects or ad-hoc work.

9. Finance and Support Services

9.1. As per Operations and Strategic Services staff costs have increased for the same reasons. Finance has seen an increase due to the rising costs of external audit. The Public Sector Auditor Appointments (PSAA) have confirmed that for the next contract individual authorities will see an 151% increase on audit fees for 2023/24 onwards. The new scale fees were published on 28 November 2023. The fee will be payable for the next five years of audits from 2023/24 to 2027/28.

10. Central and shared costs and cost apportionment

- 10.1. Cost apportionments remains broadly the same as those for 2023/24 and are consistent with the principles agreed by the Resources Allocation Working Group. Full details of apportionments by budget line for 2024/25 are set out in Appendix 3.
- 10.2. The overall split of estimated income and proposed net expenditure in 2024/25 remains broadly the same, 43% National Park and 57% Navigation.
- 10.3. Table 6 provides further details of central and shared costs. These should not be seen as synonymous with overheads but have been identified in line with those areas specifically examined by the Resource Allocation Working Group. As such, they reflect costs across the Authority included within the budgets of Operations, Strategic Services and Finance and Support Services directorates.

Central and shared costs

Year	Central and Shared Costs £000's	Apprenticeship levy costs £000's	Total £000's	Percentage split of central and shared costs	Total Core Income £000's	Central and shared costs as percentage of core income
2023/24 National Park	2,051	3	2,054	58%	3,699	56%
2023/24 Navigation	1,458	3	1,461	42%	4,315	34%
2023/24 Consolidated	3,509	6	3,515	100%	8,014	44%
2024/25 National Park	1,517	5	1,522	51%	3,504	43%
2024/25 Navigation	1,455	4	1,459	49%	4,625	32%
2024/25 Consolidated	2,972	9	2,981	100%	8,129	37%
2025/26 National Park	1,541	5	1,546	51%	3,464	45%
2025/26 Navigation	1,478	4	1,482	49%	4,833	31%
2025/26 Consolidated	3,019	9	3,028	100%	8,297	36%
2026/27 National Park	1,562	5	1,567	51%	3,449	45%
2026/27 Navigation	1,500	5	1,505	49%	4,914	31%
2026/27 Consolidated	3,062	10	3,072	100%	8,363	37%

10.4. Central and shared costs have been identified in line with the work of the Resource Allocation Working Group to include operational property, finance and insurance; communications; collection of tolls; ICT; legal; head office; office expenses and pool vehicles; directorate management and administration costs; human resources and staff training; governance and member's allowances; and the Chief Executive. All of these play a vital role in supporting the delivery of front-line services.

11. Assumptions used for the budget and financial strategy

- 11.1. The following key assumptions have been applied in developing the draft budget and financial strategy:
 - Navigation tolls will be collected in line with the budget and boat numbers will remain as forecast.
 - Salary negotiations for 2024/25 will be in line with the £1,925 per FTE budgeted and increases from 2025/26 onwards are based on a provisional increase of 3%, subject to negotiations with the NJC.
 - Staffing levels will remain at 100% of budget. Staff turnover may result in timing differences between vacancy and appointment. Where these savings arise, the forecast will be adjusted accordingly.
 - No contributions will be made to the earmarked reserves for one year only, except for vehicle replacements.
 - The Authority will move to a smaller Head Office from 1 April 2024.
 - The forecast outturn position for 2023/24 will be delivered in line with budget holders' projections; and
 - 2024/25 will see the third instalment of £50,000 being transferred back to the National Park reserve.
- 11.2. A detailed sensitivity analysis for some of these key assumptions is set out below in table 7.

Table 7

Budget sensitivity analysis

Assumption	Change in assumption	Approximate financial impact of change £ (+/-)
National Park Budget for 2023/24 will be delivered in line with forecast outturn	1% under/overspend against National Park budget	36,000
Navigation Budget for 2023/24 will be delivered in line with forecast outturn	1% under/overspend against Navigation budget	44,000

Assumption	Change in assumption	Approximate financial impact of change £ (+/-)
Overall salary increases of £1,925 per FTE in 2024/25	1% change in salary inflation	7,610
Boat numbers and distribution remain as predicted in 2024/25	1% change in navigation toll income	44,000
National Park Grant in line with current allocations and no further reductions in 2024/25	1% change in National Park Grant income	34,000
Inflation	1% increase on non-salary budgets	19,000

12. Earmarked reserves

- 12.1. The Authority's earmarked reserve strategy for the period 2024/25 to 2026/27 is set out in Appendix 4. The strategy details the actual balance of earmarked reserves at the end of November 2023, planned expenditure until the end of the financial year, and provides an analysis of movements in reserves, split between national park and navigation in all years to 2026/27.
- 12.2. Navigation earmarked reserves stand at £1,584,093 at the end of November 2023 and are forecast to decrease (to £1,204,007) by the end of the financial year due to the planned purchase of three vehicles.
- 12.3. Appendix 4 reflects the contributions to reserves allowed for in the budget and financial strategy set out in Appendix 3. Planned expenditure from reserves is itemised within Appendix 4 and includes in 2024/25:
 - Replacement of four vehicles.
 - Replacement of a welfare unit, dipper arm extension and weed bucket for excavators, telescopic handler and a concrete pump.
 - Replacement Ranger launch.
 - Software development for the new tolls system.
 - Replacement Finance system; and
 - Piling at Repps bank.
- 12.4. Planned expenditure from earmarked reserves in 2025/26 and 2026/27 includes the replacement of five further vehicles, NATO floats, Yanmar tracked carrier, mower,

11

deposit for a long reach excavator, clamshell bucket, Takeuchi excavator, iron horse and a hydraulic power pack.

12.5. Taking account of all these items, the forecast balance of navigation earmarked reserves at the end of 2026/27 is £928,957, although it should be noted that expenditure plans for 2025/26 and beyond are likely to be refined again when the financial strategy for 2025/26 is developed later next year.

13. Risk implications

13.1. Loss of income is identified in the corporate risk register under risk number four. This is a significant risk to the Authority, table 7 highlights the impact of a 1% movement. The cost-of-living crisis means that many people, including hire boat operators, may face some difficult decision regarding their continued boat ownership.

14. Conclusion

- 14.1. The draft budget presented here incorporates the navigation charges for 2024/25 and is designed to allow the Authority to continue to deliver priority navigation activities at the required level, while making prudent provision for asset maintenance over the life of the strategy and beyond. Minor adjustments have also been made reflecting the latest staffing forecasts. As a result of all these factors, there is no capacity within the budget for additional projects.
- 14.2. The National Park part of the budget shows a small surplus for 2024/25 which will cushion the impact of a further year of a flat cash settlement from DEFRA. This will result in a reserve balance of £990,759 at the end of 2024/25. While confirmation on the settlement is awaited, figures for 2025/26 onwards should be viewed with a high degree of uncertainty. Currently from 2025/26 onwards the budget returns to a deficit which will be funded from reserves. Work will be undertaken during 2024/25 to identify further savings and income generation opportunities and bought back to members in due course. The impact of any change (positive or negative) will need careful consideration to make sure National Park expenditure is sustainable.
- 14.3. It is important to recognise that the budget is highly sensitive to changes in salary inflation, with a significant proportion of the budget being made up of staff costs. The budget is based on a £1,925 per FTE increase in salaries for the period April 2024 to March 2025. As in previous years there continues to be uncertainty about the amount and the timing of the likely award.
- 14.4. For navigation the surplus of £114,294 allowed for in the 2024/25 budget will continue to maintain the reserve above the 10%. Despite falling inflation, the impact of cost increases should not be underestimated and its effect on purchasing materials and services.
- 14.5. On the Navigation side of the budget the level of reserves held by the Authority provides a cushion to increasing costs and allows time to plan for achievable medium-

term savings that will benefit both sides of the budget whilst maintaining appropriate minimum level of reserves.

14.6. As in previous years, it remains the case that the indicative tolls increase in 2025/26 and beyond will need to be revisited during next year's budget setting process to ensure they remain appropriate. This could be as a result of any variations from current assumptions or changes to outturn figures for 2023/24.

Author: Emma Krelle

Date of report: 20 December 2023

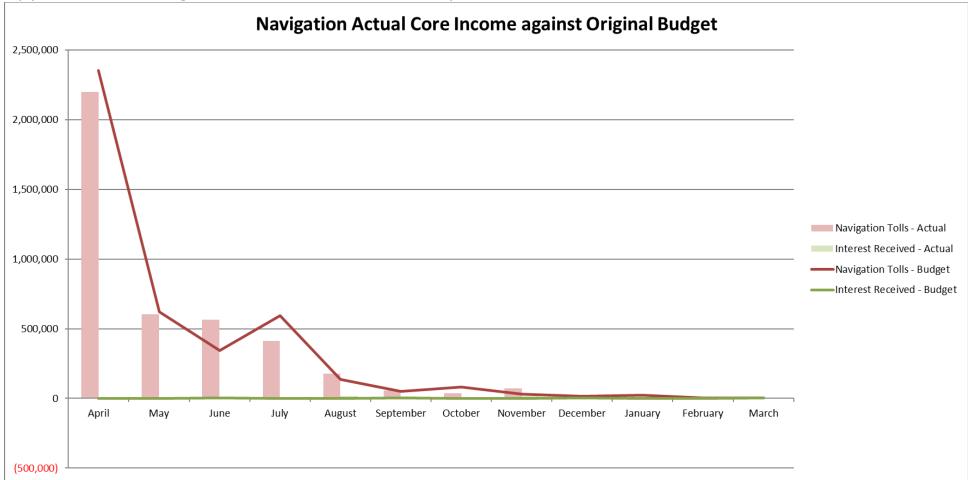
Broads Plan strategic objectives: C1, C2, C3, C4

Appendix 1 – Navigation actual income and expenditure charts to 30 November 2023

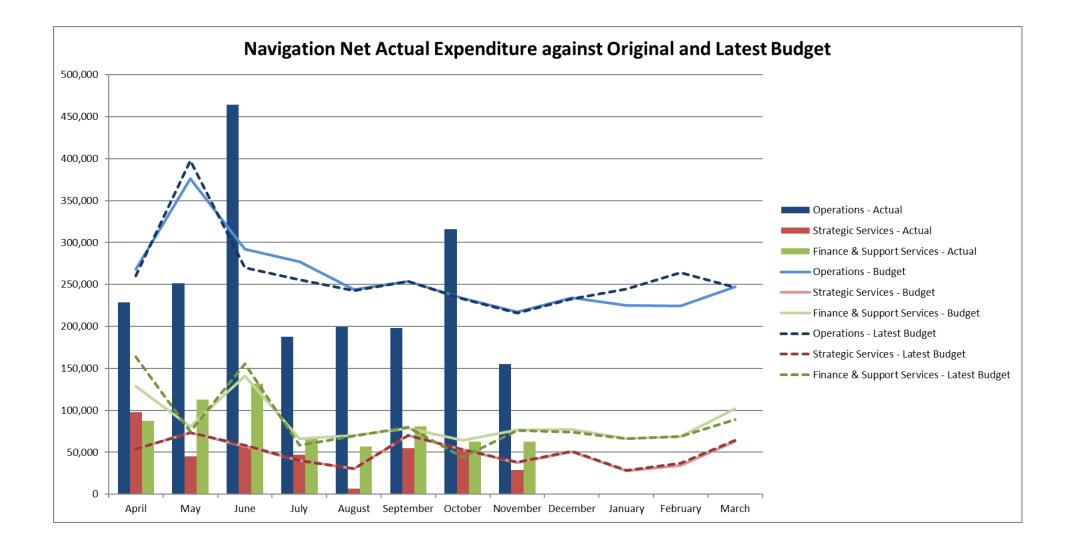
Appendix 2 – Financial monitor: Navigation income and expenditure 2023/24

Appendix 3 – 2024/25 Budget and Financial Strategy to 2026/27

Appendix 4 – Earmarked reserves 2023/24 to 2026/27 for budget



Appendix 1 – Navigation actual income and expenditure charts to 30 November 2023



Appendix 2 – Financial monitor: Navigation income and expenditure 2023/24

Table 1

Income

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Total Income	(4,327,110)	0	(4,327,110)	(4,315,034)	- 12,076
National Park Grant	0	0	0	0	+ 0
Income	0	0	0	0	+ 0
Hire Craft Tolls	(1,333,000)	0	(1,333,000)	(1,322,781)	- 10,219
Income	(1,333,000)	0	(1,333,000)	(1,322,781)	- 10,219
Private Craft Tolls	(2,844,000)	0	(2,844,000)	(2,769,643)	- 74,357
Income	(2,844,000)	0	(2,844,000)	(2,769,643)	- 74,357
Short Visit Tolls	(55,000)	0	(55,000)	(55,000)	+ 0
Income	(55,000)	0	(55,000)	(55,000)	+ 0
Other Toll Income	(32,610)	0	(32,610)	(32,610)	+ 0
Income	(32,610)	0	(32,610)	(32,610)	+ 0
Interest	(62,500)	0	(62,500)	(135,000)	+ 72,500
Income	(62,500)	0	(62,500)	(135,000)	+ 72,500

Operations

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Total Operations	3,272,853	22,435	3,295,288	3,321,632	- 26,344
Construction and Maintenance Salaries	974,116	0	974,116	988,655	- 14,539
Salaries	974,116	0	974,116	989,431	- 15,315
Expenditure	0	0	0	(776)	+ 776
Equipment, Vehicles & Vessels	538,769	0	538,769	538,769	+ 0
Income	(700)	0	(700)	(700)	+ 0
Expenditure	539,469	0	539,469	539,469	+ 0
Water Management	84,000	0	84,000	84,000	+ 0
Expenditure	84,000	0	84,000	84,000	+ 0
Land Management	0	0	0	0	+ 0
Income	0	0	0	0	+ 0
Expenditure	0	0	0	0	+ 0
Practical Maintenance	351,575	0	351,575	351,575	+ 0
Income	(56,185)	0	(56,185)	(56,185)	+ 0
Expenditure	407,760	0	407,760	407,760	+ 0
Waterways and Recreation Strategy	31,960	0	31,960	31,190	+ 770

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Income	0	0	0	0	+ 0
Salaries	23,960	0	23,960	23,190	+ 770
Expenditure	8,000	0	8,000	8,000	+ 0
Project Funding	1,125	0	1,125	1,125	+ 0
Expenditure	0	0	0	0	+ 0
Pension Payments	1,125	0	1,125	1,125	+ 0
Ranger Services	912,122	22,435	934,557	947,205	- 12,648
Income	0	0	0	0	+ 0
Salaries	789,592	0	789,592	802,240	- 12,648
Expenditure	122,330	22,435	144,765	144,765	+ 0
Pension Payments	200	0	200	200	+ 0
Safety	96,953	0	96,953	97,066	- 113
Income	(500)	0	(500)	(500)	+ 0
Salaries	68,643	0	68,643	68,756	- 113
Expenditure	28,810	0	28,810	28,810	+ 0
Premises	192,156	0	192,156	192,156	+ 0
Income	(1,820)	0	(1,820)	(1,820)	+ 0
Expenditure	193,976	0	193,976	193,976	+ 0

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Operations Management and Administration	90,078	0	90,078	89,892	+ 186
Salaries	86,418	0	86,418	86,232	+ 186
Expenditure	3,660	0	3,660	3,660	+ 0

Strategic Services

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Total Strategic Services	400,106	6,927	407,033	398,662	+ 8,371
Development Management	4,921	0	4,921	4,912	+ 9
Income	0	0	0	0	+ 0
Salaries	4,921	0	4,921	4,912	+ 9
Expenditure	0	0	0	0	+ 0
Pension Payments	0	0	0	0	+ 0
Strategy and Projects Salaries	28,181	0	28,181	25,880	+ 2,301
Income	0	0	0	0	+ 0
Salaries	28,181	0	28,181	28,097	+ 84
Expenditure	0	0	0	(2,216)	+ 2,216
Biodiversity Strategy	0	0	0	0	+ 0
Expenditure	0	0	0	0	+ 0
Human Resources	77,669	0	77,669	77,736	- 67
Salaries	49,013	0	49,013	49,080	- 67
Expenditure	28,656	0	28,656	28,656	+ 0
Volunteers	20,347	0	20,347	20,507	- 159

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Salaries	16,702	0	16,702	16,862	- 159
Expenditure	3,645	0	3,645	3,645	+ 0
Communications	90,148	0	90,148	90,636	- 488
Income	0	0	0	0	+ 0
Salaries	81,388	0	81,388	81,876	- 488
Expenditure	8,760	0	8,760	8,760	+ 0
Visitor Centres and Yacht Stations	139,012	6,927	145,939	140,535	+ 5,404
Income	(197,010)	0	(197,010)	(197,010)	+ 0
Salaries	267,442	0	267,442	262,038	+ 5,404
Expenditure	68,580	6,927	75,507	75,507	+ 0
Strategic Services Management and Administration	39,828	0	39,828	38,456	+ 1,372
Salaries	39,078	0	39,078	38,988	+ 90
Expenditure	750	0	750	(532)	+ 1,282
Strategy and Projects	0	0	0	0	+ 0
Expenditure	0	0	0	0	+ 0

Finance & Support Services

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Total Finance & Support Services	1,019,937	0	1,019,937	1,047,354	- 27,417
National Park Grant	0	0	0	0	+ 0
Expenditure	0	0	0	0	+ 0
Legal	24,000	0	24,000	34,000	- 10,000
Income	(6,000)	0	(6,000)	(6,000)	+ 0
Expenditure	30,000	0	30,000	40,000	- 10,000
Governance	124,718	0	124,718	122,774	+ 1,944
Salaries	93,318	0	93,318	93,502	- 184
Expenditure	31,400	0	31,400	29,272	+ 2,128
Chief Executive	52,652	0	52,652	51,753	+ 899
Salaries	52,256	0	52,256	51,679	+ 577
Expenditure	396	0	396	74	+ 322
Asset Management	78,394	0	78,394	78,493	- 99
Income	(3,135)	0	(3,135)	(3,135)	+ 0
Salaries	23,994	0	23,994	24,183	- 189
Expenditure	57,535	0	57,535	57,445	+ 90

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Finance and Insurance	271,886	0	271,886	284,396	- 12,510
Income	0	0	0	0	+ 0
Salaries	150,086	0	150,086	150,192	- 106
Expenditure	121,800	0	121,800	134,204	- 12,404
Collection of Tolls	208,680	0	208,680	210,930	- 2,250
Salaries	198,080	0	198,080	200,330	- 2,250
Expenditure	10,600	0	10,600	10,600	+ 0
ІСТ	214,748	0	214,748	220,149	- 5,401
Salaries	107,520	0	107,520	113,050	- 5,530
Expenditure	107,228	0	107,228	107,099	+ 129
Premises – Head Office	44,860	0	44,860	44,860	+ 0
Expenditure	44,860	0	44,860	44,860	+ 0

Projects and Corporate items

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Projects and Corporate Items	11,783	0	11,783	11,783	+ 0
Partnerships / HLF	8,500	0	8,500	8,500	+ 0
Income	0	0	0	0	+ 0
Salaries	0	0	0	0	+ 0
Expenditure	8,500	0	8,500	8,500	+ 0
Corporate Items	3,283	0	3,283	3,283	+ 0
Expenditure	3,283	0	3,283	3,283	+ 0

Table 6

Contributions from earmarked reserves

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Total contributions from Earmarked Reserves	(322,250)	(29,362)	(351,612)	(351,612)	+ 0
Earmarked Reserves	(322,250)	(29,362)	(351,612)	(351,612)	+ 0
Expenditure	(322,250)	(29,362)	(351,612)	(351,612)	+ 0

Net (Surplus) / Deficit

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Grand Total	55,320	0	55,320	112,785	- 57 <i>,</i> 465

2024/25 Budget and Financial Strategy to 2026/27

		2022/23		2023/24				2024/25			2025/26		2026/27			2024/25 Apport	ionment			
Row Labels	National Park	Navigation		National Park 2023/24 (Latest	•	Consolidated 2023/24 (Latest			Consolidated								Navigation	Consolidated	National Park N	avigation
	2022/23 (Actual)	2022/23 (Actual)	2022/23 (Actual)	Available Budget)	Available Budget)	Available Budget)			2023/24 (Forecast)			2024/25 (Budget)			2025/26 (Budget)	2026/27 (Budget)	2026/27 (Budget)	2026/27 (Budget)		
Income																				
National Park Grant	(4,784,591)	0	(4,784,591)	(3,414,078)	0	(3,414,078)	(3,564,078)	0	(3,564,078)	(3,414,078)	0	(3,414,078)	(3,414,078)	0	(3,414,078)	(3,414,078)	C	(3,414,078)	100%	0%
Hire Craft Tolls Private Craft Tolls	0	(1,204,264) (2,516,714)	(1,204,264) (2,516,714)	0	(1,333,000) (2,844,000)	(1,333,000) (2,844,000)	0	(1,322,781) (2,769,643)	(1,322,781) (2,769,643)	0	(1,436,000) (3,006,000)	(1,436,000) (3,006,000)	0	(1,515,000) (3,171,330)	(1,515,000) (3,171,330)	0	(1,546,000) (3,234,757)		0% 0%	100% 100%
Short Visit Tolls	0	(54,089)	(54,089)	0	(55,000)	(55,000)	0	(55,000)	(55,000)	0	(60,000)	(60,000)	0	(63,300)	(63,300)	0	(64,566)	(64,566)	0%	100%
Other Toll Income Interest	0 (58,570)	(35,474) (58,570)	(35,474) (117,141)	0 (62,500)	(32,610) (62,500)	(32,610) (125,000)	0 (135,000)	(32,610) (135,000)	(32,610) (270,000)	0 (90,000)	(32,930) (90,000)	(32,930) (180,000)	0 (50,000)	(33,260) (50,000)	(33,260) (100,000)	0 (35,000)	(33,590) (35,000)	(33,590) (70,000)	0% 50%	100% 50%
Income Total	(4,843,162)	(3,869,111)	(8,712,273)	(3,476,578)	(4,327,110)	(7,803,688)	(3,699,078)	(4,315,034)	(8,014,112)	(3,504,078)	(4,624,930)	(8,129,008)	(3,464,078)	(4,832,890)	(8,296,968)	(3,449,078)	(4,913,913)	(8,362,991)	43%	57%
Income Total Net Expenditure	(4,843,162)	(3,869,111)	(8,712,273)	(3,476,578)	(4,327,110)	(7,803,688)	(3,699,078)	(4,315,034)	(8,014,112)	(3,504,078)	(4,624,930)	(8,129,008)	(3,464,078)	(4,832,890)	(8,296,968)	(3,449,078)	(4,913,913)	(8,362,991)	43%	57%
Operations																				
Construction and Maintenance Salaries Construction and Maintenance Salaries (Income)	549,462 0	902,955 0	1,452,417 0	599,074 0	998,076 0	1,597,150 0	606,384 0	1,011,844 0	1,618,229 0	646,965	1,066,225	1,713,190 0	668,333 0	1,106,187 0	1,774,520 0	677,329 0	1,119,251 0	1,796,580	38% 0%	62% 0%
Equipment, Vehicles and Vessels	161,938	377,856	539,794	231,201	539,469	770,670	231,201	539,469		184,980	431,620	616,600	176,580	412,020		179,580	419,020		30%	70%
Equipment, Vehicles and Vessels (Income) Water Management	(5,343) 2,245	(12,468) 50,311	(17,811) 52,557	(300) 4,700	(700) 84,000	(1,000) 88,700	(300) 4,700	(700) 84,000	(1,000) 88,700	(360) 5,500	(840) 75,000	(1,200) 80,500	(360) 5,500	(840) 75,000	(1,200) 80,500	(360) 5,500	(840) 75,000		30% 7%	70% 93%
Water Management (Income)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0%	0%
Land Management Land Management (Income)	68,861 (102,663)	0	68,861 (102,663)	56,355 (87,500)	0	56,355 (87,500)	55,355 (87,500)	0	55,355 (87,500)	57,350 (78,235)	0	57,350 (78,235)	57,350 (78,235)	0	57,350 (78,235)	57,350 (78,235)	0	57,350 (78,235)	100% 100%	0% 0%
Waterways and Recreation Strategy	64,055	6,992	71,047	Ó	8,000	8,000	0	8,000		82,851	6,400	89,251	0	6,400			6,400		93%	7%
Waterways and Recreation Strategy (Income) Practical Maintenance	(64,055) 122,812	491,986	(64,055) 614,799	240,900	407,760	0 648,660	90,900	407,760	498,660	(82,851) 327,140	393,250	(82,851) 720,390	0 123,140	408,250	531,390	123,140	408,250	531,390	100% 45%	0% 55%
Practical Maintenance (Income)	0	(16,709)	(16,709)	0	(56,185)	(56,185)	0	(56,185)	(56,185)	0	(26,425)	(26,425)	0	(26,425)	(26,425)	0	(26,425)	(26,425)	0%	100%
Ranger Services Ranger Services (Income)	277,222 (101)	751,208 (235)	1,028,430 (335)	215,433 0	934,557 0	1,149,990 0	218,595 0	947,205 0	1,165,800 0	231,031 0	1,192,875 0	1,423,906 0	235,146 0	1,039,334 0	1,274,480 0	238,783 0	1,053,882 0	1,292,665 0	16% 0%	84% 0%
Safety	66,224	87,252	153,476	46,363	97,453	143,815	46,270	97,566		47,390		147,670	44,529	100,471	145,000				32%	68%
Safety (Income) Project Funding	(1,005) 11,370	(937) 1,126	(1,942) 12,496	0 129,475	(500) 1,125	(500) 130,600	0 129,475	(500) 1,125		0	(500)	(500) 0	0	(500)	(500) 0	0	(500)	(500) 0	0% 0%	100% 0%
Project Funding (Income)	(7,500)	0	(7,500)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0%
Operational Property Operational Property (Income)	87,097 (3,436)	113,745 (8,017)	200,842 (11,453)	103,074 (780)	193,976 (1,820)	297,050 (2,600)	103,074 (780)	193,976 (1,820)		47,812 (780)	78,708 (1,820)	126,520 (2,600)	70,087 (780)	108,933 (1,820)	179,020 (2,600)	70,087 (780)	108,933 (1,820)		38% 30%	62% 70%
Operations Management and Admin	93,942	46,270	140,213	60,052	90,078	150,130	59,928	89,892		62,768		156,920	64,540	96,810					40%	60%
Operations Management and Admin (Income) Operations Total	1,321,126	2,791,335	4,112,461	1,598,047	3,295,288	4,893,335	1,457,302	3,321,632	4,778,934	1,531,562	3,408,924	4,940,486	1,365,830	3,323,820	4,689,650	1,383,264	3,362,001	4,745,265	0% 31%	0% 69%
Strategic Services												550.000	555 007						000/	
Development Management Development Management (Income)	485,026 (83,608)	4,590 0	489,616 (83,608)	502,089 (87,500)	4,921 0	507,010 (87,500)	506,418 (90,500)	4,912 0	511,330 (90,500)	552,955 (90,500)	5,126 0	558,080 (90,500)	555,287 (90,500)	5,263 0	560,550 (90,500)	563,860 (90,500)	5,370 0	569,230 (90,500)	99% 100%	1% 0%
Strategy and Projects Salaries	120,544	10,005	130,550	139,129	28,181	167,310	125,543	25,880		144,253	29,287	173,540	184,573	30,073		210,815	30,686		83%	17%
Strategy and Projects Strategy and Projects (Income)	91,738 (25,500)	0	91,740 (25,500)	112,280 (15,000)	0	112,280 (15,000)	123,800 (15,000)	0	123,800 (15,000)	172,728 (30,798)	0	172,728 (30,798)	112,454 (36,446)	0	112,454 (36,446)	93,000 (59,670)	0	93,000 (59,670)	100% 100%	0% 0%
Biodiversity Strategy	18,858	0	18,858	9,300	0	9,300	20,988	0	20,988	8,520	0	8,520	8,000	0	8,000		C	8,000	100%	0%
Biodiversity Strategy (Income) NCPGS Discovery Grant	(14,290) 682,033	0	(14,290) 682,033	0	0	0	19,580	0	19,580	10,070	0	10.070	0	0	0	0	0	0	0% 100%	0% 0%
NCPGS Discovery Grant (Income)	(709,347)	0	(709,347)	0	0	0	(19,580)	0	(19,580)	0	0	0	0	0	0	0	C	0	0%	0%
NCPGS Restoration Grant NCPGS Restoration Grant (Income)	0	0	0	0	0	0				147,120 (157,190)	0	147,120 (157,190)	0	0	0	0	0	0	100% 100%	0% 0%
Palludiculture Exploration Fund	0	0	0	0	0	0	27,420	0	,	43,450	0	43,450	0	0	0	0	C	0	100%	0%
Palludiculture Exploration Fund (Income) FiPL	169,121	0	0 169,121	194,000	0	0 194,000	(27,420) 350,611	0	(27,420) 350,611	(43,450) 488,220	0	(43,450) 488,220	27,700	0	27,700	29,000	0	29,000	100% 100%	0% 0%
FiPL Grant (income)	(169,121)	0	(169,121)	(194,000)	0	(194,000)	(339,833)	0	(339,833)	(480,320)	0	(480,320)	0	0	0	0	C	0	100%	0%
Environment Land Management System Environment Land Management System (Income)	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0% 0%	0% 0%
Water Environment Grant	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0%	0%
Water Environment Grant (Income) Communications	294,050	0 85,351	0 379,402	292,554	0 90,148	0 382,702	318,426	90,636	409,062	285,569	96,141	0 381,710	289,186	0 97,415	386,600	293,981	99,249	393,230	0% 75%	0% 25%
Communications (Income)	(3,680)	0	(3,680)	(250)	0	(250)	(16,000)	0	(16,000)	(250)	0	(250)	(250)	0	(250)	(250)	0	(250)	100%	0%
Generation Green (income) Generation Green	(5,965) 5,659	0	(5,965) 5,659	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0% 0%	0% 0%
UK NP Communications Team UK NP Communications Team (Income)	121,428 (87,800)	0	121,428 (87,800)	11,522	0	11,522	67,987 (33,895)	0	67,987 (33,895)	0	0	0	0	0	0	0	0	0	0% 0%	0% 0%
Visitor Centres and Yacht Stations	325,412	172,598	498,009	235,703	336,022	571,725	253,709	337,545		240,677	346,483	587,160	247,596	363,664	611,260	250,654	367,066	617,720	41%	59%
Visitor Centres and Yacht Stations (Income)	(123,479)	(63,867)	(187,346)	(109,540)	(197,010)	(306,550)	(109,540)	(197,010)		(107,040)		(251,000)	(107,040)	(197,010)			(197,010)		43%	57%
Human Resources Human Resources (Income)	103,739 (1,654)	74,581 (3,823)	178,320 (5,477)	84,141 0	77,669 0	161,810 0	84,214 0	77,736 0	0	91,442 0	0	175,850 0	93,324 0	86,146 0	0	94,510 0	C	0	52% 0%	48% 0%
Volunteers Volunteers (Income)	42,234	28,156	70,390	55,013	20,347	75,360	55,444	20,507	75,950	61,043	22,577	83,620	60,181 0	22,259	82,440	63,415	23,455	86,870	73% 0%	27% 0%
Strategic Services Management and Admin	87,077	37,319	124,396	92,932	39,828	132,760	89,730	38,456	128,186	98,056	42,024	140,080	100,590	43,110	143,700	102,564	43,956	146,520	70%	30%
Strategic Services Management and Admin (Income) Strategic Services Total	0 1,322,473	0 344,911	0 1,667,384	0 1,322,373	0 400,106	0 1, 722,479	0 1, 392,101	0 398,662	0 1,790,764	0 1, 434,554	0 482,086	0 1 ,916,64 0	0 1,444,654	0 450,920	0 1 ,895,574	0 1,452,338	0 460,012	0 1,912,350	0% 75%	0% 25%
Finance and Support Services																				
Legal	133,793	44,780 (5,264)	178,573 (5,264)	80,000	30,000 (6,000)	110,000 (6,000)	100,000	40,000 (6,000)		110,000	40,000 (5,000)	150,000 (5,000)	110,000	40,000 (5,000)	150,000 (5,000)	110,000	40,000 (5,000)		73% 0%	27% 100%
Legal (Income) Governance	155,082	76,353	231,436	120,632	124,718	245,350	118,476	122,774	241,250	128,764	132,947	261,710	132,588	137,092	269,680	135,287	139,963	275,250	49%	51%
Chief Executive Asset Management	75,347 62,326	49,428 67,360	124,775 129,686	80,408 96,651	52,652 81,529	133,060 178,180	79,033 96,772	51,753 81,628		82,004 74,650		135,700 155,390	84,161 63,475	55,109 81,416		85,847 64,129	56,213 81,951		60% 48%	40% 52%
Asset Management (Income)	(22,112)	(7,584)	(29,696)	(21,165)	(3,135)	(24,300)	(21,165)	(3,135)	(24,300)	(21,165)	(4,135)	(25,300)	(21,165)	(3,135)	(24,300)	(21,165)	(3,135)	(24,300)	84%	16%
Finance and Insurance Finance and Insurance (Income)	1,616,089	218,122	1,834,211	223,624	271,886	495,510	383,454 (10,000)	284,396 0		259,951	318,119	578,070	264,509	323,921	588,430	268,386	328,854	597,240	45% 0%	55% 0%
Collection of Tolls	0	196,866	196,866	0	208,680	208,680	(10,000)	210,930		0	228,380	228,380	0	235,520	235,520	0	240,130	240,130	0%	100%
Collection of Tolls (Income) ICT	0 236,177	0 116,326	0 352,503	0 200,252	0 204,848	0 405,100	0 206,103	0 210,249	0 416,352	0 236,750	0 234,115	0 470,865	0 218,148	0 201,367	0 419,515	0 221,294	0 204,271	0 0 425,565	0% 50%	0% 50%
Office Expenses	21,580	10,629	32,209	200,252 20,100	204,848 9,900	30,000	206,103	9,900		236,750 17,420		26,000	17,420	8,580					67%	33%
Office Expenses (Income) Head Office	(111)	(55)	(165)	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0% 66%	0% 34%
Head Office (Income)	204,937 (113)	81,488 (46)	286,425 (159)	117,080	44,860	161,940 0	481,136 0	44,860 0	0	97,680 0	50,320 0	148,000 0	97,680	50,320	148,000 0	97,680	50,320	0	66% 0%	0%
Finance and Support Services Total	2,482,998	848,402	3,331,400	917,583	1,019,937	1,937,520	1,453,910	1,047,354	2,501,264	986,052	1,137,763	2,123,815	966,815	1,125,190	2,092,005	978,877	1,142,148	2,121,025	46%	54%
Corporate Items Projects and Corporate Items	94,459	53,690	148,149	3,417	3,283	6,700	3,417	3,283	6,700	4,437	4,263	8,700	4,590	4,410	9,000	4,845	4,655	9,500	51%	49%
National Heritage Lottery Funding	472,745	0	472,745	96,460	0	96,460	86,240	0	86,240	30,000	0	30,000	0	0	0	0	C	0	100%	0%
National Heritage Lottery Funding (Income) EU Funding - CANAPE	(632,482) 39,937	0 39,937	(632,482) 79,874	(91,535) 8,500	0 8,500	(91,535) 17,000	(91,535) 8,500	0 8,500	(91,535) 17,000	(121,875) 0	0	(121,875) 0	0	0	0	0	0	0	100% 0%	0% 0%
EU Funding - CANAPE (Income)	(28,535)	(28,535)	(57,070)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0%
Contributions from Earmarked reserves Corporate Items Total	(8,749) (62,625)	(35,117) 29,975	(43,866) (32,650)	(415,364) (398,522)	(344,685) (332,902)	(760,049) (731,424)	(681,470) (674,848)	(351,612) (339,829)	(1,033,082) (1,014,677)	(375,403) (462,841)	(522,400) (518,137)	(897,803) (980,978)	(93,954) (89,364)	(112,800) (108,390)	(206,754) (197,754)		(110,700) (106,045)		42% 47%	58% 53%
Net Expenditure Total	5,063,972	4,014,624	9,078,596	3,439,480	4,382,430	7,821,910	3,628,465	4,427,819	8,056,284	3,489,327	4,510,636	7,999,963	3,687,935	4,791,540	8,479,475	3,747,024	4,858,116	8,605,140	44%	56%
Grand Total (Surplus) / Deficit	220,810	145,512	366,322	(37,098)	55,320	18,222	(70,613)	112,785	42,172	(14,751)	(114,294)	(129,045)	223,857	(41,350)	182,507	297,946	(55,796)	242,149		

Year	Earmarked Reserves	Property Reserve - National Park	Property Reserve - Navigation	Property Reserve - TOTAL	Plant, Vessels and Equipment Reserve - National Park	Plant, Vessels and Equipment Reserve - Navigation	Plant, Vessels and Equipment Reserve - TOTAL	Premises Reserve - National Park	Premises Reserve - Navigation	Premises Reserve - TOTAL	Other Earmarked Reserves - National Park	Other Earmarked Reserves - Navigation	Other Earmarked Reserves - TOTAL	НĽ	CANAPE	Total Earmarked Reserves - National Park	Total Earmarked Reserves - Navigation	GRAND TOTAL Earmarked Reserves
	Actual Balance 01 April 2023 (incl interest)	(421,967)	(514,394)	(936,361)	(153,571)	(482,307)	(635,878)	(212,285)	(164,294)	(376,578)	(1,073,525)	(110,605)	(1,184,130)	(171,017)	(463,385)	(2,264,057)	(1,503,292)	(3,767,349)
	Contributions to Reserves to 30/11/2023 Vessels and Equipment (VES000451) Vehicles (VEH000451) Mutford Lock (MLK000451) Mutford Lock Rent (MLK000552) Launches (LAU000451) Ranger Vehicles (RAN000451) Dockyard Site (PRM009451) Pool Vehicles (PCP000451) Building repairs (PRM000451) Asset Management for Countryside sites (SIM00451) Computer Software (ICT000451) Sale of old vehicles (VEH000552) CANAPE Income (CANXXX52) Catchment Partnership (CAT000552) Heritage Lottery Fund Income (HLF61X552) UK Communications Team (Income) Upper Thurne contribution to Reserve (Budget £21,000) Pool Vehicles Income from sales of Dockyard assets Planning policy Asset Management Rangers income (Plug in grant) Contributions from Reserves to 30/11/2023	0 0 0 0 0 0 0 (46,000) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 (25,000) (1,462) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(25,000) (1,462) (1,462) (46,000) (46,000) (46,000) (0 (0 (0 (0 (0 (0 (0 (0 (0	0 (2,600) (10,050) 0	(64,400) (26,600) (30,000) (10,400) 0 (4,950) 0 0 (5,670) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(92,000) (38,000) 0 (30,000) (13,000) 0 (15,000) 0 0 (8,100) 0 0 (8,100) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 (9,000) 0 (16,200) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 (21,000) 0 (6,300) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 (30,000) 0 (22,500) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 (10,400) (24,263) 0 (7,495) 0 (33,895) 0 (33,895) 0 (21,000) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 (24,263) 0 (24,263) 0 0 (7,495) 0 (33,895) 0 (21,000) 0 (21,000) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(55,318)	1,164	(27,600) (11,400) 0 (2,600) (10,050) (16,200) (46,000) (10,400) (24,263) (24,30) 582 (7,495) (55,318) (33,895) 0 (21,000) 0 (657) 0 0 (750)	(64,400) (26,600) (25,000) (1,462) (30,000) (10,400) (4,950) (6,300) 0 (9,600) 0 (5,670) 582 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 (1,532) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(92,000) (38,000) (12,5000) (13,000) (30,000) (30,000) (22,500) (46,000) (22,500) (46,000) (24,263) (8,100) 1,164 (7,495) (55,318) (33,895) 0 (21,000) 0 (2,1000) 0 (2,500)
	Replacement of AO12 DWY & DWX (ordered in 22/23, delivery in 23/24), plus 3 other vehicles (VEH000450) Replacement Fen excavator, field shelter & pony trailer (VES000450) Replacement of AO12 URF, AO12 TXV & AO12 URE(RAN000450)	0 0 0	0 0 0		14,603 24,480 10,602	34,073 57,120 24,737	48,676 81,600 35,339	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0			14,603 24,480 10,602	34,073 57,120 24,737	48,676 81,600 35,339
2023/24	Site maintenance Hoveton Riverside Park £100k deferred from 22/23 (SIM000450) Dockyard - solar panels (deferred from 22/23) and repile 55m2 edge (PRM009450) EXPERIENCE grant expenditure NCC (COM000450) Catchment Partnership (CAT000450) Heritage Lottery Fund costs (HLFXXX450) CANAPE Expenditure (CANXXX450) Tolls system (ICTNAV450) UK Communications Team (UKC000450) Replacement shed at Reedham Quay Partnership & External Funding Manager costs from 1/11/23 for 2 years (SPS00450 Yare House dilapidations and moving costs (YAH000450) Farming in protective landscapes						0 0 0 0 0 0 0 0 0 0 0 0 0	0 288 0 0 0 0 3,851 0 10,603 0	0 671 0 0 0 0 0 1,497 0 0 0	959 0 0 0 0 0 0 5,348 0 10,603 0	0 15,874 32,593 0 0 28,776 0 2,099 68,006 4,638		0 15,874 32,593 0 0 28,776 0 2,099 68,006 4,638	217,982	18,364	0 288 15,874 32,593 217,982 9,182 0 28,776 3,851 2,099 78,609 4,638	0 671 0 0 9,182 0 1,497 0 0 0	0 959 15,874 32,593 217,982 18,364 0 28,776 5,348 2,099 78,609 4,638
	Actual Balance 30 November 2023 Contributions to Reserves to 31/03/24 Mutford Lock Rent (MLK000552) Potter Heigham Chalet Income (UTE000451) Catchment Partnership Norfolk Rivers Trust (CAT000552) Catchment Partnership (CAT000451) Heritage Lottery Fund Income (HLF61X552) UK Communications income (UKC000552) CANAPE Income Sale of old vehicles (VEH000552) Contributions from Reserves to 31/03/24	(467,967) 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(538) (538) 0 0 0 0 0 0 0 0 0 0 0 0	(1,008,823) (538)	(159,373) (159,373)	(511,679) 0 0 0 0 0 0 0 0 0 0 0	(671,051) 0 0 0 0 0 0 0 0 0 0 0	(222,744) 0 0 0 0 0 0 0 0 0 0 0	(189,425) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(412,169) 0 0 0 0 0 0 0 0 0 0 0 0	(1,018,593) 0 (7,505) 0 0 0 0 0 0 0 0	(120,205) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(1,138,798) 0 0 (7,505) 0 0 0 0 0 0 0	(8,352) (121,875)	(443,857)	(2,098,957) 0 (7,505) 0 (121,875) 0 0 0 0	(1,584,093) (538) 0 0 0 0 0 0 0 0 0 0 0	(3,683,050) (538) 0 (7,505) 0 (121,875) 0 0 0
	Replacement of AO12 DWY & DWX (ordered in 22/23, delivery in 23/24), plus 3 other vehicles (VEH000450) Replacement Fen excavator, field shelter & pony trailer (VES000450) Repairs to How Hill Boat Shed (BHB000450) (delayed from 20/21) Dockyard - solar panels (deferred from 22/23) and replie 55m2 edge (PRM009450) Site maintenance Hoveton Riverside Park £100k deferred from 22/23 (SIM000450) Electric charging points at Potter (delayed from 22/23 due landowner agreements) (UTE000450) EXPERIENCE grant expenditure NCC (COM000450) Tolls system (ICTNAV450) CANAPE Expenditure outstanding planting (CANXXX450) Heritage Lottery Fund costs (HLFXXX450) Yare House dilapidations and moving costs (YAH000450) Catchment Partnership (CAT000450) UK Communications Team (UKC000450) Reedham Quay Hut (YHT000450) Partnership & External Funding Manager costs from 1/11/23 for 2 years (SPS00450)	0				75,557 12,880 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	107,939 18,400 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 18,000 35,712 0 0 0 0 33,702 0 0 13,962 0 0 0	0 7,000 83,329 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 25,000 119,041 0 0 0 0 33,702 0 0 19,391 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17,609 3,928 0 8,601 4,921	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 18,000 0 20,000 0 0 281,706 17,609 3,928 0 0 8,601 4,921	70,500		32,382 5,520 18,000 35,712 0 18,000 0 18,000 0 70,500 315,407 17,609 3,928 13,962 8,601 4,921	75,557 12,880 7,000 83,329 0 0 20,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0	107,939 18,400 25,000 119,041 0 18,000 0 20,000 0 70,500 315,407 17,609 3,928 19,391 8,601 4,921
	Repayment of loan for CANAPE Closure of CANAPE/HLF & bal trf to General (NP) and Nav) Forecast Balance 01 April 2024	(26,000) (493,967)	0 (541,394)	(26,000)	(9,750) (131,221)	(22,750) (445,991)	(32,500)	(9,750) (131,118)	(22,750) (116,417)	(32,500)	0 (691,333)	0 (100,205)	0 (791,538)	(59,727)	91,000 352,857 0	0 176,428 (1,507,366)	0 176,428 (1,204,007)	0 352,857 (2,711,373)

S:\Finance\General\Earmarked Reserves\206725\Earmarked Reserves 2024-25 Budget.xlsx

Year	Earmarked Reserves	Property Reserve - National Park	Property Reserve - Navigation	Property Reserve - TOTAL	Plant, Vessels and Equipment Reserve - National Park	Plant, Vessels and Equipment Reserve - Navigation	Plant, Vessels and Equipment Reserve - TOTAL	Premises Reserve - National Park	Premises Reserve - Navigation	Premises Reserve - TOTAL	Other Earmarked Reserves - National Park	Other Earmarked Reserves - Navigation	Other Earmarked Reserves - TOTAL	HLF	CANAPE	Total Earmarked Reserves - National Park	Total Earmarked Reserves - Navigation	GRAND TOTAL Earmarked Reserves
	Contributions to Reserves to 31/03/25 Vessels and Equipment (VES000451) Vehicles (VEH000451) Mutford Lock (MLK000451) Launches (LAU000451) Ranger Vehicles (RAN000451) Dockyard Site (PRM009451) Pool Vehicles (PCP000451) Building repairs (PRM000451) Asset Management for Countryside sites (SIM00451) Computer Software (ICT000451) Potter Heigham Chalet Income (UTE000451) Catchment Partnership (CAT000451) Catchment Partnership NRT contribution (CAT000552) Heritage Lottery Fund Income last 5% of grant (HLF61X552) Contributions from Reserves to 31/03/25		0 (2,000) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(2,000) (2,000) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 11,400 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 (26,600) 0 0 (10,400) 0 (4,950) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 (38,000) 0 (13,000) 0 (15,000) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 (21,000) (15,000) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(121,875)		0 (11,400) 0 (2,600) 0 (10,050) 0 0 (21,000) (26,330) (15,000) (121,875)	0 (26,600) 0 (2,000) 0 (10,400) 0 (4,950) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 (38,000) 0 (13,000) 0 (15,000) 0 (21,000) (26,330) (15,000) (121,875)
2024/25	Replacement of two Hilux (VEH000450) Welfare unit (E8k), Dipper arm extension for fen excavator (£11k), Telescopic handler (£23k), Weed bucket for excavator (£5k) & Concrete pump (£150k) Replacement of M/L Yare (LAU000450) (delayed from 2021/22) Replacement of two Hilux vehicles (RAN000450) Tolls system (ICTNAV450) Replacement Finance system (ICT000450) Piling at Repps bank (MMR000450) Delayed works at Hoveton Riverside Park (SIM000450) Improvements to Bridge Green, Potter Heigham (UTE000450) Partnership & External Funding Manager costs from 1/11/23 for 2 years (SPS00450) Heritage Lottery Fund costs (HLFXXX450) Farming in protective landscapes Catchment Partnership (CAT000450)	0 0 0 0 0 0 250,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 50,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		42,000 137,900 200,000 48,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	60,000 197,000 60,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 33,500 0 12,000 49,700 0 7,900 40,078	0 0 30,000 16,500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 30,000 50,000 0 12,000 49,700 0 7,900 40,078	30,000		18,000 59,100 0 12,000 0 250,000 12,000 49,700 30,000 7,900 40,078	42,000 137,900 200,000 48,000 30,000 16,550 50,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0	60,000 197,000 60,000 30,000 50,000 250,000 12,000 49,700 30,000 7,900 40,078
2025/26	Forecast Balance 01 April 2025 Contributions to Reserves to 31/03/26 Vessels and Equipment (VES000451) Vehicles (VEH000451) Mutford Lock (MLK000451) Mutford Lock Rent (MLK000451) Launches (LAU000451) Ranger Vehicles (RAN000451) Dockyard Site (PRM000451) Pool Vehicles (PCP000451) Building repairs (PRM000451) Computer Software (ICT000451) Potter Heigham Chalet Income (UTE000451) Catchment Partnership (CAT000451) Contributions from Reserves to 31/03/26	(243,967) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(493,394) 0 (25,000) (2,000) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(737,361) 0 (25,000) (2,000) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(27,600) (15,300) (15,300)	(60,041) (35,700) 0 (30,000) (15,200) 0 (3,300) 0 0 0 0 0 0 0 0 0 0 0	(126,212) (92,000) (51,000) 0 (30,000) (19,000) 0 (10,000) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(131,118) 0 0 0 0 0 0 (9,000) 0 (16,200) 0 0 0 0 0 0 0 0 0 0 0	(116,417) 0 0 0 0 0 (21,000) 0 (6,300) 0 0 0 0 0 0 0 0 0 0 0 0 0	(247,535) 0 0 0 0 0 0 0 (30,000) 0 (22,500) 0 0 0 0 0 0 0 0 0 0 0	(610,486) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(53,705) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(664,190) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	0	(1,203,344) (27,600) (15,300) 0 0 (3,800) (9,000) (6,700) (13,400) (13,400) (21,000) (27,700)	(723,557) (64,400) (35,700) (25,000) (2,000) (30,000) (15,200) (21,000) (3,300) (6,300) (6,300) (6,600) 0 0	(1,926,901) (92,000) (51,000) (25,000) (2,000) (19,000) (10,000) (20,000) (21,000) (21,000) (27,700)
	Replacement of Hilux (VEH000450) Replacement of Hilux (RAN000450) Nato floats (£20k), Yanmar tracked carrier (£15k), Mower (£7k), Deposit for long reach excavator (£20k), Clamshell bucket (£12k) & Takeuchi excavator (£15k) Partnership & External Funding Manager costs from 1/11/23 for 2 years (\$P\$500450) Catchment Partnership (CAT000450)	0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		10,500 7,000 26,700 0 0 0	24,500 28,000 62,300 0 0	35,000 35,000 89,000 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0	0 0 22,054 27,700	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 22,054 27,700			10,500 7,000 26,700 22,054 27,700	24,500 28,000 62,300 0 0	35,000 35,000 89,000 22,054 27,700
2026/27	Forecast Balance 01 April 2026 Contributions to Reserves to 31/03/27. Vessels and Equipment (VES000451) Vehicles (VEH000451) Mutford Lock (MLK000451) Launches (LAU000451) Ranger Vehicles (RAN000451) Dockyard Site (PRM009451) Pool Vehicles (PCP000451) Building repairs (PRM000451) Computer Software (ICT000451) Potter Heigham Chalet Income (UTE000451) Catchment Partnership (CAT000451)	(243,967) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(520,394) 0 (25,000) (2,000) 0 0 0 0 0 0 0 0 0 0 0 0 0	(764,361) (25,000) (2,000)	(27,600) (19,200) (19,00)	(93,841) (64,400) (44,800) 0 (30,000) (20,000) 0 (3,300) 0 0 0 0 0 0 0 0 0 0	(169,212) (92,000) (64,000) 0 (30,000) (25,000) 0 (10,000) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(156,318) 0 0 0 0 0 (9,000) 0 (16,200) 0 0 0 0 0 0 0 0	(143,717) 0 0 0 0 (21,000) 0 (6,300) 0 0 0 0 0	(300,035) 0 0 0 0 0 (30,000 0 (22,500) 0 0 0 0 0 0 0 0 0 0 0	(622,832) 0 0 0 0 0 0 0 (13,400) (21,000) (29,000)	(60,305) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(683,136) 0 0 0 0 0 0 0 0 0 (20,000) (21,000) (29,000)	0	0	(1,250,090) (19,200) (19,200) 0 0 (5,000) (5,000) (16,200) (13,400) (21,000) (29,000)	(64,400) (44,800) (25,000) (20,000) (20,000) (21,000) (21,000) (3,300) (6,300) (6,600) 0 0 0	(2,068,346) (92,000) (64,000) (25,000) (30,000) (30,000) (30,000) (10,000) (22,500) (22,500) (20,000) (21,000) (29,000)
	Contributions from Reserves to 31/03/27 Replacement of Hliux & AU12 OCN (VEH000450) Iron horse (£18k) & Hydraulic power pack (£28k) Replacement of AU66 ZZL (RAN000450) Catchment Partnership (CAT000450) Forecast Balance 01 April 2027	0 0 0 (243,967)	0 0 0 (547,394)	(791,361)	22,500 13,800 7,000 0 (90,571)	52,500 32,200 28,000 0 (143,641)	75,000 46,000 35,000 0 (234,212)	0 0 0 (181,518)	0 0 0 (171,017)	0 0 0 (352,535)	0 0 29,000 (657,232)	0 0 0 (66,905)	0 0 29,000 (724,136)	0	٥	22,500 13,800 7,000 29,000 (1,324,890)	52,500 32,200 28,000 0 (928,957)	75,000 46,000 35,000 29,000 (2,253,846)

S:\Finance\General\Earmarked Reserves\20085\Earmarked Reserves 2024-25 Budget.xlsx



Navigation Committee

11 January 2024 Agenda item number 9

Port Marine Safety Code audit findings and recommendations

Report by Director of Operations

Purpose

To update Members on the outcome of the recent audit findings and recommendations on the Port Marine Safety Code.

Broads Plan context

Managing navigation safety and access, C4 – Maintain and improve safety and security standards and users' behaviours on our waterways.

Recommended decision

To note the outcome of the recent audit findings and recommendations.

1. Introduction

- 1.1. The Port Marine Safety Code (PMSC) was published by the Government in March 2000. The Code establishes an agreed national standard for port marine safety and formalises the duties and responsibilities for safety and environmental protection within UK ports and harbours. The Code applies to all harbour authorities, and compliance is not optional.
- 1.2. The Broads Authority is a Competent Harbour Authority, as defined within the Pilotage Act 1987. This arises from The Broads Authority (Pilotage Powers) Order 1991.
- 1.3. The Code requires that all harbour authorities base their powers, policies, plans and procedures on a Formal Safety Assessment (FSA), and that they maintain a Safety Management System to control the risks that are identified to a level which is as low as reasonably practicable (ALARP).
- 1.4. The Broads Authority, as Duty Holder for the Broads, has developed a Safety Management System to the requirements of the <u>Port Marine Safety Code</u> taking cognisance of the advice in the <u>Guide to Good Practice on Port Marine Operations</u>.

2. 2023 Audit

- 2.1. The PMSC was chosen by TIAA, our internal auditors, for audit within the 2023/24 audit programme.
- 2.2. The PMSC audit is an independent review of the Broads Authority Safety Management Systems (SMS). The PMSC requires that Harbour Authorities include provisions for the systematic review of performance based on information monitoring of the whole system.
- 2.3. During the audit two areas of good practice were identified:
 - The roles and functions of key staff are well outlined in the SMS, including the Director of Operations, Head of Safety Management and Head of Ranger Services. This ensures the role associated with the PMSC is clear.
 - Incident reports are presented to the Boating Safety Management Group (BSMG) and Navigation Committee, enabling trends to be identified and subsequent actions to be taken to address these where appropriate.
- 2.4. The final overall assessment is 'Reasonable Assurance'.
- 2.5. The audit definition of 'Reasonable Assurance' is: The system of internal controls is generally adequate and operating effectively but some improvements and requirements to ensure that risks are managed, and process objectives achieved.

3. Audit Recommendations

3.1. Five audit recommendations were made: all five related to process reporting and not delivery of operational safety requirements.

Audit Recommendation	Broads Authority agreed to actions
Internal audit on specific areas of the SMS in line with the 3-year cycle	Internal Audits had been carried out and any findings actioned, but the reporting cycle had slipped. Internal Audit has been added to the Committee forward plan. The 2024/25 annual internal auditing programme will be presented to the Navigation Committee Jan 2024, completing this action.
The PMSC requires a statement about the standard of the organisation's performance against the PMSC	Upon completion of the PMSC audit by TIAA, the report on compliance against the standards can go before the Navigation Committee on 11 January 2024 and the Broads Authority (as Duty Holders) on 26 January 2024, completing this action.

70

Audit Recommendation	Broads Authority agreed to actions
The status of key Performance Indicators (KPI's), about defined targets should also be recorded on the Authority's website	KPI's are reported to the Navigation Committee within the Chief Executive's report. From May 2024 these figures will be added to the Authority's web pages.
The PMSC requires the Duty Holders to report compliance with the code to the Maritime and Coastguard Agency (MCA) every three years.	The Head of Safety Management is in discussion with the MCA about compliance reporting and the standard format to be used.
The PMSC requires a Marine Safety Plan (MSP) showing how the Code will be met.	Auditors recognised that many of the elements within a Marine Safety Plan are already detailed in Section C of the Broads Plan but felt that a separate MSP would be simpler and clearer for users. The Head of Safety Management will develop and add an MSP to the Authority's SMS, completion date agreed to be October 2024

3.2 The Safety Management System is currently being updated to reflect the recommendations within the PMSC audit, the outcome of the Pilotage Review and the Boat Safety Management Hazard review: the updated SMS will be available by April 2024.

4. Conclusion

- 4.1. Given the complexities and the size of the Broads Authority's Safety Management System, gaining a 'Reasonable Assurance' for the Port Marine Safety Code demonstrates the robust nature of the planning, implementation and delivery of safety measures by the Authority.
- 4.2. Safety is never finished and having a 'clean bill of health' following a check-up of our PMSC will not see us become complacent. The Authority will continue to build upon recent important safety decisions (addition of licensing for Hired Paddle Craft operators, the addition of British Marine's Quality Accredited Boatyard Schemes being a compulsory licensing requirement, Ranger Hire Boat and Paddle Craft surveys, improved Hire Boat Auditing and enforcing the Boat Safety Scheme certification) and continually improve safety for our waterways' users.

Author: Rob Rogers

Date of report: 04 December 2023

Background papers: N/A

<u>Broads Plan</u> strategic objectives: Section C - Maintain and improve safety and security standards and users' behaviours on our waterways.



Navigation Committee

11 January 2024 Agenda item number 10

Report on Surveys by Rangers 2023

Report by Director of Operations

Purpose

To provide the Committee with the 2023 results from Ranger Surveys carried out on hirers of paddle craft and hired motor vessels.

Broads Plan context

Theme C: Maintaining and enhancing the navigation. C4 – Maintain and improve safety and security standards and user behaviours on the waterway.

Recommended decision

To note the report.

1. Introduction

- 1.1. During the 2021/22 season, Rangers were tasked to undertake the Hire Boat Questionnaire at Super Safety Events and at other random times when an opportunity existed. This data gathering was made possible due to the additional resource we had available from the Assistant Rangers. The purpose of the questions is to gauge key aspects from the helm of the hire craft, such as how often they hire vessels, whether have they seen the safety videos, did they get a handover, what was the duration of the handover and how confident do they feel to helm the vessel.
- 1.2. The questionnaire was developed specifically to gather data relating to the hired vessels' helms competence, as anecdotally there was a perception that hirers were largely inexperienced and the handover instruction was not adequate, following a surge in new waterway users post-Covid.
- 1.3. In the 2023/24 season, Rangers were again tasked to undertake the Hire Boat survey and we added a similar set of questions so paddle craft hirers could also be included within the survey.

2. Hired Paddle Craft Survey results

2.1. During the summer season, 141 hired paddle craft users were surveyed; the questions followed those asked of hire vessels and the key results are summarised as follows:

1

- 67% (94 people) did not receive a recommendation to watch the online free animated safety videos.
- A question was asked testing the licensing requirement for any person hiring a paddle craft is to be given a trial run to demonstrate their basic competency. Of those responding 34% (48 people) had been provided with a 10-20 minute on-water trial, and 26% had no on-water trial or 'show out'.
- Those who did receive a trial run (show out) were provided with advice on waterway safety and protocol (keeping to the right, what to do if a capsize, wearing buoyancy aid, safe passage through bridges).
- 76% were advised on the best places to paddle as well as areas to avoid (busy or heavy boat numbers).
- When asked about confidence to control the paddle craft when first setting off, 28% were very confident. This improved to 45% after time spent on the water.
- When asked "which best describes your group?"
 - 1. 6% were 'lone 'paddlers.
 - 2. 17% were family groups (including children under 16)
 - 3. 30% were family groups (no children under 16)
 - 4. 45% were friends

3. Paddle Survey Conclusions.

- 3.1. As this is only the first year of results, trends and patterns cannot be drawn, but maintaining the survey will provide useful information so we can build up a better picture of safety in an area where participation is increasing.
- 3.2. Through the work of the Safety and Communications Teams we will do more work to publicise the online animated safety videos within the paddle hire sector, particularly as the paddling video was updated with added safety advice.
- 3.3. During the licensing in 2024/25, the Hire Boat Licensing Officer will work with Paddle Hire Companies to ensure that show-outs and in-water trails are provided to hirers, in light of 26% of responders not being offered this important element.
- 3.4. The last part of the survey asks paddlers to state what further improvements they would like, and these follow commonly raised topics like more pontoon moorings, more places to stop and get out to explore, specific signage for paddlers and increased Ranger patrols. These aspects will be considered as part of the Integrated Access Strategy, currently being reviewed and consulted upon.

4. Broads Hire Craft Survey 2023/24

4.1. Results from this year's Ranger Survey have been compared to the 2022 survey in the table below.

Question	2022% responses (sample size 724)	2023% responses (sample size 427)			
First Time Hirers	30%	28%			
Did you review the free animated online videos	74%	80%			
Did you get a Broadcaster and were you directed to safety pages?	80%	87%			
Handover duration was between 20-30 minutes	40%	43%			
Handover duration 30-45 between minutes	20%	16%			
Percentage of hirers not receiving a trial run	12%	10%			

4.2. The 2023 Survey results show an improvement compared to the year before again demonstrating that hire company staff are providing satisfactory information at handover on key boat handling issues, like judging speed, passing under low bridges, person overboard drills and advice on personal flotation aids.

5. Conclusion

- 5.1. The Rangers' surveys are a health check of the competence and understanding of hired vessel helms on our waters, and the results help to counter anecdotal stories of inexperienced hirers being 'let loose' on our waterways.
- 5.2. The 2023 survey shows that 10% of helms reported that they had no 'show-out'. This demonstration of competence under the Hire Boat Code is a compulsory element regardless of experience. For the 2024 season, the Hire Boat Licensing Officer will be picking up this issue with Hire Companies once a no-show-out is identified.
- 5.3. Attributing metrics to health and safety on broads waters is impossible as multiple factors influence incidents and accidents, but the safety measures brought in following lessons learnt from past incidents demonstrate that safety awareness is improving. The Broads Authority will continue to play its part to educate, inform and enforce safety. We are again looking to run the 'Fast Water Training' at Great Yarmouth Yacht Station, for all hire operators, in early 2024, as well as maintaining seasonal on-the-spot health checks on hire companies as well as licensing audits on hire boat and hire paddle craft operators.

75

Author: Rob Rogers

Date of report: 04 December 2023

Background papers: Safety on the Broads-update paper 13 April 2023

<u>Broads Plan</u> strategic objectives: C4 – Maintain and improve safety and security standards and user behaviours on the waterways.



Navigation Committee

11 January 2024 Agenda item number 11

Pilotage review

Report by Head of Ranger Services

Purpose

To note the proposals within Section 5 on how the Broads Authority will manage pilotage under the Port Marine Safety Code, following a review by independent Consultants Marico Marine.

Broads Plan context

Broads Plan objective C4 includes an action to 'manage adherence to boat safety measures including up to date Safety Management System' which Pilotage is included within.

Recommended decision

To note the report.

Contents

1.	Introduction	1
2.	Background	2
3.	Risk implications	2
4.	Consultants Recommendations	2
5.	Further information	3
6.	Open Port Duty	4
7.	Conclusion	4

1. Introduction

1.1. The Broads Authority contracted Marine and Risk Consultants Limited (Marico Marine) to review the pilotage provisions which are currently in place on the Broads, but presently inactive.

2. Background

- 2.1. The Broads Authority is a "Competent Harbour Authority" (CHA) as defined by the Pilotage Act 1987. This arises from The Broads Authority (Pilotage Powers) Order 1991 which remains extant. The Authority has not issued any pilotage directions, and there is currently no demand for conventional pilotage.
- 2.2. There is no expectation that large freight vessels which may require pilotage will return to the waterways in the foreseeable future.
- 2.3. It should be noted that there are three locations on the Broads where "Bridge Pilotage" is provided to leisure vessels (hire craft). However, these pilots and services are not provided by the CHA, nor are they operating under the provisions of the Pilotage Act, and these services are not considered in this review.
- 2.4. The current pilotage arrangements are not sustainable, nor do they meet the requirements as set out in the PMSC, which is why this review was undertaken. Currently this risk is being managed using Special Directions which allow the Authority to put in place conditions on individual vessels to ensure the 'ease, convenience or safety of navigation or the safety of persons or property in the navigation area' (Broads Authority Act 2009).
- 2.5. No ships requiring pilotage have entered the Broads within the last 8 years.

3. Risk implications

- 3.1. A high-level navigation risk assessment was undertaken to support this review, by formally establishing the potential risks to navigation both with and without a pilotage service in place.
- 3.2. The risk assessment has produced the following conclusions:

• All navigation hazards identified for vessels where it has been assumed a pilot would be required but scored without pilotage as a risk control measure were assessed to be in the ALARP or LOW risk bands.

• A qualitative assessment of the risk reducing effectiveness of pilotage has shown that pilotage reduces navigation by only 5%; and

• Pilotage is most effective at reducing the risk of the hazard "Commercial vessel greater than 20m contacts harbour infrastructure (Quay, fixed navigation aid etc.)"

4. Consultants Recommendations

4.1. Considering the current and expected future traffic profile of the Broads Navigation Area, and the result of the navigation risk assessment, the following recommendations are made to the Authority as set out in the report:

78

• Engage with Great Yarmouth Port Authority to confirm whether providing pilotage under a joint arrangement is feasible.

• Assuming the above is not an option, undertake a full review of the Safety Management System to document formal arrangements for the discontinuation of any form of pilotage, while still maintaining the status of a Competent Harbour Authority.

• Seek specialist marine legal advice to support the above review, including amending Vessel Dimension byelaws, or issuing a General Direction; and

• Clarify the procedures which will be followed (based on full risk assessment) should any vessels of greater size than defined in the revised byelaws / Directions wish to enter the navigation area.

4.2. Alternatively, if there is no appetite for maintaining CHA status consider the formal removal of CHA powers by application to the Secretary of State.

5. Further information

- 5.1. In relation to the recommendations made in the report, as set out above, further investigations have been made as follows:
 - Discussions with Peels Ports about sharing Pilotage have been made previously, 5 years ago and more recently last year. While the Port has not declined to provide a service, at an operational level there is very little appetite to take this forward. Training of Pilots and maintaining their competence in the Broads navigation area (as required under the PMSC and at a cost to the Broads Authority), when there is likely to be no, or extremely low, need for this service would not be cost-effective.
 - The issuing of a General Direction or the updating of the Vessel Dimension Byelaws, to restrict all vessels over 20m from entering the Broads would allow the Authority to remove the requirement for a pilot while still retaining the 'Competent Harbour Authority' status. The length of 20m is relevant as the Pilotage Act applies to vessels 21m and over.
 - It is not intended to stop vessels over 20m from entering the Broads, rather a
 risk assessment would need to be completed to determine what safety
 measures would be needed to allow safe passage for these vessels on a case-bycase basis. It is envisaged that any passage would be undertaken with a suitably
 qualified crew, or the vessel being escorted by a patrol launch, this is currently
 standard practice.
 - Vessels or types of vessels undertaking regular passages could be covered by one assessment which would be regularly reviewed or if circumstances changed.
 - This proposed method would allow time to put suitable measures in place, should larger vessels, which require a Pilot, to enter the Broads.

6. Open Port Duty

6.1. A possible objection to this recommended option is the often quoted "Open Port Duty" which applies to Harbour Authorities by virtue of the Harbours, Docks and Piers Clauses Act 1847. At the time of writing, we are seeking clarification on this clause as it is not clear if this section of the HDPC Act 1847 applies to the Broads Authority.

7. Conclusion

- 7.1. From the advice obtained (subject to clarification on the HDPC Act as above) the preferred option is to use a General Direction to limit the size of vessels entering the Broads to 20m, negating the need for a Pilotage service.
- 7.2. As set out in 5.1, a risk assessment for vessels over 20m would be carried out to ensure they could be safely accommodated. This would be on a case-by-case basis, in line with current practices.
- 7.3. While the Authority has the powers within the Broads Authority Act 2009, a General Direction, has not been used before, so further advice would need to be sought if this process was deemed necessary.
- 7.4. Under the proposals set out in 5 above the Authority would remain a Competent Harbour Authority, and could consider the re-introduction of pilotage, should future demand and risk assessment justify the issuing of new Directions.

Author: Lucy Burchnall

Date of report: 11 December 2023

Broads Plan strategic objectives: C4

Appendix 1 – Broads Authority Pilotage Review 2023



BROADS AUTHORITY

PILOTAGE REVIEW 2023



Report Number: Issue: Date: 23UK1953 01 16 November 2023

MARINE AND RISK CONSULTANTS LTD



Prepared for:	Broads Authority
	Yare House, 62-64 Thorpe Road, Norwich, Norfolk,
	NR1 1RY
Author(s):	William Heaps

QC:

David Foster

Date	Release	Prepared	Authorised	Notes
10 Oct 2023	Draft A	WH		Draft for final comments
16 Nov 2023	lssue 01	WH	AC	Final Draft

Marine and Risk Consultants Ltd Marico Marine Bramshaw Lyndhurst Hampshire SO43 7JB United Kingdom

Telephone: + 44 (0) 2380 811133 Email: <u>officeUK@maricogroup.com</u>





renewableUK





CYBER ESSENTIALS CERTIFIED PLUS



EXECUTIVE SUMMARY

The Broads Authority has contracted Marine and Risk Consultants Limited (Marico Marine) to review the pilotage provisions which are currently in place on the Norfolk and Suffolk Broads, but presently inactive.

This review considers pilotage provision by:

- Giving an overview of the Authority's responsibilities for navigation safety, and current levels of activity on the Broads;
- Undertaking a brief review of applicable legislation;
- Considering the historical and current requirements for the provision of a pilotage service, and possible options for the future of the service;
- Undertaking a simple navigation risk assessment to establish the effectiveness of pilotage as a risk control measure and identify additional or alternative mitigations; and finally
- Making recommendations to the Authority.

The Norfolk and Suffolk Broads are not a Statutory Harbour Authority, but the Broads Authority is designated a "Special Statutory Authority", affording the same level of protection as National Park status, but with tailormade legislation relating to navigation. The Authority therefore balances the navigational duties and powers of a harbour authority with the conservation and recreational duties and powers of a National Park authority. These duties and powers are principally set out in the Norfolk and Suffolk Broads Act 1988.

Additionally, the Authority is a "Competent Harbour Authority" as defined the Pilotage Act 1987. This arises from The Broads Authority (Pilotage Powers) Order 1991 which remains extant.

The Authority has not issued any pilotage directions, and there is currently no demand for conventional pilotage.

There is no expectation that large freight vessels which may require pilotage will return to the waterways in the foreseeable future.

It should be noted that there are three locations on the Broads where "Bridge Pilotage" is provided to leisure vessels (hire craft). However, these pilots and services are not provided by the CHA, nor are they operating under the provisions of the Pilotage Act, and these services are not considered in this review.

It is clear that current pilotage arrangements are not fit for purpose and are due for review.

A high-level navigation risk assessment was undertaken to support this review, by formally establishing the potential risks to navigation both with and without a pilotage service in place.



The risk assessment has produced the following conclusions:

- All navigation hazards identified for vessels where it has been assumed a pilot would be required but scored *without* pilotage as a risk control measure were assessed to be in the ALARP or LOW risk bands;
- A qualitative assessment of the risk reducing effectiveness of pilotage has shown that pilotage reduces navigation by only 5%; and
- Pilotage is most effective at reducing the risk of the hazard "Commercial vessel greater than 20m contacts harbour infrastructure (Quay, fixed navigation aid etc.)"

Taking into account the current and expected future traffic profile of the Broads Navigation Area, and the result of the navigation risk assessment, the following recommendations are made to the Authority:

- Engage with Great Yarmouth Port Authority to confirm whether providing pilotage under a joint arrangement is feasible;
- Assuming the above is not an option, undertake a full review of the MSMS to document formal arrangements for the discontinuation of any form of pilotage, while still maintaining the status of a Competent Harbour Authority;
- Seek specialist marine legal advice to support the above review, including amending Vessel dimension byelaws, or issuing a General Direction; and
- Clarify the procedures which will be followed (based on full risk assessment) should any vessels of greater size than defined in the revised byelaws / Directions wish to enter the navigation area.

Alternatively, if there is no appetite for maintaining CHA status:

Give consideration to the formal removal of CHA powers by application to the Secretary of State.



CONTENTS

Execu	itive S	ummaryii
Conte	ents	iv
1	Intro	duction1
	1.1	Background1
	1.2	Guidance and Information Sources
2	Norfo	lk and Suffolk Broads Overview3
	2.1	Description
	2.2	Navigation Authority
	2.3	Navigation and Vessel Traffic
	2.4	Competent Harbour Authority and "Bridge Pilots"
3	Legis	ative Review8
	3.1	National Legislation
		3.1.1 Harbour Docks & Pier Clauses Act 1847 8
		3.1.2 The Pilotage Act 1987
		3.1.3 The Marine Navigation Act 2013 10
	3.2	Local Legislation
		3.2.1 Harbour Legislation
		3.2.2 Byelaws
		3.2.3 Pilotage District – Pilotage Directions
	3.3	Guides and Codes of Practice
		3.3.1 Port Marine Safety Code12
		3.3.2 A Guide to Good Practice on Port Marine Operations February 201813
		3.3.3 MCA Guidance on Vessel Traffic Services and Local Port Services
4	Requ	irements of Providing a Pilotage Service15
	4.1	Safety Assessment
	4.2	Agents and Joint Arrangements
	4.3	Pilotage Directions
	4.4	Other Requirements
5	Curre	nt Status of the Pilotage Service
	5.1	Challenges
	5.2	Options

MARICO MARINE

23UK1953 Broads Pilotage Review

		5.2.1 Maintain Current Pilotage Arrangements	19
		5.2.2 Continue to Provide Pilotage Under New Arrangements	
		5.2.3 Cease Pilotage Provision	21
6	Risk /	Assessment	22
	6.1	Risk Assesmsnt Overview	22
	6.2	Stage 1: Hazard Identification	23
		6.2.1 Generic Risk Control Measures	23
		6.2.2 Local Risk Control Measures	25
		6.2.3 Hazard Definitions	25
	6.3	Stage 2: Incident Frequency	
	6.4	Stage 3: Effectiveness of Pilotage as a Risk Control	27
		6.4.1 Pilotage Effectiveness - Collision	27
		6.4.2 Pilotage Effectiveness – Grounding	
		6.4.3 Pilotage Effectiveness – Contact	
	6.5	Stage 4: Hazard Scoring	
		6.5.1 Interpretation of Risk Calculation Scores	
		6.5.2 Risk Ranked Summary – Without Pilotage	
		6.5.3 Risk Reduction of Pilotage	
	6.6	Stage 5: Results of Risk Reduction Assessment	
		6.6.1 Comparison	
		6.6.2 Risk Assessment Conclusions	
		6.6.3 Risk Assessment - Recommendation	
7	Revis	ed Options	
	7.1	Advantages and Disadvantages of Options	
	7.2	Preferred Option	
		7.2.1 Open Port Duty	
8	Reco	mmendations	

FIGURES

Figure 1: Broads Authority Executive Area	. 4
Figure 2: General Risk Matrix	30

86



TABLES

Table 1: Private Boat Numbers (Source, Broads Authority)	5
Table 2: Hire Boat Numbers (Source, Broads Authority)	5
Table 3: List of Hazards Identified for Assessment	29
Table 4: Risk Score Descriptors	30
Table 5: Ranked hazard List Without Pilotage in Place (Baseline)	31
Table 6: Risk Reduction Effectiveness of Pilotage.	32
Table 7: Pilotage Options – Advantages and Disadvantages	35

ANNEXES

Annex A	Risk Assessment Methodology	A-1
Annex B	Risk Data	B-1



ABBREVIATIONS

Abbreviation	Detail
AIS	Automatic Identification System
ALARP	As Low as Reasonably Practicable
СНА	Competent Harbour Authority
COLREGS	International Regulations for Preventing Collisions at Sea
FSA	Formal Safety Assessment
GtGP	Guide to Good Practice
GYPA	Great Yarmouth Port Authority
НМСС	HM Coastguard
ІМО	International Maritime Organisation
LPS	Local Port Service
m	Metre
МАІВ	Marine Accident Investigation Branch
Marico Marine	Marine and Risk Consultants Ltd
МСА	Maritime and Coastguard Agency
MSMS	Marine Safety Management System
NRA	Navigation Risk Assessment
PMSC	Port Marine Safety Code
RNLI	Royal National Lifeboat Institution
SHA	Statutory Harbour Authority
SPB	Self Propelled Barge
SUP	Stand Up Paddleboard
VTS	Vessel Traffic Service

1 INTRODUCTION

The Broads Authority has contracted Marine and Risk Consultants Limited (Marico Marine) to review the pilotage provisions which are currently in place on the Norfolk and Suffolk Broads, but presently inactive.

This review will consider the pilotage provision as follows:

- Give an overview of the Authority's responsibilities for navigation safety, and current levels of activity on the Broads;
- Undertake a brief review of applicable legislation;
- Consider the historical and current requirements for the provision of a pilotage service, and possible options for the future of the service;
- Undertake a simple navigation risk assessment to establish the effectiveness of pilotage as a risk control measure and identify additional or alternative mitigations; and finally
- Make recommendations to the Authority.

1.1 BACKGROUND

The Norfolk and Suffolk Broads are not a Statutory Harbour Authority, but the Broads Authority is designated a "Special Statutory Authority", affording the same level of protection as National Park status, but with tailormade legislation relating to navigation. The Authority therefore balances the navigational duties and powers of a harbour authority with the conservation and recreational duties and powers of a National Park authority. These duties and powers are principally set out in the Norfolk and Suffolk Broads Act 1988.

Additionally, the Authority is a "Competent Harbour Authority" as defined the Pilotage Act 1987. This arises from The Broads Authority (Pilotage Powers) Order 1991 which remains extant.

Consequently, it would be reasonable to assume that the Authority should manage navigation in compliance with the UK Port Marine Safety Code as suggested in paragraph 3 of the Executive Summary of the Code – despite not being a statutory harbour authority. However, by virtue of the Competent Harbour Authority powers, it is clear that compliance with the Code is expected and indeed the Authority has clearly and publicly committed to compliance, with a statement on the website¹. As such, the Authority has undertaken a Navigational Risk Assessment and has developed a Marine Safety Management System based on the identified risks.

The Authority has not issued any pilotage directions, and there is currently no demand for conventional pilotage. There is only one "pilot" said to be able to provide pilotage, who has retired from the Authority but is retained to provide a Pilot service. One individual is said to be under training.

¹ <u>https://www.broads-authority.gov.uk/boating/navigating-the-broads/safety/port-marine-safety-code</u>

However, in the absence of Directions, sufficient qualifying experience and a formal authorisation process it is considered that the Authority would be unable to demonstrate that the two individuals concerned were "Pilots" under the meaning of the Pilotage Act. It is therefore probable that the individuals providing the advice would not be protected by the Pilots indemnity described in the Act.

There is no expectation that large freight vessels which may require pilotage will return to the waterways in the foreseeable future.

It should be noted that there are three locations on the Broads where "Bridge Pilotage" is provided to leisure vessels (hire craft). However, these pilots and services are not provided by the CHA, nor are they operating under the provisions of the Pilotage act (albeit the services may be useful mitigations to reduce navigational risk).

It would be ideal if these individuals were not referred to as Pilots, but it is accepted that this is unlikely to change given the long-standing use of the terminology.

1.2 GUIDANCE AND INFORMATION SOURCES

The following documents and information informed this review:

- The Norfolk and Suffolk Broads Act 1988
- The Broads Authority (Pilotage Powers) Order 1991
- The Pilotage Act 1987
- The Port Marine Safety Code (November 2016)
- A Guide to Good Practice on Port Marine Operations Prepared in conjunction with the Port Marine Safety Code 2016 (February 2018)
- "Broads Passage Plan External"
- Section 7 of the Broads Authority MSMS: Pilotage
- The Authority's website: <u>https://www.broads-authority.gov.uk/</u>
- Information provided by, and discussions with, officers of the Authority.

MARICO MARINE

2 NORFOLK AND SUFFOLK BROADS OVERVIEW

2.1 **DESCRIPTION**

The Broads are situated in the counties of Norfolk and Suffolk on the east coast of England and are managed and protected as one of the UK's 15 National Parks. The Broads were originally dug out in medieval times to provide peat for fuel. In the 14th century, these peat diggings flooded, creating the waterways we see today.

By the 19th century, the rich boating heritage of these waterways made them an obvious destination for those who enjoyed the increasingly popular pastime of pleasure boating. Today, the Broads is Britain's third largest inland navigation area and attracts around eight million visitors every year.

The following summary of management arrangements is taken form the MSMS:

- The Broads is Britain's largest nationally protected wetlands, comprising rivers, broads, marshes, fens and carr woodland. There are over 200km of navigable waterways and over 25% of the area has a European designation, Special Area of Conservation or Special Protection Area, incorporating many National and Local Nature Reserves and Sites of Special Scientific Interest. The Broads is listed under the Ramsar Convention on Wetlands of International Importance, and are home to a diverse variety of rare birds, animals and plants.
- The Broads Authority ("The Authority") was established as a non-statutory body in 1978 following a report by the Nature Conservancy Council regarding degradation of the Broads.
- The Broads Authority was formalised as a statutory authority by the Norfolk and Suffolk Broads Act 1988 (Reference 1), ("The Broads Act"), and began operating as such in 1989, for the purpose of conserving and enhancing the natural beauty of the Broads, promoting the enjoyment of the Broads by the public, and protecting the interests of navigation.
- The Authority is designated a "Special Statutory Authority", affording the same level of protection as National Park status, but with tailor-made legislation relating to navigation. The Authority therefore balances the duties and powers of a harbour authority with those of a National Park authority.

2.2 NAVIGATION AUTHORITY

The extent of the Broads Authority executive area is shown in **Figure 1**.

The Navigation area is defined in the Norfolk and Suffolk Broads Act 1988 as subsequently amended, and in summary includes:

- a. those stretches of the rivers Bure, Yare and Waveney, and their tributaries, branches and embayments (including Oulton Broad) which, at the passing of this Act, were in use for navigation by virtue of any public right of navigation;
- b. the banks of the waterways which make up those stretches; and
- c. Haddiscoe New Cut and its banks;
- d. Breydon Water and the Lower Bure;



e. Mutford Lock and the adjoining land as defined in article 2 of the Broads Authority (Transfer of Mutford Lock) Harbour Revision Order 2021.

Figure 1: Broads Authority Executive Area



2.3 NAVIGATION AND VESSEL TRAFFIC

The Broads are exceptionally busy with vessel traffic, but this is predominantly leisure craft of all kinds (powered and unpowered), and including kayaks, SUPs, sailing and rowing dinghies, private yachts and motor vessels **(Table 1**). In addition, there are very significant numbers of hired craft using the waterway, including



small motorised day boats, motor cruisers and sailing yachts, many of which are under the command of, and crewed by, inexperienced and unqualified visitors (**Table 2**).

Class of Private Boats	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Change	% Change
Motor Cruisers	4,967	5,059	5,091	5,086	5,110	5,079	5,083	5,004	5,237	5,142	-95	-1.81%
Auxiliary Yachts	1,166	1,168	1,152	1,127	1,132	1,093	1,107	965	1,048	1,024	-24	-2.29%
Day Launches	521	514	504	495	556	574	558	562	582	600	18	3.09%
Outboard Dinghies	1,043	1,062	1,016	962	1,064	1,060	1,058	<mark>1,051</mark>	<mark>1,14</mark> 0	1,185	45	<mark>3.9</mark> 5%
Workboats	188	180	172	156	158	156	153	144	142	166	24	16.9%
Passenger Vessel SPB	0	0	0	0	22	21	23	13	19	20	1	5.26%
Total Motor Boats	7,885	7,983	7,935	7,826	8,042	7,983	7,982	7,739	8,168	8,137	-31	-0.38%
Sailing Craft	1,214	1,230	1,191	1,107	1,076	1,081	1,023	844	920	861	-59	-6.41%
Rowing Craft	1,636	1,578	1,532	1,513	1,483	1,513	1,545	1,800	2,039	2,054	15	0.74%
Houseboats	33	27	33	45	45	49	52	49	52	67	15	28.85%
Total Unpowered Boats	2,883	2,835	2,756	2,665	2,604	<mark>2,64</mark> 3	2,620	2,693	3,011	2,982	-29	-0.96%
Total	10,768	10,818	10,691	10,491	10,646	10,626	10,602	10,432	11,179	11,119	-60	-0.54%

Table 1: Private Boat Numbers (Source, Broads Authority)

Table 2: Hire Boat Numbers (Source, Broads Authority)

Class of Hire Boats	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Change	% Change
Motor Cruisers	869	842	821	789	802	806	801	734	729	673	-56	-7.68%
Auxiliary Yachts	46	47	43	44	45	46	44	39	45	45	-	0.00%
Total All cabin hire boats	915	889	864	833	847	852	845	773	774	718	<mark>-56</mark>	-7.24%
Day launches	289	299	290	295	290	301	297	261	326	363	37	11.35%
Outboard Dinghies	7	8	10	11	9	9	8	4	4	4	-	0.00%
Passenger Vessels MCA	11	10	10	6	6	6	6	5	6	6	-	0.00%
Passenger Vessels SPB	0	0	0	0	6	7	7	4	8	8	-	0.00%
Total Motor Boats	1,222	1,206	1,174	1,145	1,158	1,175	1,163	1,047	1,118	1,099	-19	-1.70%
Sailing Craft	109	110	108	102	101	95	87	74	88	73	-15	-17.05%
Rowing Craft	188	175	184	192	191	194	193	182	227	230	3	1.32%
Houseboats	16	16	16	16	28	26	26	27	27	28	1	3.70%
Total	1,535	1,507	1,482	1,455	1,478	1,490	1,469	1,330	1,460	1,430	-30	-2.05%

MARICO MARINE

Overall traffic levels are assessed every four years through census² carried out over a three-day period in August. The 2018 census counted over 9,000 vessel movements on the northern rivers (where commercial activity would most likely occur) in the census period, confirming the very busy nature of the waterway.

Present day commercial traffic includes a small number of large vessels serving the leisure industry (excursions, traditional Wherrys) and commercial workboats engaged in waterway maintenance (dredgers, reed cutters, small tugs and barges etc). All of the above are generally restricted to the inland waterway.

The owners and operators of hire craft are subject to clear licencing procedures (<u>https://www.broads-authority.gov.uk/boating/owning-a-boat/hire-boat-licensing</u>), and these same procedures set the qualification standards for the "skippers" of passenger vessels (Less than 12 passengers must be qualified in accordance with The Merchant Shipping (Inland Waterway and Limited Coastal Operations) (Boatmasters' Qualifications and Hours of Work) Regulations 2012; and vessels with 12 or more passengers are covered by MCA regulations MSN 1823 (M) Safety code for passenger ships - GOV.UK (<u>www.gov.uk</u>). None of these categories of vessel would be intended to be subject to pilotage.

While some leisure craft enter from seaward (and indeed are encouraged to do so: see <u>https://www.broads-authority.gov.uk/boating/owning-a-boat/bringing-your-boat-from-overseas</u>), it is understood that traditional freight carrying commercial traffic ceased approximately 15 years ago.

There are two points of access to the inland waterway system from the sea: Mutford Lock (Lowestoft) which is only suitable for recreational craft, or via Great Yarmouth which gives access to both the Northern and Southern Broads and is suited to larger craft.

Historically most commercial traffic would have been bound for Norwich on the River Wensum / Yare or Cantley Sugar Beet Refinery also on the River Yare. In practice, the vast majority of the Broads are not navigable by commercial freight vessels.

It is understood that none of the former commercial quays are either active, or suitable for accepting commercial vessels at the current time.

It is conceivable, however, that large vessels may seek to navigate on the waterway in the future, for example in connection with projects or new developments, however the MSMS states that *"In practice, such vessels are not usually piloted, but escorted by Broads Authority launches. These launches operate to their own published procedures".*

² Boat Census 2018 Report nc170119 (broads-authority.gov.uk)

Commercial in Confidence

MARICO MARINE

2.4 COMPETENT HARBOUR AUTHORITY AND "BRIDGE PILOTS"

As noted in **section 1.1** above, the Authority is a Competent Harbour Authority by virtue of the Broads Authority (Pilotage Powers) Order 1991. However, in the absence of published pilotage directions it is not clear which vessels pilotage applies to, nor in which area pilotage is provided / required.

Historically however, pilotage was "strongly recommended" for (or provided to) seagoing commercial vessels bound for any berth within the navigation area (usually Norwich or Cantley). As such vessels approached through the Great Yarmouth CHA area, the limits of the Broads are assumed to be the boundary with Great Yarmouth harbour area.

As also noted in **section 1.1** the term pilotage is widely used on the waterway to describe a service provided to hire boats navigating through two bridges over the inland waterways (at Potter Heigham and Wroxham).

The MSMS states in respect of these bridges:

"The Broads Authority believes that pilotage is not necessary for experienced helmsmen to safely navigate these bridges. However, it is accepted that the majority of hire vessels are helmed by novices. As such, the hire boat operators have provided pilotage services to protect their own assets and to assist their customers. The Broads Authority does not authorise or regulate these pilots".

These services are not therefore pilotage under the meaning of the Pilotage Act, and while they do provide an effective risk mitigation for specific hazards, they will not be considered further in this review.



3 LEGISLATIVE REVIEW

This section details relevant national and local legislation relevant to this review as listed below:

3.1 NATIONAL LEGISLATION

There is a wide variety of legislation relevant to harbour operations, which is listed elsewhere (see the Port Marine Safety Code and associated Guide to Good Practice, for example) (**Sections 3.3.1 and 3.3.2** refer). The legislation briefly described below is most relevant to the provision of a Pilotage service by a Competent Harbour Authority.

3.1.1 Harbour Docks & Pier Clauses Act 1847

Relevant sections of the Harbour Docks & Pier Clauses Act are detailed below:

3.1.1.1 Section 52 (extract)

"The Harbour Master may give Directions for all or any of the following purposes:

For regulating the time at which and the manner in which any vessel shall enter into, go out of, or lie in or at the harbour, dock or pier, and within the prescribed limits, if any, and its position, mooring or unmooring, placing and removing, whilst therein;

For regulating the position in which any vessel shall take in or discharge its cargo or any part thereof, or shall take in or land its passengers, or shall take in or deliver Ballast within or on the harbour dock or pier;

For regulating the manner in which any vessel entering the harbour or dock or coming to the Pier shall be dismantled as well for the safety of such vessel as for preventing Injury to other vessels and to harbour, dock, or pier, and the moorings thereof;

For removing unserviceable vessels and other obstructions from the harbour, dock, or pier, and keeping the same clear; and

For regulating the quantity of ballast, or dead weight in the hold which each vessel in or at the harbour, dock, or pier shall have during the delivery of her cargo or having discharged the same."

As the Broads Authority is not a Statutory Harbour Authority, a Harbour Master has not been appointed, but the Broads Act 1988 does make provision for the appointment of a "Navigation Officer" (and deputy). Section 19 of Schedule 5 of that Broads Act states in respect of "Seagoing Freight Traffic":

(1) The navigation officer shall exercise his powers under this Part of this Schedule with the object of securing, so far as is reasonably practicable and consistent with the maintenance of safety, that any seagoing freight vessel which is in, entering or leaving the Norwich navigation has a safe passage and is given priority over other traffic.

(2) The navigation officer shall, in controlling the movement of any vessel, comply with any directions given (with the object mentioned in sub-paragraph (1) above) by the harbour master of Great Yarmouth unless he considers, in a particular case, that it is inadvisable on grounds of safety to do so.

In practice, Schedule 5 of the Broads Act 1988 gives the Authority many of the same powers as a Statutory Harbour Authority.

3.1.2 The Pilotage Act 1987

The Pilotage Act 1987 is an Act of Parliament that governs the operation of marine pilotage. The Act requires the CHA to keep under consideration what pilotage services are needed to secure the safety of ships and gives them powers to:

- Make pilotage compulsory within their pilotage district and levy charges for the use of a pilot;
- Grant PECs, to any bona fide deck officer of a ship, including its master or first mate, who may hold one provided the relevant competent harbour authority is satisfied that that person has the skill, experience and local knowledge, and sufficient knowledge of English for safety purposes, to be capable of piloting one or more specified ships within its harbour; and
- Authorise pilots within their district.

The CHA has a duty to keep under regular review the need for and implementation of Pilotage in the area for which it has responsibility. It has to set the level of Pilotage required, develop and promulgate Pilotage Directions, and satisfy itself that prospective Pilots for authorisation meet the required standards that it has determined, in respect of age, physical fitness, time of service, local knowledge, skill, and character.

With relevance to this study, Section 2(1) and 2(2) of the Act requires the CHA to keep under consideration whether:

- Any and, if so, what pilotage services need to be provided to secure the safety of ships navigating in or in the approaches to its harbour; and
- In the interests of safety, pilotage should be compulsory for ships navigating in any part of that harbour or its approaches. If so, for which ships under which circumstances and what pilotage services need to be provided for those ships. N.B. The Act states (Section 7 (3) that: "A pilotage direction shall not apply to ships of less than 20 metres in length or to fishing boats of which the registered length is less than 47.5 metres".

3.1.2.1 Review of Pilotage Act 1987

In 1997 following the <u>Sea Empress</u> disaster in 1996, the <u>Department for Environment</u>, <u>Transport and the</u> <u>Regions</u> undertook a review of the Act which concluded that "*Pilotage should rightly remain the responsibility of the CHAs and become integrated with other port marine activity under the management and responsibility of one Statutory Authority*". The principal recommendation of the Review was for the establishment of the <u>Port</u> <u>Marine Safety Code</u> (see **Section 3.3.1**).



3.1.3 The Marine Navigation Act 2013

The Marine Navigation Act 2013 amends legislation relating to pilotage, harbour authorities, the general lighthouse authorities and the manning of ships. With regards to pilotage the Act has addressed the problems as outlined below:

3.1.3.1 Clause 1: Power to remove harbour authorities' pilotage functions

Clause 1 amends the Pilotage Act 1987 to provide the appropriate national authority with power to specify by order that a harbour authority in England, Wales or Scotland is not a CHA within the meaning of that Act. Making such an order in respect of a CHA will mean it is no longer required to carry out certain duties set out in the Pilotage Act. The relevant duties include keeping under review whether any, and, if so, what pilotage services need to be provided for the safety of ships in its harbour or its approaches and whether pilotage should be compulsory. The appropriate national authority in this context is the Secretary of State as regards harbours in England and Wales and the Scottish Ministers as regards harbours in Scotland. In England and Wales, the order making power is subject to the applicable negative resolution scrutiny procedure.

3.1.3.2 Clause 2: Pilotage Exemption Certificates: grant

Clause 2 amends the Pilotage Act 1987 to remove the restriction whereby only the master or first mate of a ship may hold a pilotage exemption certificate. Any bona fide deck officer of a ship, including its master or first mate, may hold one provided the relevant CHA is satisfied that that person has the skill, experience and local knowledge, and sufficient knowledge of English for safety purposes, to be capable of piloting one or more specified ships within its harbour.

3.1.3.3 Clause 3: Pilotage Exemption Certificates: suspension and revocation

Clause 3 extends the circumstances in which a CHA can, by written notice, suspend or revoke a PEC. The authority may do this if:

- An event occurs that gives it reason to believe that the holder of the certificate no longer meets the requirements for holding a certificate;
- It thinks that the holder of the certificate has provided false information; and
- It thinks that the holder of the certificate has been guilty of professional misconduct while piloting the ship; or the certificate has been misused in circumstances where an act of pilotage is undertaken by an unauthorised person.



3.1.3.4 Clause 4: Pilotage notification

Clause 4 amends the Pilotage Act 1987 by substituting a new section 15(3) which makes it an offence by the master of a ship not to give a pilotage notification before the ship is navigated in an area for which a pilotage direction is in force. That notification must either request an authorised pilot or notify the authority that the ship will be piloted by a specified person in accordance with a pilotage exemption certificate.

3.2 LOCAL LEGISLATION

3.2.1 Harbour Legislation

The overarching legislation is the Norfolk and Suffolk Broads Act 1988, as amended. While this act covers all aspects of the Authority's constitution, duties and powers; specific reference is made to Navigation specifically:

- Part II Navigation (includes: the navigation area, defines the navigation committee, describes functions of the Authority in relation to the navigation area);
- Part III Finance refers to navigation charges;
- Schedule 4 gives detail of the navigation committee; and
- Schedule 5 gives detail on powers and duties in the navigation area.

3.2.2 Byelaws

Schedule 5, Part I, Byelaws, Paragraph 4 gives the Authority power to make byelaws for the purposes of ensuring safe navigation.

Four such byelaws have been made and are published on the website: <u>https://www.broads-authority.gov.uk/boating/navigating-the-broads/byelaws-and-speed-limits</u>

- Navigation Byelaws 1995
- Speed Limit Byelaws 1992
- Vessel Dimension Byelaws 1995
- Vessel Registration Byelaws 1997

None of the above byelaws refer to pilotage.

3.2.3 Pilotage District – Pilotage Directions

While the pilotage Act 1987 gives a Competent Harbour Authority powers to make directions, there is no compulsion on the CHA to do so. However, there seems little advantage in obtaining the legal powers to provide pilotage and make directions if there is no intention of the making use of those powers. Nevertheless, there is no evidence that the Broads Authority has ever made pilotage directions, and any pilotage that did

Commercial in Confidence

historically take place was not subject to formal direction. In effect the authority gained the necessary powers but has not formally made use of them. Following this review, it would be relatively easy to formally introduce directions, following appropriate consultation, as the legal framework is in place.

3.3 GUIDES AND CODES OF PRACTICE

There are two principal documents guiding the UK ports industry's compliance with legislation and good practice, as well as additional guidance published by the MCA.

3.3.1 Port Marine Safety Code

The Port Marine Safety Code (the Code) applies to all harbour authorities in the UK that have statutory powers and duties. The Code is primarily intended for "the duty holder" who is directly accountable for the safety of marine operations in their waters and approaches.

The current version of the PMSC is dated November 2016.

The Code establishes a national standard for every aspect of port marine safety and aims to enhance safety for those who use or work in ports, their ships, passengers and the environment.

It was developed following the grounding of the *MV Sea Empress* and a review of the arrangements for harbour pilotage under the Pilotage Act 1987 (see **Section 3.1.2**).

The Code applies the well-established principles of risk assessment and safety management systems to port marine operations. Ports and harbours (and other organisations with responsibilities for navigation) are required to produce a Safety Management System (SMS) based on the ALARP ("as low as reasonably practicable") principle - that is managing marine operations in harbours to reduce risk "as low as reasonably practicable".

The Code embraces some fundamental principles.

- The promotion of nationally agreed standards;
- Recognising that best practice is built on experience and is therefore evolutionary; and
- Focus upon those risks affecting the safety of life, property and the environment.

3.3.1.1 The Port Marine Safety Code and Pilotage

With regards to pilotage the Code states the following:

Pilotage and Pilotage Directions

4.11 Under the Pilotage Act 1987, a Competent Harbour Authority ("CHA") has a duty to assess what, if any, pilotage services are required to secure the safety of ships, and to provide such services as it has deemed necessary31. CHAs should determine these matters through risk assessment.

4.12 CHAs must issue pilotage directions if they decide, based on their assessment of the risks, that pilotage should be made compulsory. The pilotage directions must specify to which ships they apply and the area and circumstances in which they apply.

Authorisation of Pilots

4.13 A CHA may authorise suitably qualified pilots in its area. Authorisations may relate to ships of a particular description and to particular parts of the harbour. The CHA determines the qualifications for authorisation in respect of medical fitness standards, time of service, local knowledge, skill, character and otherwise. Qualifications of EEA State nationals must be recognised. The CHA may also – after giving notice and allowing a reasonable opportunity to make representations – suspend or revoke an authorisation in certain circumstances.

4.14 CHAs are encouraged to implement the international recommendations on the training and certification and operational procedures for pilots contained within International Maritime Organisation resolution A960.

Pilotage Exemption Certificates.

4.15 CHAs must grant a 'Pilotage Exemption Certificate' ("PEC") to a ship's deck officer (including the Master who applies for one if they demonstrate they have sufficient skill, experience and local knowledge to pilot the ship within the compulsory pilotage area.

The requirements for granting a PEC must not exceed or be more onerous than those needed for an authorised pilot.

4.16 A CHA may suspend or revoke a PEC if it ceases to be satisfied that the holder possesses the required skill, experience and local knowledge, or in cases of professional misconduct or the provision of false information.

3.3.2 A Guide to Good Practice on Port Marine Operations February 2018

This document is a supplement to the Code. It contains more detailed guidance on issues relevant to harbour authorities including pilotage. It is designed to provide general guidance and examples of how a harbour authority can meet its commitments in terms of compliance with the Code. The guidance applies to all harbour authorities in the UK that have statutory powers and duties.

Section 9 of the guide gives detailed guidance on the interpretation of the Code with respect to pilotage according to the following general principles:

- A. Harbour authorities are accountable for the duty to provide a pilotage service; and for keeping the need for pilotage and the service provided under constant and formal review.
- B. Harbour authorities should therefore exercise control over the provision of the service, including the use of pilotage directions, and the recruitment, authorisation, examination, employment status, and training of pilots.
- *C. Pilotage should be fully integrated with other port safety services under harbour authority control.*



D. Authorised pilots are accountable to their authorising authority for the use they make of their authorisations: harbour authorities should have contracts with authorised pilots, regulating the conditions under which they work – including procedures for resolving disputes.

3.3.3 MCA Guidance on Vessel Traffic Services and Local Port Services

Vessel Traffic Service (VTS) is a service implemented by a Harbour Authority, designed to improve the safety and efficiency of vessel traffic and to protect the environment. The service should have the capability to interact with the traffic and to respond to traffic situations developing in the VTS area.

MGN 401 (M+F) Amendment 3 Navigation: Vessel Traffic Services (VTS) and Local Port Services (LPS) in the UK, published by the MCA on 22 March 2022 gives full guidance to assist Statutory Harbour Authorities in considering the implementation of a VTS or LPS and in reviewing an existing VTS.

Not all harbours require a full VTS service, and Harbour Authorities should determine through a process of risk assessment what level (if any) of traffic management service should be provided within their geographic area of responsibility.

The Broads Authority does not operate any form of active traffic monitoring or control, but does provide advice and assistance through "Broads Control", mobile rangers and information points and yacht stations (see **Figure 1** for locations).

There is therefore no direct interaction in real time between the navigation authority and pilotage that may take place, with the exception that any large vessels would routinely be provided with an escort by a ranger patrol launch, which could intervene upon the request of a pilot (e.g. in a developing close quarters situation).



4 **REQUIREMENTS OF PROVIDING A PILOTAGE SERVICE**

The Competent Harbour Authority (CHA) should provide the pilotage services it considers to be needed. This duty is not discharged simply by authorising one or more pilots: it includes the management of the service, ensuring that the person assigned as pilot to every vessel taking one is fit and appropriately qualified for that task.

The 1987 Pilotage Act requires that the pilotage service provided by any CHA should be based upon a continuing process of risk assessment. Operating a pilotage service will involve consideration of the following factors:

- Safety assessment;
- Agents and joint arrangements;
- Pilotage directions;
- Boarding and landing arrangements;
- Consultation;
- Pilotage regulations;
- Authorisation of pilots;
- Contracts with authorised pilots;
- Training;
- Rostering pilots; and
- Incident and disciplinary procedures.

4.1 SAFETY ASSESSMENT

Section 2(1) and 2(2) of the Pilotage Act requires CHAs to keep under consideration whether:

- Any and, if so, what pilotage services need to be provided to secure the safety of ships navigating in or in the approaches to its harbour; and
- In the interests of safety, pilotage should be compulsory for ships navigating in any part of that harbour or its approaches. If so, for which ships under which circumstances and what pilotage services need to be provided for those ships.

The hazards involved in the carriage of dangerous goods, pollutants or harmful substances by ship have to be particularly considered and are best addressed as part of an authority's overall risk assessment and safety management system. An authority with the powers to provide an effective and efficient pilotage service must be satisfied that it can do so competently. This means, firstly, that the authority has the competence to assess and oversee authorised pilots, and those who may apply for pilotage exemption certificates; and secondly, that they will have sufficient pilotage work to maintain their skills adequately.

An authority which identifies the need to provide a pilotage service, incurs an obligation to find and maintain the resources and expertise.

The Authority has considered pilotage in its formal safety assessment, and by virtue of commissioning this report, is keeping those arrangements under review.

4.2 AGENTS AND JOINT ARRANGEMENTS

The Pilotage Act provides for a CHA to use an agent for pilotage services, and for formal joint arrangements between CHAs for the discharge of pilotage functions.

There are important limitations to the power to make such arrangements, and key functions must be retained by each CHA. It is especially important to have a robust agreement about the resourcing of any operations conducted jointly or through another undertaking.

Any delegation or joint arrangement should be subject to a formal contract with any other body used in this way (including another harbour authority) which fully recognises statutory obligations which cannot be delegated or shared. The contract should set out the decisions which the delegated or joint body may make, and any conditions to which this is to be made subject. There should be provision in such a contract to terminate the arrangement at any time in order to enable an authority to carry out delegated or joint functions itself, or to make some other permissible arrangement instead.

The Authority does not currently have joint arrangements.

4.3 **PILOTAGE DIRECTIONS**

Pilotage directions should specify how and to which vessels they apply, and in what circumstances. It may be that pilotage is appropriate for a class of vessels in some circumstances and not others.

There is no provision for pilotage directions, once given, to be waived or not applied - other than by the making of new directions by the authority, or by formally removing the harbour authorities' pilotage functions (see **section 3.1.3.1**).

The Authority has not issued Directions.



4.4 **OTHER REQUIREMENTS**

Of the remaining requirements listed above (Boarding and landing arrangements; Consultation; Pilotage regulations; Authorisation of pilots; Contracts with authorised pilots; Training; Rostering pilots; and Incident and Disciplinary Procedures), it is observed that the MSMS provides extremely limited detail, and it is not clear whether all of the requirements have been met.

MARICO MARINE

5 CURRENT STATUS OF THE PILOTAGE SERVICE

5.1 CHALLENGES

As described in the introduction (**Section 1)** to this report, the Broads Authority is a CHA.

However, this status is providing several operational challenges to the Authority:

- In the absence of formal directions it is unclear as to which vessels or classes of vessels pilotage is intended to be applied to, nor is it clear to what standards, or how, pilots should be trained and authorised;
- Commercial traffic levels have fallen to such an extent that the requirement for vessels to take pilots has become extremely infrequent;
- It is not considered economically feasible to employ even one full time pilot, so the Authority is reliant on part time personnel who may require considerable notice periods to ensure availability (and who may not in fact be authorised Pilots under the Pilotage Act);
- It is not considered economically feasible to maintain required infrastructure such as a coded pilot vessel, although the nature of the pilotage district means this is not a significant consideration;
- The numbers of vessels requiring pilots has fallen to such an extent, that it is very difficult for existing personnel providing advice to maintain the required levels of competency through undertaking a minimum required number of voyages each year. (Although in the absence of Pilotage Directions these fundamental requirements are unclear);
- The Authority no longer employs any officers suitably qualified to train or assess new pilots or PEC applicants. It is considered that the current "pilot" would be unable to fulfil this function (noting age profile and local experience limitations), and it will therefore be difficult to authorise further Pilots in the future;
- Potentially, the level of pilotage actually undertaken cannot generate sufficient revenue to cover the ongoing costs incurred but under the pilotage Act, cost is not a valid reason for not providing a service that has been assessed as necessary; and
- The Authority cannot demonstrate that it is currently meeting all of the requirements for providing a pilotage service as described in **Section 4** above.

5.2 OPTIONS

The high-level options open to the Authority are:

- 1) No change to current arrangements;
- 2) Continue to provide pilotage, but update arrangements to address the challenges listed above (section 5.1); or
- 3) Cease pilotage provision.



These options are discussed below.

5.2.1 Maintain Current Pilotage Arrangements

Maintaining current arrangements for pilotage is not considered a viable option for the reasons set out in **section 5.1** above and is not considered further.

5.2.2 Continue to Provide Pilotage Under New Arrangements

If Pilotage is to be continued, a fundamental review of how the service will be provided and maintained will be required. As a first stage a pilotage risk assessment must be undertaken (or reviewed if an existing one can be located) to establish whether pilotage is still an effective risk control for the harbour.

If Pilotage is to continue to be provided, the possible options (excluding maintaining current arrangements) are:

- Drafting Pilotage Directions to make the requirements for pilotage and authorisation clear (unlikely to solve fundamental issue, and not recommended without additional mitigations);
- Provide the service jointly with another authority, both for economy, and to provide greater opportunities for Pilot training and authorisation; or
- Introduce new procedures to address the challenges identified, while maintaining the future option to provide a pilotage service.

5.2.2.1 Issue Pilotage Directions

As noted above, issuing Pilotage Directions would be a relatively easy process given that the legislation is in place, and the Authority already has the necessary powers to do so. However, the Directions would need to be developed based on a contemporary risk assessment, to establish the current need for the service. The Directions would need to give due regard to the training and authorisation of suitable pilots, and the practicalities of actually delivering the service.

In practice, simply issuing Directions may only have the effect of formalising current arrangements as discussed in **section 5.2.1** above and would not address the fundamental issues identified in **section 5.1**.

Therefore, simply issuing Directions is not recommended, without additional actions being identified and put in place.

5.2.2.2 Joint Arrangements

The Pilotage Act provides for a CHA to use an agent for pilotage services, and for formal joint arrangements between CHAs for the discharge of pilotage functions (see **section 4.2**).

There are important limitations to the power to make such arrangements, and key functions must be retained by each CHA. It is especially important to have a robust agreement about the resourcing of any operations conducted jointly or through another undertaking.

Any delegation or joint arrangement should be subject to a formal contract with any other body used in this way (including another harbour authority) which fully recognises statutory obligations which cannot be delegated or shared. The contract should set out the decisions which the delegated or joint body may make, and any conditions to which this is to be made subject. There should be provision in such a contract to terminate the arrangement at any time in order to enable an authority to carry out delegated or joint functions itself, or to make some other permissible arrangement instead.

The only feasible local CHA with which such joint arrangements could be made is Great Yarmouth Port Authority. It is understood that approaches have been made to GYPA in the past, but informal discussions have not progressed.

Advantages of a joint arrangement may include:

- Financial economies;
- Coordinated provision of pilotage across neighbouring / overlapping pilotage districts (simplification for mariners);
- Opportunities for Pilots to gain more experience in arranging of vessels in different areas; and
- Greater resilience of the service for both parties, better pilot availability at short notice.

Disadvantages may include:

- Commercial conflicts between the two participating authorities (attracting vessels to each other's facilities);
- Unequal contributions / advantages gained from the arrangement;
- Contractual complexities of coming to an arrangement; and
- The practicalities of providing the service may be just as challenging for GYPA as they are for the Broads Authority.

5.2.2.3 Introduce New Procedures

Consideration may be given to managing the current situation more formally, while still maintaining the ability to provide pilotage in the future, should circumstances change. For example, subject to the requirements of Open Port Duty, it may be possible to disallow vessels over a certain size on the basis that no suitable facilities exist for them. This could be formalised through new or amended byelaws (such as the Vessel Dimension Byelaws 1995), although simply stating that vessels over a certain size cannot be accepted without additional consideration, may be sufficient.



5.2.3 Cease Pilotage Provision

The final option is to cease pilotage provision completely. This is not an option to be considered lightly and can only be pursued following risk assessment.

Should risk assessment show that pilotage is no longer a significant risk reduction factor, the Authority would then need to instigate the legal procedures necessary to remove the harbour authorities' pilotage functions. This option became realistic as a result of the Marine Navigation Act 2013 (**Section 3.1.3**). Clause 1 of that act amends the Pilotage Act 1987 to ease the removal of a harbour authorities' pilotage functions.

However, there is a requirement for consultation and approval by the Secretary of State.

Therefore, robust evidence will be necessary to demonstrate pilotage is no longer necessary (nor likely to be so in the foreseeable future). It should also be considered that having the powers (albeit in abeyance) may prove very useful, and save considerable future expense, should a currently unforeseen requirement for pilotage arise in the future.

The following section of this report comprises a high-level assessment of pilotage in the navigation area.

6 **RISK ASSESSMENT**

6.1 RISK ASSESMSNT OVERVIEW

The Broads Authority has recognised the challenges summarised in the preceding sections of this report and the need for an assessment to inform the preferred options for the future.

A full Navigation Risk Assessment undertaken in compliance with the recommendations within the PMSC and GtGP (following IMO Formal Safety Assessment methodology) is not within the scope of this report and considered unnecessarily onerous at this stage of pilotage service review.

Nevertheless, it is considered appropriate to review potential risks to safe navigation posed by those commercial vessels which would be expected to utilise a pilotage service, and to consider some of the risk mitigation which may be necessary if pilotage is unavailable or ineffective.

A full navigation risk assessment (focusing on the need for pilotage) would typically be broken down into five stages:

- Stage 1: Hazard identification:
 - Baseline risk assessment "without pilotage";
 - Identify generic and local risk controls; and
 - Hazard definition.
- Stage 2: Quantify incident frequency:
 - o Review of all available incident data and incident records; and
 - Consultation with local stakeholders.
- Stage 3: Consider pilotage effectiveness in respect of:
 - o Grounding;
 - o Collision; and
 - o Contact.
- Stage 4: Hazard scoring:
 - Baseline assessment made in consultation with navigation officer / stakeholders; and
 - Review and adjustment of baseline assessment with Navigation Officer.
- Stage 5: Results of Risk Reduction Assessment:
 - Comparison between baseline and residual risk scores; and
 - Conclusions and recommendations.



A methodology for a full FSA compliant assessment is given at **Annex A**.

The following sub-sections consider the 5-stage assessment at high level, in order to draw meaningful conclusions, albeit in the absence of a detailed assessment informed by stakeholder consultation and quantifiable data.

6.2 STAGE 1: HAZARD IDENTIFICATION

Stage 1 seeks to identify navigational hazards within the Pilotage district, related to vessels that may be expected to take pilots. In practice, of course, the vast majority of navigational activity in the navigation area is undertaken by non-pilotage vessels (mainly leisure craft) and the hazards affecting those vessels have been separately assessed in the Authority's PMSC compliant NRA.

- Vessel types likely to require pilotage (if directions were in place):
 - Commercial (freight) vessels greater than 20m LOA; and
 - Fishing vessels greater than 47.5m LOA.

However, there is no expectation that large fishing vessels may use the waterway, and they will not be considered.

- As well as the (very remote) possibility of two freight vessels colliding, such vessels may also collide with other vessels using the waterway. For this assessment "other vessels" have been divided into two categories:
 - Leisure / fishing / workboat /vessel carrying more than12 pax in CHA area; and
 - Leisure / fishing / workboat /vessel carrying less than12 pax in CHA area.
- The relevant hazards (i.e. those most likely to be mitigated by the presence of a marine Pilot) for each of the above vessel types are:
 - Collision;
 - o Grounding; and
 - Contact.

6.2.1 Generic Risk Control Measures

A baseline of risk control measures within the control of the harbour authority, as identified below, have been considered relevant for the assessment:

- Operations are to be planned to the extent necessary to ensure safety:
 - Updated vessel information;
 - o Clear communications; and



- Passage plans.
- Operations are to be fully compliant with legislation, guidance and best practice;
 - Register of relevant legislation/guidance maintained.
- All those involved in operations to be competent persons;
- All the necessary information is provided to undertake the movement safely:
 - Updated charts; and
 - Relevant port information promulgated via Notice to Mariners, websites and other publications.
- All equipment provided is fit for purpose:
 - Vessel to declare defects prior to arrival; and
 - Procedure in place to postpone operation pending rectification of defect.
- All necessary resources are allocated to mitigate identified risks;
- Operations are undertaken in accordance with up-to-date written procedures:
 - o Navigation procedures and policies regularly reviewed and updated; and
 - All those tasked with undertaking the operation are familiar with current policies and procedures.
- Any exceptions to safe practice are reported:
 - Reports reviewed and procedures/risk assessments reviewed accordingly.
- Incidents and near misses are investigated:
 - Incident/near miss reporting procedure in place; and
 - Incident investigation procedure in place.
- A planned response to emergencies is available:
 - Emergency plans maintained, exercised and updated.

When scoring the hazards it is assumed that the above risk control measures are in place – relevant plans and procedures have been seen to be maintained by the Authority, although given the very infrequent pilotage operations, it must be considered that some aspects such as incident response, passage planning and vessel handling are seldom practised.



6.2.2 Local Risk Control Measures

Local risk control measures in place that are solely attributed to the Broads Authority include (but may not be limited to) the following:

- Lighting and marking of channels;
- Regular hydrographic survey;
- Risk assessments undertaken by organisers of large recreational events; and
- Harbour / Ranger patrols during high periods of activity within the navigation area.

6.2.3 Hazard Definitions

The following sections define:

- Collison;
- Grounding; and
- Contact.

6.2.3.1 Collision

Vessel collision is the structural impact between two moving vessels (including vessels not under pilotage). The main reasons attributed to collisions include:

- Officer of the watch failure to observe the Navigation Byelaws;
- Fatigue, particularly on smaller coastal vessels;
- Met ocean conditions;
- Propulsion/steering/navigation system failure;
- Non adherence to the (Vessel) Company's Safety Management System; and
- A combination of inexperience and systematic failure in the shipboard organisation.

The primary mitigation measure against the hazard of vessels colliding with one another is the International Regulations for Preventing Collisions at Sea, 1972 (COLREGS). This risk assessment, in considering measures to minimise the risk of collision in respect of navigation, makes the assumption that vessels will be compliant with the COLREGS. However, the COLREGS do not apply on the Broads, but for this purpose it is considered that the navigation byelaws have the same mitigating effect.

6.2.3.2 Grounding

Grounding is a type of marine accident that involves the impact of a vessel on the seabed, resulting in damage of the submerged part of her hull and, in particular, the bottom structure.

Grounding accidents can be attributed to the following scenarios as follows:

- Human error, i.e. poor decision making, fatigue; inexperience;
- Insufficient passage planning;
- Failure to alter course at a given turning point near a underwater obstruction;
- Taking evasive actions near the obstruction and consequently run aground or make contact with the underwater obstruction;
- Met ocean conditions;
- Loss of propulsion through unexpected problems with the propulsion/steering system that occur in the vicinity of the underwater obstruction; and
- Dragging anchor resulting in the vessel going aground.

The complex and tidal nature of the channels in the navigation area makes grounding a very real hazard, and one for which pilotage is likely to be a very effective mitigation.

6.2.3.3Contact

Contact is defined as an event wherein a vessel hits a fixed object, such as a quay wall or fixed navigation mark (e.g. Pile or Perch). For such an event to happen one of two scenarios must have occurred. Either the vessel failed to detect the fixed object, or it was unable to avoid hitting and can be attributed to:

- Human error;
- Defective/mechanical failure;
- Inadequate propulsion or steering; and/or
- Adverse weather conditions.

Given the complex and constrained waterways, and infrequent passages, contact must be considered a probable occurrence.

6.3 STAGE 2: INCIDENT FREQUENCY

The likely frequency at which the assessed hazards might be realised in the future may be assessed by means of:



- A review of third-party incident data and incident records (for example, from the MAIB, RNLI, HMCG, Police);
- A review of Internal (broads Authority) incident data and incident records;
- Application of professional judgement; and
- Consultation with the navigation officer.

In practice, there have been so few relevant movements of "pilotage" vessels in the CHA area within the last 15 years, that incident data is effectively non-existent, with more historic data being unreliable. It is therefore necessary to rely on professional judgement when assessing risks, including knowledge of incident rates in similar harbours to benchmark the assessment of frequencies with which hazards may occur.

For the purposes of this assessment a baseline traffic density for commercial traffic has been assumed at one vessel arrival and departure per week.

Of course, the actual traffic density at present is zero – there are no commercial vessel movements at all, and therefore the risk associated with such movement is also zero. However, to realistically assess the requirement for pilotage – some level of vessel traffic has had to be assumed.

6.4 STAGE 3: EFFECTIVENESS OF PILOTAGE AS A RISK CONTROL

There should be a sense of increased confidence when the pilot comes on board the ship. Not only does the pilot bring local expertise that reduces the risk of navigating in constrained waters, but he should also add to the effectiveness of the bridge team.

The local knowledge, integration into the bridge team and expertise of the pilot may therefore contribute to a meaningful reduction in the "frequency" of a collision, contact or grounding event occurring.

However, it has been assumed that if the hazard is realised (a collision, grounding or contact occurs) pilotage will have a negligible effect in reducing consequence.

Given the lack of recent pilotage experience in the navigation area, it is difficult to quantify pilotage effectiveness locally, but the following paragraphs discuss effectiveness in general terms and propose realistic values for effectiveness.

6.4.1 Pilotage Effectiveness - Collision

Whilst in transit a pilot may be considered to reduce the likelihood of a vessel colliding with another vessel. The pilot will be aware of other shipping movements and any constraints they may have on his manoeuvre. He will also be familiar with local maritime activities in the waterway such as diving, fishing, maintenance activities and recreational vessel behaviours. However, in consideration of the pilot's effectiveness, it should not be overlooked that a competent mariner navigating his vessel in the navigation area without the benefit of a pilot would still be well placed to command a vessel that he is likely to be experienced at handling.

The effectiveness of pilotage in reducing the frequency of collision events is therefore somewhat limited as long as the master of the vessel correctly adheres to the COLREGs and is competent.

The effectiveness of pilotage in reducing collision frequency has been estimated at 25% for this assessment.

6.4.2 Pilotage Effectiveness – Grounding

It is considered that a Pilot would be most effective in mitigating against grounding incidents in the complex tidal channels of the Broads. While other mitigations such as marking and lighting, survey and charting, availability of real time and predicted tidal levels, and passage planning may all be effective and useful, local knowledge and experience is probably the most effective mitigation available and would normally be available through advice from a pilot. A competent mariner should be able to undertake the passage without advice but, combined with the need to keep a good lookout, and the likely density of inexpert leisure vessels, there is a danger of overload, and local advice would likely be very effective in mitigating against the possibility of grounding.

It is noted that historically, Broads pilots are locally known as "Mud Pilots" for good reason.

The effectiveness of pilotage in reducing grounding frequency has been estimated at 75% for this assessment.

6.4.3 Pilotage Effectiveness – Contact

The pilot will be familiar with the port and berth layout including mooring arrangements, any restrictions alongside, as well as important details such as the availability and contact details of linesmen. In the event that a tug or pushing assistance may be required the pilot should understand the characteristics and capabilities of the tug. The pilot may also have a broader range of ship handing experience. However, taking into consideration events which are outwith the pilots' control, such as engine or steering failure, human error (e.g. helmsman puts the wheel the wrong way), extremes of weather and tug error (and the very rare use of tugs), then the effectiveness of pilotage in reducing the frequency of "contact" may be somewhat limited.

The effectiveness of pilotage in reducing contact frequency has been estimated at 50% for this assessment.

MARICO MARINE

6.5 STAGE 4: HAZARD SCORING

Notwithstanding the fact that a full NRA is not within the scope of this report, a high-level assessment is still considered useful and has been prepared using the principle outlined above.

A baseline risk assessment has been developed and scored jointly by Marico Marine navigation experts, with existing generic and local mitigation measures (see **Sections 6.2.1** and **6.2.2**) in place but *without* any allowance for pilotage as a risk control measure.

The exercise was then repeated but with the introduction of Pilotage as a control measure – with the effectiveness of pilotage in reducing the risk for each hazard using the figures given in **Section 6.4** above.

The Hazman II software used by Marico Marine to assess navigational risk allows risk reduction effectiveness to be applied to each hazard assessed, and thus calculates baseline risk (without pilotage) and residual risk (with pilotage implemented as a risk reduction measure). The user inputs to the calculation for each hazard being:

- Hazard frequency;
- Hazard consequence (to people, property, the environment and business reputation); and
- Additional control measure effectiveness (only pilotage is considered in this short assessment).

Five hazards have been assessed to test the effectiveness of Pilotage as a risk control measure **(Table 3)**.

Detail of the scoring exercise is given at Annex B.

Table 3: List of Hazards Identified for Assessment

Hazard Title	Category
Commercial vessel greater than 20m collides with a leisure / fishing / workboat /vessel carrying more than12 pax in CHA area	Collision
Commercial vessel greater than 20m collides with a leisure / fishing / workboat /vessel carrying 12 or less pax in CHA area	Collision
Commercial vessel greater than 20m contacts harbour infrastructure (Quay, fixed navigation aid etc.)	Contact
Commercial vessel greater than 20m collides with another commercial vessel underway within CHA area	Collision
Commercial vessel greater than 20m grounds in CHA area	Grounding

6.5.1 Interpretation of Risk Calculation Scores

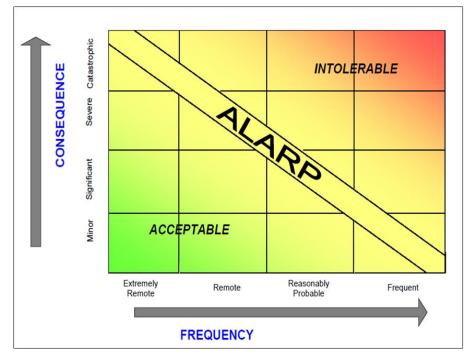
A detailed methodology is provided in **Annex A**.

The combination of consequence and frequency of occurrence of a hazard is combined using a risk matrix (see **Figure 2**, below), which enables hazards to be ranked and a risk score assigned. The resulting scale can be divided into three general categories:



- Acceptable;
- As Low As Reasonable Practicable (ALARP); and
- Intolerable.

Figure 2: General Risk Matrix



The risk scores resulting from the assessment process are interpreted as shown in

Table 4, below:

Table 4: Risk Score Descriptors

Risk Number	Risk
0 to 1.9	Negligible
2 to 3.9	Low Risk
4 to 6.9	As Low as Reasonably Practical
7 to 8.9	Significant Risk
9 to 10.0	High Risk

6.5.2 Risk Ranked Summary – Without Pilotage

A summary of the ranked hazards, *without* pilotage as a control measure are detailed below in **Table 5**.

The two highest risks were collision with other vessels (either more or less than 12 passengers). The risk associated with these hazards are highest, chiefly due to the potential for injury – especially to those in smaller vessels (hire craft).

MARICO MARINE

The risk of two commercial vessels colliding is lower, both due to the lower assessed consequence (particularly injuries), but mainly due to the very low likelihood (frequency) of this event occurring, even with the assumed traffic levels.

The assessment demonstrates that even without pilotage, all of the hazards fall within the "Low" or "ALARP" risk regions in terms of risk assessment and are therefore considered to be acceptable.

The highest scoring hazard was assessed to be a Commercial vessel greater than 20m collides with a leisure / fishing / workboat /vessel carrying more than12 pax in CHA area, with an assessed score of 4.45.

Table 5: Ranked hazard List Without Pilotage in Place (Baseline).

Rank	Hazard Title	Category	Risk
1	Commercial vessel greater than 20m collides with a leisure / fishing / workboat /vessel carrying more than12 pax in CHA area	Collision	4.45
2	Commercial vessel greater than 20m collides with a leisure / fishing / workboat /vessel carrying 12 or less pax in CHA area	Collision	4.05
3	Commercial vessel greater than 20m contacts harbour infrastructure (Quay, fixed navigation aid etc.)	Contact	3.06
4	Commercial vessel greater than 20m collides with another commercial vessel underway within CHA area	Collision	2.24
5	Commercial vessel greater than 20m grounds in CHA area	Grounding	2.07

6.5.3 Risk Reduction of Pilotage

By using the baseline risk assessment as a starting point (**Section 6.5.1**), the risk reduction values of pilotage and the methodology contained in **Section 6.4**, it was possible to calculate the residual risk with the pilotage risk control added.

The effectiveness of pilotage was deemed to have only a negligible (if any) impact upon the "consequence" of a hazard occurring and so only the "frequency" reduction is estimated, as effective pilotage will result in fewer incidents occurring. (See **Section 6.4** for discussion).

The results of the modified risk assessment are shown in **Table 6**.

The table shows the initial baseline/inherent risk without pilotage in place alongside the new residual risk with pilotage, and the difference between the two.



Table 6: Risk Reduction Effectiveness of Pilotage.

Rank	Hazard Title	Risk Category (Baseline / Residual)			Difference
1	Commercial vessel greater than 20m collides with a leisure / fishing / workboat /vessel carrying more than12 pax in CHA area	Collision	4.45	4.34	-0.11
2	Commercial vessel greater than 20m collides with a leisure / fishing / workboat /vessel carrying 12 or less pax in CHA area		4.05	3.94	-0.11
3	Commercial vessel greater than 20m contacts harbour infrastructure (Quay, fixed navigation aid etc.)	Contact	3.06	2.78	-0.28
4	Commercial vessel greater than 20m collides with another commercial vessel underway within CHA area	Collision	2.24	2.22	-0.02
5	Commercial vessel greater than 20m grounds in CHA area	Grounding	2.07	1.85	-0.22

As expected, the addition of pilotage as a control measure does result in an overall reduction of assessed risk for each hazard; however the reduction is very low – and in fact close to negligible. This is chiefly the result of the very low level of traffic which requires pilotage, meaning the control, while potentially effective, is little used, combined with the fact that pilotage can only reduce the frequency, with little reduction in consequence, of any hazard being realised.

One of the hazard scores (Commercial vessel greater than 20m collides with a leisure / fishing / workboat /vessel carrying 12 or less pax in CHA area) changes from the ALARP to the Low risk region, but the difference is slight overall.

Similarly, the score for "Commercial vessel greater than 20m grounds in CHA area" falls from the low to negligible risk band, but again the overall difference is slight.

6.6 STAGE 5: RESULTS OF RISK REDUCTION ASSESSMENT

6.6.1 Comparison

A direct comparison of the risk for each of the identified hazards "with" or "without" pilotage in place can be made:

- Overall inherent navigational risk without pilotage 15.87; and
- Overall residual risk with pilotage in place 15.13.

These figures indicate that providing pilotage reduces the overall navigation risk by 5%. Therefore, for the identified hazards, pilotage is assessed as being only slightly effective at reducing the overall risk score when compared to operating without pilotage.

While pilotage is applicable to all the identified hazards it is evident that varying levels of reductions are spread across all hazards, with some hazards showing only slight reductions.

For all hazards, none of the risk scores exceeded "ALARP", either with or without pilotage in place.

The highest scoring hazard, both with and without pilotage in place was "Commercial vessel greater than 20m collides with a leisure / fishing / workboat /vessel carrying more than12 pax in CHA area", with Pilotage reducing the risk by only 0.11 (a very small reduction).

The greatest reduction in risk achieved through the implementation of pilotage was only assessed to be 0.28 (again, a very small reduction) for the hazard "Commercial vessel greater than 20m contacts harbour infrastructure (Quay, fixed navigation aid etc.)", which produced a score reduced to 3.06 from 2.78 after the pilotage control was applied.

6.6.2 Risk Assessment Conclusions

The risk assessment has produced the following conclusions:

- All navigation hazards identified for vessels that it has been assumed would require a pilot but scored *without* pilotage as a risk control measure were assessed to be in the ALARP or LOW risk bands;
- A qualitative assessment of the risk reducing effectiveness of pilotage has shown that pilotage reduces navigation by only 5%; and
- Pilotage is most effective at reducing the risk of the hazard "Commercial vessel greater than 20m contacts harbour infrastructure (Quay, fixed navigation aid etc.)"

It is emphasised that the apparent lack of effectiveness of pilotage as a risk control is very strongly driven by the frequency with which the control might be effective.

In simple terms, the control measure is expected to be so little used (due to the rarity of vessels requiring pilotage), that effectiveness is outweighed by other control measures which apply to all vessel types, including the majority which do not require pilots to be embarked.

It is also necessary to consider "perception" as well as risk. It is increasingly common that vessel Masters, company/owner and insurer are unlikely to be willing to commit vessels to challenging passages and harbour areas passage without a pilot being available. They will simply take business elsewhere.

It should be noted that this assessment has not attempted to undertake a cost-benefit analysis and has exclusively examined the comparative benefits on the safety of navigation of providing a pilotage service or not as the case may be.

6.6.3 Risk Assessment - Recommendation

The quantitative assessment of those hazards to navigation within the Navigation Area which could be realistically mitigated through the provision of pilotage as a control measure has demonstrated that:

- The baseline level of risk without Pilotage is ALARP or Low; and
- Pilotage only reduces the risk very slightly, still within the ALARP to Negligible risk bands.

While Harbour Authorities should always strive to reduce the level of risk associated with operations in their area to the lowest level practicable, there is no clear evidence that the current pilotage service (if used) would contribute significantly to a reduction of risk, all other control measures being maintained and remaining effective.

It is recommended that consideration should be given to formalising the current status of pilotage service as, despite the minimal contribution to risk reduction at present, the current arrangements are unsustainable.

However, it is considered that the ability to provide Pilotage may be useful in the future, and the Authority may wish to retain CHA powers (making clear that they are not currently used), to allow for the possibility that large vessels may wish to use the waterway in the future (e.g. a potential re-instatement of the Sugar Refinery wharf, given current policy to move freight from road to sea, or potential future large projects in the area which may require water based freight options).

Alternatively, the authority could apply to the Secretary of State to cease pilotage provision, and in the event of future need, re-apply to become a pilotage authority once again.

It is finally recommended (and required by the PMSC) that before any commercial vessel (over 20m loa) is permitted to use the waterway in future, the vessel / project should be subject to full navigation risk assessment taking into consideration realistic traffic densities, once they are known.

7 **REVISED OPTIONS**

Considering the risk assessment results and recommendations above, the three options for the pilotage service on the Broads identified in **section 5.2** of this report are reviewed below:

- No change to current arrangements;
- Continue to provide pilotage, but update; or
- Cease pilotage provision.

7.1 ADVANTAGES AND DISADVANTAGES OF OPTIONS

The following table (**Table 7**) shows the principal advantages and disadvantages of each of the options described above.

Options	Advantages	Disadvantages	Recommendation
	The CHA retains autonomy on all pilotage matters.	Number of future pilotage acts is not considered high enough to maintain level of required competency.	
		Lack of suitable personnel.	
		Need to maintain formal training scheme and competence of pilot(s).	
No change to current arrangements	No administrative burden	Direct and fixed employee costs unsustainable.	Not recommended – unsustainable.
	associated with reviewing Directions.	Administrative burden of maintaining service.	
		Pilotage has been shown to be a minimally effective risk reduction control	
	No legal costs.		
Continue to provide pilotage, but update	Entering a joint arrangement with another	Not considered possible, as GYPC unlikely to enter into such an agreement.	Not recommended – not considered feasible – but
	Harbour Authority <i>may</i> be a practical way to address the challenges of providing	Legal challenges and associated costs.	GYPC might be approached formally to seek confirmation of this
arrangements	a pilotage service.	In practice, unlikely to be a workable solution	conclusion.

Table 7: Pilotage Options – Advantages and Disadvantages



Options	Advantages	Disadvantages	Recommendation
	Reviewing Directions to clarify that while still a CHA, no pilotage is provided and no commercial vessels >20m loa are currently accepted on the waterway would clarify current situation.	May require legal advice and confirmation.	
	Would be a cost effective solution (no ongoing costs for a "sleeping" CHA).		Recommended Option
	Would allow pilotage to be re-introduced with minimal costs in the future.	New guidance would need to be issued and potentially supported by amended byelaws	
	No need to maintain pilots and training scheme while service not provided.	by clams	
	Positively addresses all current challenges of providing service.	Does not allow re- introduction of service at short notice if trading conditions change	
Cease pilotage provision	Reversible decision – the PMSC requires the need for pilotage to be kept under review, so service could be re-introduced in the future if required.	Requires additional attention to ensure other controls remain effective.	Not recommended but would be a feasible (but more costly) second choice option.
	Would have no effect on navigational risk, while no vessels require pilotage	Legal process and significant associated costs to remove and /or reinstate CHA status.	

7.2 **PREFERRED OPTION**

The results of this assessment have identified the formal updating and clarification of pilotage provision as the preferred option available to the Broads Authority.

If this option is pursued it will be essential to continue to keep all other risk control measures under review (as is required in any event to maintain compliance with the PMSC). In particular, those risk controls associated with management of marine traffic in the harbour area should be reviewed and, if possible, improved to raise effectiveness still further. However, pilotage should no longer be one of those control measures.

In order to achieve the objectives of this option, it is recommended that:

• The MSMS is updated to make clear that due to the lack of facilities for commercial freight traffic, and the consequent lack of demand, pilotage is not currently offered;



- The MSMS should explicitly state that Pilotage Directions are not currently made, and that this decision has been reached following formal risk assessment (this report);
- Similarly, it should be made clear that no officers are currently authorised to provide pilotage services;
- The maximum size of vessels permitted to enter the harbour should be defined (for example through byelaws or a General Direction) (See note in section 7.2.1 below);
- It should be made clear that the Authority remains a CHA, and will consider the re-introduction of pilotage, should future demand and risk assessment justify the issuing of new Directions; and
- The new status should be clearly and publicly promulgated a suggested text (used by another UK Harbour Authority taking a similar approach to pilotage) is as follows: "The Broads Authority is a Competent Harbour Authority (CHA) and has the authority to require pilotage. The Authority assesses the risk of the movement of shipping into and out of the harbour. With no large commercial traffic, there are no extant pilotage directions and any movements will be assessed on an individual basis".

7.2.1 Open Port Duty

A possible objection to this recommended option is the often quoted "Open Port Duty" which applies to Harbour Authorities by virtue of the Harbours, Docks and Piers Clauses Act 1847.

Section 33 of that act states that "Upon payment of the rates made payable by this and the special Act, and subject to the other provisions thereof, the harbour, dock, and pier shall be open to all persons for the shipping and unshipping of goods, and the embarking and landing of passengers".

This clause is often taken to mean that a harbour must allow any vessel access under any circumstances – but clearly other constraints are in place, not least the facilities that the harbour can offer in terms of available berths and channel depths and dimensions.

It is therefore not only acceptable, but necessary to give clear guidance with regard to the maximum size of vessels a port can accept, and for the Broads this could be achieved through amendment to existing vessel dimension byelaws, or the issue of a General Direction (both of which would require consultation).

However, it is recommended that external and specialist legal advice be taken on these matters, especially as it is not certain that this section if the HDPC act applies to the Broads Authority.

8 **RECOMMENDATIONS**

Taking in to account the current and expected future traffic profile of the Broads Navigation Area, and the result of the navigation risk assessment forming Section 6 of this document, the following recommendations are made to the Authority:

- Engage with Great Yarmouth Port Authority to confirm whether providing pilotage under a joint arrangement is feasible;
- Assuming the above is not an option, undertake a full review of the MSMS to document formal arrangements for the discontinuation of any form of pilotage, while still maintaining the status of a Competent Harbour Authority;
- Seek specialist marine legal advice to support the above review, including amending Vessel dimension byelaws, or issuing a General Direction;
- Clarify the procedures which will be followed (based on full risk assessment) should any vessels of greater size than defined in the revised byelaws / Directions wish to enter the navigation area.

Alternatively, if there is no appetite for maintaining CHA status:

• Give consideration to the formal removal of CHA powers by application to the Secretary of State.

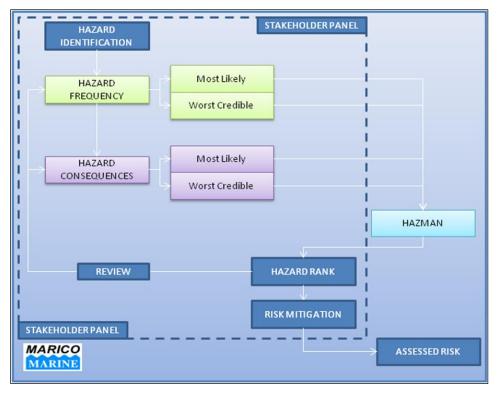


Annex A Risk Assessment Methodology



Risk Assessment Methodology

This Navigation Risk Assessment (NRA) identifies possible mitigation measures, where appropriate, and makes recommendations. The process starts with the identification of all potential hazards. It then assesses the likelihood (frequency) of a hazard causing an incident and considers the possible consequences of that incident. It does so in respect of two scenarios, namely the "most likely" and the "worst credible". The quantified values of frequency and consequence are then combined using the Marico HAZMAN II software to produce a Risk Score for each hazard. These are collated into a "Ranked Hazard List" from which the need for possible additional mitigation may be reviewed.

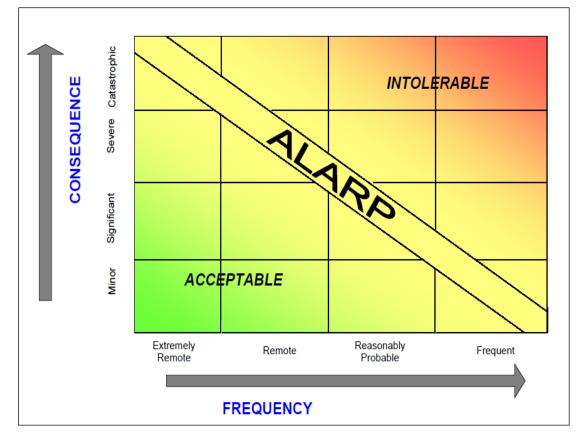


Marico Marine hazard identification process

Criteria for Navigation Risk Assessment

Risk is the product of a combination of consequence of an event and the frequency with which it might be expected to occur. In order to determine navigational risk a Formal Safety Assessment (FSA) approach to risk management is used. International Maritime Organisation (IMO) Guidelines define a hazard as *"something with the potential to cause harm, loss or injury"*, the realisation of which results in an accident. The potential for a hazard to be realised can be combined with an estimated or known consequence of outcome. This combination is termed *"risk"*. Risk is therefore a measure of the frequency and consequence of a particular hazard.





General risk matrix

The combination of consequence and frequency of occurrence of a hazard is combined using a risk matrix (see above), which enables hazards to be ranked and a risk score assigned. The resulting scale can be divided into three general categories:

- Acceptable;
- As Low As Reasonable Practicable (ALARP); and
- Intolerable.

At the low end of the scale, frequency is extremely remote and consequence minor, and as such the risk can be said to be "acceptable", whilst at the high end of the matrix, where hazards are defined as frequent and the consequence catastrophic, then risk is termed "intolerable". Every effort should be made to mitigate all risks such that they lie in the "acceptable" range. Where this is not possible, they should be reduced to the level where further reduction is not practicable. This region, at the centre of the matrix is described as the ALARP region. It is possible that some risks will lie in the "intolerable" region, but can be mitigated by measures, which reduce their risk score and move them into the ALARP region, where they can be tolerated, albeit efforts should continue to be made when opportunity presents itself to further reduce their risk score.



Hazard Identification

Hazard identification is the first and fundamental step in the risk assessment process. In order to ensure that the process was both structured and comprehensive, potential hazards were reviewed using the incident categories identified as being relevant to this study:

- Collision
- Grounding; and
- Contact.

Risk Matrix Criteria

As indicated earlier, frequency of occurrence and likely consequence are both assessed for the "most likely" and "worst credible" scenario. Frequencies and consequences of occurrences were assessed using the same criteria as adopted by Dorset Council for other harbour assessments for consistency.

Frequency was assessed according to the levels set out in the table below.

Frequency criteria

Scale	Description	Operational Interpretation
F5	Almost Certain	More than once a month
F4	Likely	More than once in 6 months
F3	Possible	Once per year
F2	Unlikely	Less than once in 10 years
F1	Rare	Less than once in 100 years

Using the assessed notional frequency for the "most likely" and "worst credible" scenarios for each hazard, the probable consequences associated with each are assessed in terms of damage to:

- People
- Property
- Environment
- Business (Adverse publicity, impact on normal business activities and reputation)

The magnitude of each is then assessed using the consequence categories given in the table below.



Consequence Categories and Criteria.

Cat.	People	Property	Environment	Business			
	Negligible						
C1	Very minor injury (e.g. bruising). Very minor damage to property. No effect of note. Tier 1 may be declared but criteria not necessarily met.		Very short-term disruption to services (1- 2hrs) with ensuing loss of revenue.				
		Costs <£10k	Costs <£10k	Costs <£10k			
	Minor						
C2	Single minor injury.	Minor damage to property.	Tier 1 – Tier 2 criteria reached. Small operational (oil) spill with little effect on environmental amenity.	Adverse local publicity. Short-term loss of revenue including minor disruption to commercial activities (<1 day).			
		Costs £10k –£100k	Costs £10K–£100k	Costs £10k – £100k			
	Moderate						
C3	Multiple minor or single major injury.	Moderate damage to property.	Tier 2 spill criteria reached but capable of being limited to immediate area within area.	Adverse regional publicity. Temporary suspension of commercial activities and/or prolonged restrictions (1≥7 days).			
		Costs£ 100k - £1M	Costs £100k -£1M	Costs £100k - £1M			
	Major						
C4	Multiple major injuries or single Major damage to property.		Chemical spillage or small	Adverse national publicity. Medium-term suspension of operations or prolonged restrictions, major disruption to commercial activities.			
		Costs £1M -10M	Costs £1M - £10M	Costs £1M -£10M			
	Catastrophic						
C5	Multiple fatalities	Catastrophic damage to property.	Tier 3 oilspillcriteriareached.Internationalsupportrequired.Widespreadshorelinecontamination.Seriouschemical orgasSignificantthreattoenvironmental amenity.	Adverse international publicity. Long-term suspension of operations, prolonged restrictions, and/or termination of commercial activities.			
		Costs>£10M	Costs >£10M	Costs >£10M			

131



Hazard Data Review Process

Frequency and consequence data are assessed for each hazard for both most likely and worst case scenarios.

Having decided in respect of each hazard which frequency and consequence criteria are appropriate for the five consequence categories in both the "most likely" and "worst credible" scenarios, ten risk scores are obtained using the following matrix (see below).

	Frequency	Rare	Unlikely	Possible	Likely	Almost Certain
	Cat 1	0	0	0	0	0
Cons	Cat 2	1	2	2	3	6
Consequences	Cat 3	3	3	4	6	8
nces	Cat 4	4	5	6	7	9
	Cat 5	5	6	7	8	10

Risk factor matrix used for hazard assessment.

Where:

Risk Number	Risk
0 to 1.9	Negligible
2 to 3.9	Low Risk
4 to 6.9	As Low as Reasonably Practical
7 to 8.9	Significant Risk
9 to 10.0	High Risk

It should be noted that occasionally, a "most likely" scenario will generate a higher risk score than the equivalent "worst credible" scenario; this is due to the increased frequency often associated with a "most likely" event. For example, in the case of a large number of small personal injuries, the total number of accidents might be of greater significance than a single fatality at a lesser frequency.



Hazard Ranking

The risk scores obtained from the above process are then analysed further to obtain four indices for each hazard as follows:

- The average risk score of the four categories in the "most likely" set;
- The average risk score of the four categories in the "worst credible" set;
- The maximum risk score of the four categories in the "most likely" set; and
- The maximum risk score of the four categories in the "worst credible" set.

These scores are then combined in Marico Marine's hazard management software "HAZMAN II" to produce a single numeric value representing each of the four indices. The hazard list is then sorted in order of the aggregate of the four indices to produce a "Ranked Hazard List" with the highest risk hazards prioritised.



Annex B Risk Data



Residual Risk Data: 23UK1953 Broads Pilotage Review

					Consequence Descriptions					Risk	By Co	onsequ	ence (Catego	ory			
								-	ML	_	_				WC			
Rank	Ref	Accident Category	Hazard Title	Possible Causes	Most Likely (ML)	Worst Credible (WC)	Frequency	Environment	People	Property	Reputational		Frequency	Environment	People	Property	Reputational	Risk Overall
1	5	Collision	Commercial vessel greater than 20m collides with a leisure / fishing / workboat /vessel carrying more than12 pax in CHA area	Avoidance of 3rd party vessel; Restricted visibility; communication difficulties; severe weather; mechanical failure; equipment failure; navigation error; failure to observe COLREGs; failure to keep a proper lookout; persons navigating under influence of drugs/alcohol; unlit vessel;	Negligible environmental impact; multiple minor or single major injury; minor damage to commercial, moderate to smaller vessel; Adverse regional publicity.	Minor environmental impact; multiple fatalities; minor damage to commercial, major to smaller vessel; Adverse international publicity.	3	1	3	2	3		2	2	5	4	5	4.34
2	3	Collision	Commercial vessel greater than 20m collides with a leisure / fishing / workboat /vessel carrying 12 or less pax in CHA area	Restricted visibility; communication difficulties; severe weather; mechanical failure; equipment failure; navigation error; failure to observe COLREGs; failure to keep a proper lookout; persons navigating under influence of drugs/alcohol; unlit vessel;	Negligible environmental impact; multiple minor or single major injury; minor damage to commercial, moderate to smaller vessel; Adverse regional publicity.	Minor environmental impact; multiple major injury or single fatality; minor damage to commercial, major to smaller vessel; Adverse national publicity.	3	1	3	2	3		2	2	4	4	4	3.94
3	10	Contact	Commercial vessel greater than 20m contacts harbour infrastructure (Quay, fixed navigation aid etc.)	severe weather; mechanical failure; equipment failure; navigation error; Inaccurate hydrographic information; persons navigating under influence of drugs/alcohol;	(Contact with a pile / nav aid or jetty). Negligible environmental	(Contact with a pile / nav aid or jetty). Tier 1 oil spill (minor); Single minor injury, moderate damage (to vessel and quay),	4	1	1	2	1		3	2	2	3	3	2.78
4	1	Collision	Commercial vessel greater than 20m collides with another commercial vessel underway within CHA area	Avoidance of 3rd party vessel; Restricted visibility; communication difficulties; severe weather; mechanical failure; equipment failure; navigation error; failure to observe COLREGs; failure to keep a proper lookout; persons navigating under influence of drugs/alcohol; unlit vessel;	Negligible pollution, Minor injury, Minor damages, adverse local publicity.	Tier 2 pollution; Multiple minor injuries or single major; Moderate damage to both vessels; Adverse Regional publicity.	2	1	2	2	2		1	3	3	3	3	2.22
5	7	Grounding	Commercial vessel greater than 20m grounds in CHA area	Avoidance of 3rd party vessel; Restricted visibility; communication difficulties; severe weather; mechanical failure; equipment failure; navigation error; uncharted obstruction; Inaccurate hydrographic information; persons navigating under influence of drugs/alcohol;	Negligible environmental effects, negligible injuries, negligible costs, negligible publicity	Tier 2 pollution (moderate), very minor injuries, major property losses, adverse regional publicity.	4	1	1	1	1		2	3	2	4	3	1.85



Navigation Committee

11 January 2024 Agenda item number 12

Boat Safety Management Group

The Port Marine Safety Code Safety Management System: Stakeholder Hazard Review 2023 Report by Head of Safety Management

Purpose

The report details the outcome of the Safety Management System Stakeholder Hazard Review.

Broads Plan context

Theme C4 – Maintain & improve safety and security standards & user behaviour on the waterways.

Recommendation:

To note the report.

Contents

1.	Introduction	1
2.	Background	2
3.	The Risk Assessment Process	2
4.	Review Meeting	3
5.	Summary of Changes	3
6.	Updated Hazard Log	5
7.	Recommendations and Conclusions	6

1. Introduction

1.1. The Broads Authority, as a Competent Harbour Authority under the Pilotage Act 1987, is required to comply with the duties and responsibilities set out in the Port Marine Safety Code (PMSC).

136

1.2. The Code requires that all harbour authorities base their powers, policies, plans and procedures on a Formal Safety Assessment (FSA) and that they maintain a Safety Management System (SMS) to ensure that risks are reduced to a level which is as low as reasonably practicable (ALARP).

2. Background

- 2.1. In May 2003, the Broads Authority undertook a detailed Formal Safety Assessment (FSA) which identified 28 hazards and proposed risk reduction measures. The outcome of the Assessment was documented in a Hazard Log.
- 2.2. In 2007, the Authority published a Safety Management System (SMS) to meet the needs of the PMSC. There have been several updates over the years, the current version is issue 7. (The SMS is currently under review and upon completion shall be presented to the Navigation Committee in April 2024). The SMS recommended that the Hazard Log be reviewed by a stakeholder group every three years and for the log to be kept under constant review by officers and the Boat Safety Management Group.
- 2.3. The previous stakeholder review was in March 2019 at the Broads Authority Dockyard, Norwich. A report was brought to this committee in June 2019 and an update on the actions from that review is set out in Appendix 1.
- 2.4. The objective of this report is to document the process by which the hazards were reviewed and updated and to present a summary of significant changes to the hazards.

3. The Risk Assessment Process

- 3.1. The PMSC guidance recommends that each scenario (hazard) be assessed against the likelihood and impact of four categories. The four categories are:
 - People,
 - property (assets),
 - Environmental and
 - Port Business (Reputation)
- 3.2 To manage this process, the authority used software that was used for the previous review.
- 3.3 The Stakeholder group reviewed the scenario for each hazard; both for the worst-case outcome and the most likely outcome and scored against each of the four categories in terms of the likelihood of any scenario occurring and the severity of any such an event. Following the assessment an overall numerical score was generated for the hazard.
- 3.4 The method by which this assessment is carried out, and the definitions of the probability, severity, and risk classification, are set out in Appendix 2.

4. Review Meeting

4.1. The Stakeholder Hazard Review was held on 5th October 2023 at Broads Authority Dockyard, Norwich. The meeting brought together a group of suitably qualified and experienced people to discuss and update the hazards. The list of invitees and their attendance are shown below.

Name	Representing	Attended (Y/N)	
James Buck	Peel Ports	N	
Robbie Bell	Y		
Colin Dye	BHBF	N	
Tony Howes	BHBF	Y	
Jonathan Myers	Norwich Rowing Club	N	
Jackie Kilbourn	Norwich Rowing Club	N	
Anthony Trafford	British Marine Federation	N	
Ben Falat	NSBA	Y	
Robert Middleton	NSBA	N	
Clive Edwards	NSBA	Y	
Tony Urwin	Tony Urwin Bank Boats & Canoe Hire		
Bill Dickson	Broads Authority – Chairperson	Y	
	(attending on behalf of Alan Goodchild		
	chairperson for Nav Comm & BSMG)		
Rob Rogers	Broads Authority – Director of Operations	Y	
Linda Ibbitson-Elks	Broads Authority – Head of Safety Management	Y	
Emily Leonard	Broads Authority – Waterways Project Officer	Y	
Sue Stephenson	Broads Authority – Ecology & Design Supervisor	Y	
Sonja Edgar	Broads Authority – Administrative Officer	Y	
Dan Hoare	Broads Authority – Head of Construction &	Y	
	Maintenance		
Andy Ellson	Broads Authority – Senior Ranger (Northern	Y	
	Teams)		
Chris Morphew	Broads Authority – Senior Ranger (Southern	Y	
	Teams)		

4.2. The objective of the meeting was to review all the hazards, capture updates, recategorise against the new requirements and to identify any new hazard or omission. The attendance of a cross-section of interested parties allowed the hazard assessments and mitigating action to be agreed.

5. Summary of Changes

5.1. Table 2. below provides an overview listing all 52 hazards, new hazards are marked in yellow shading.

	Review Date	ID	Scenario Name	Risk Score	
M	21/08/2024	NS0059	Diving (Scuba)	5.31	\bigcirc

	09/10/2024	EP0006	Boat wash: Powered craft speeding creating excess wash	4.06	\sim
≊ √	09/10/2024	CM0041	Other crisis management: Mass Fish Kill	4.38	×
	09/10/2024	CM0041	Shoreside environmental: Fire	3.38	×
• •	09/10/2024	CM0051	Shoreside environmental: Giant Hog Weed and other hazardous species	3.75	X
- -	09/10/2024	CM0052	Shoreside user activity: Motorised Vehicles and Bicycles	2.44	×
- -	09/10/2024	CM0053	Shoreside environmental: Trees and Vegetation	3.38	X
* •	09/10/2024	CM0033	Other crisis management: Water borne diseases	3.69	×
* •	09/10/2024	EP0039	Water pollution: Cargo	3.81	×
* •	09/10/2024	EP0037	Other environmental: Carbon Monoxide poisoning	4.81	×
	09/10/2024	EP0038	Impacts on Wildlife / Habitats: Non-Native invasive species	5.38	X
* •	09/10/2024	NS0025	Contact with structure: Natural obstructions to navigation - vegetation	2.81	ł
× √	12/10/2024	NS0025	Other nautical safety: Event management open water swimming events	2.56	F
×	12/10/2024	NS0013	Collision: Collision with Dredging and River Maintenance Works	2.30	×
_	12/10/2024	NS0027		5.56	×
₹ √	12/10/2024	NS0029 NS0019	Other nautical safety: Extreme Weather Other nautical safety: Boat embarkation and disembarkation	5.06	2
√	15/10/2024	CM0014	Members of public: Swimming	3.5	20
∎ ∠	15/10/2024	NS0033	Other nautical safety: Wild Fowling (Gun Punting))	1.94	X
∎ ∠	15/10/2024	CM0056	Shoreside environmental: Adverse Weather	2	X
√	15/10/2024	CM0056		4.13	×
_	15/10/2024	NS0020	Other crisis management: Medical emergencies	2.81	×
√	15/10/2024	CM0050	collision: Sailing Yachts/Dinghies horeside environmental: Litter and fly tipping		
_			onoreside environmental: Litter and ity tipping Other nautical safety: Passage of Gt. Yarmouth & Breydon Water		
×	15/10/2024	NS0026		4.25	X
M.	15/10/2024	NS0034	Collision: Rowing coaching vessels	2.81	
∎ ∕	15/10/2024	NS0024	Collision: Boat testing / demonstrating at high speed	3.56	
∎ ∕	15/10/2024	NS0010	Other nautical safety: Event Management of Sailing Racing Event	4	
M	15/10/2024	NS0018 NS0005	Collision: Waterskiing and Wakeboarding	1.75 4.13	
M	15/10/2024		Collision: Powered craft		
M	15/10/2024	NS0008	rounding/Stranding: Recreation vessel grounding		
M	15/10/2024	NS0011	Other nautical safety: Event management of unpowered vessel racing event, rowing/paddling	2.94	
M	15/10/2024	CM0054	Shoreside user activity: Fall from height	4.13	\mathbf{C}
•	15/10/2024	CM0057	Shoreside infrastructure: Slips trips and falls	3.5	C
1	15/10/2024	NS0043	Collision: non-powered vessel - paddleboard, canoe, rowing skiff	4.44	C
•	15/10/2024	NS0021	Capsizing/Listing: Capsizing of unpowered recreational craft	3.94	C
•	15/10/2024	NS0036	Fire/Explosion: Any vessel	6	
₹	15/10/2024	NS0017	Other nautical safety: Powerboat Racing	3.81	C
4	15/10/2024	NS0007	Collision: Collision with recreational craft and hire vessel		C
4	15/10/2024	NS0004	Collision: Commercial ferry and a recreational vessel		C
4	15/10/2024	NS0003	Collision: Commercial vessel and a recreational vessel		Ō
4	15/10/2024	CM0046	Shoreside Infrastructure: Countryside furniture and structures		Ō
1	15/10/2024	CM0048	Shoreside user activity: Angling		Ō
•	15/10/2024	PE0044	Port Infrastructure Delay: Mutford Lock	4	Õ
•	15/10/2024	NS0016	Contact with structure: Other bridges & layby moorings	4.25	Õ
1	15/10/2024	NS0012	Other nautical safety: Angling	3.06	Ō

M	15/10/2024	NS0013	Contact with structure: Potter Heigham and Wroxham low bridges		\bigcirc
M	15/10/2024	NS0042	Contact with floating object: Large volume of floating debris	3	\bigcirc
M	15/10/2024	NS0009	Contact with structure: Recreational vessel contact with mooring or infrastructure		\bigcirc
M	15/10/2024	CM0055	Shoreside environmental: Ground conditions		\circ
M	15/10/2024	CM0045	Shoreside infrastructure: Power Lines		\circ
M	16/10/2024	CM0047	Shoreside environmental: Livestock in Fields		\circ
M	29/11/2024	NS0060	Other nautical safety: Foil boards (Foiling) and boats		\bigcirc
M	29/11/2024	NS0061	Other nautical safety: Remote Operated Vehicles (ROVs)	2.38	\circ

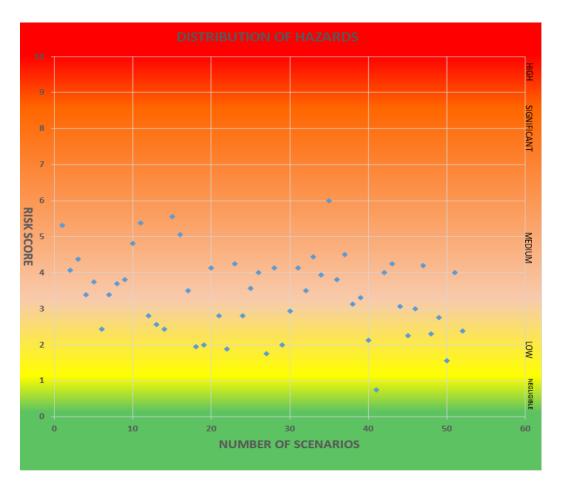
5.2. The Table below shows Hazards which have been declared dormant. All hazards are managed to an 'as low as reasonably practicable' level.

	Review Date	ID	Scenario Name		
M		NS0035	Collision: Trawling on Breydon Water		\bigcirc
M		NS0030	Collision: Kite Surfing		$\overline{\mathbf{O}}$
×		NS0031	Collision: Ringos and inflatable equipment capable of carrying persons towed at speed		\circ
M		NS0032	Other nautical safety: Punting (Skippered)	1.25	\bigcirc
M		NS0040	Other nautical safety: Water plants, Hickling Broad	2.25	\bigcirc

NB: The Hazard NS0040 – Water plants Hickling Broad has been merged with NS0023 – Natural Obstruction to Navigation – Vegetation.

6. Updated Hazard Log

6.1 The graph below shows the distribution of the hazards and how the vast majority have been assessed with the control measures and mitigations, to be low to medium risks, and demonstrating that we currently have no high or significant risks.



- 6.2 The 2019 Hazard Review Action Plan update is set out in Appendix 1.
- 6.3 The Boat Safety Management Group will monitor the progress of the Hazard Review Action Plan (Appendix 3) and updates will be brought to this committee as appropriate.
- 6.4 The Broads Authority Safety Management System (SMS) will be updated to include the reviewed Hazard Log.

7. Recommendations and Conclusions

- 7.1 The review of the Hazard Logs by the Boat Safety Management Group (BSMG) concluded that of the 52 active hazards, 52 have been declared 'as low as reasonably practicable' (ALARP).
- 7.2 The Safety Team would like to conclude this hazard review by thanking the BSMG members for their time and expertise spent reviewing the hazards and for their continued support and input into the safety management of the Broads.

Author: Linda Ibbitson-Elks

Date of report: 12 December 2023

<u>Broads Plan</u> strategic objectives: Theme C4 – Maintain & improve safety and security standards & user behaviour on the waterways.

6

Appendix 1 – 2019 Hazard Review Action Plan – Update

Appendix 2 – Risk Categories and Criteria

Appendix 3 – 2023 Hazard Review Action Plan

Appendix 1 – 2019 Hazard Review Action Plan- Update

Hazard		Description	Action	Responsible	Target	Progress to Date	Completed
Cat	No.			Officer	Complaint Date		
Med	NS0003	Collision: Commercial vessel and a recreational vessel	Develop General Direction to all commercial vessels over a certain size to require notification, escort, and pilot.	LB	Dec 2019	Special Directions apply on a case-by-case basis.	Dec 2019
Med	NS0007 and NS0043	Collision: Collision with recreational craft and hire vessel; and Collision: Non- powered vessel – paddleboard, canoe, rowing skiff.	Update Hire Boat Licensing to include unpowered boats including sail following release of the National Hire Boat Code	Head of Safety Management	April 2020	The Code for the Design, Construction & Operation – Version 2 came into effect on 1 st January 2022 and made mandatory under the Broads Authority Hire Boat Licensing conditions.	Jan 2022

Appendix 2 – Risk Categories and Criteria

	People	Environment	Property	Business/Reputation
5	Multiple fatalities	Major (Has the potential to cause catastrophic and/or widespread damage - Tier 3, requires major external assistance)	Major (> £10 million)	Major (National media coverage, Significant change in stakeholder confidence, Impact lasting more than three months, attracts regulators attention /comment, Major Business disruption and impact)
4	Single fatality	Significant (Has the potential to cause significant damage and impact - Tier 2, pollution control measures from external organisations required)	Serious (£1m - £10m)	Serious (Local, regional media coverage, Moderate change in stakeholder confidence, Impact lasting between one and three months, Moderate business disruption
3	Serious injury(s) (MAIB/RIDDOR reportable injury)	Minor (An incident that results in pollution with limited/local impact - Tier 1, Harbour Authority pollution controls measures deployed)	Moderate (£100,000 - £1m)	Moderate (Negative local publicity. Moderate damage to reputation. Moderate loss of revenue, £750,000 - £4m)
2	Minor injury(s)	No Measurable Impact (An incident or event occurred, but no discernible	Minor (£0- £100,000)	Minor (Local complaint/recognition, Minimal change in stakeholders 'confidence, impact

		environmental impact - Tier 1 but no pollution control measures needed)		lasting less than 1 week. Minor business disruption)
1	No injury	None (No incident - or a potential incident/near miss)	None	None

Likelihood	
Very Unlikely	1:50 years
Unlikely	1:25 years
Occasionally	1:10 years
Probably	1:5 years
Likely	> 1 per year

Appendix 3 – Hazard	d Review Action Plan
---------------------	----------------------

No.	Description	Action	Responsible	Target	Progress to Date	Completed
			Officer	Date		
1.	Error found on the software hazard	BA to develop improved systems to	HOSM	2025		
	review paperwork.	record, review and monitor data.				
2.	Ensure Stakeholders are placed in groups where they have specific knowledge, experience, and interest in a particular hazard scenario.	BA to ensure future hazard reviews are organised to consider stakeholders particular experience, knowledge and interest when selecting hazards to be	HOSM	2026		
		reviewed.				



11 January 2024 Agenda item number 13

2023/24 Health and Safety Review and Internal Audit Recommendations following review

Report by Head of Safety Management

Purpose

To present the annual review of marine incidents 2022/2023 and the recommended annual safety audit programme for 2023/2024.

Broads Plan context

4.3: Implement, promote, and monitor measures to maintain and improve safety and security for the navigation and boats.

Recommendation

To note the report.

1. Annual marine incidents

- Appendix 1 gives details of the marine incidents reported during the period of April 2023 to 4 December 2023, including an analysis of deaths and personal injury since 1995.
- 1.2. The Authority continues to highlight the importance of personal responsibility within safety publications. Rangers continue to educate boat users on key safety messaging at Super Safety Events and when observing issues whilst patrolling the waterways.
- 1.3. Notable points from the 2023/24 reported incidents:
 - 3 reported fatalities, which were not related to boating.
 - 9 reported incidents to persons inadvertently entering the water, which is a vast improvement from the previous safety report.
 - Boat fires continue to remain low level, as in previous years.
- 1.4 The number of members of the public inadvertently entering the water is a vast improvement from the previous report. Contributory factors to this improved statistic are the authorities and partners reinforcing the safety messaging of personal

awareness, a slow and steady speed on approach to the mooring, using provided grab rails and wearing of a life jacket when mooring and moving around a vessel.

- 1.5 The licensing of non-powered hire craft was introduced in 2023/24 which required the operators to provide a formal handover and an 'in-water' trial to all hirers. Paddle sports is a growing trend in our waters and an area where more safety education is needed; we intend to work closer with British Canoeing in 2024/25 on safety messaging and educational material for users.
- 1.6 The Hire Boat Licensing Officer carried out a series of 'Spot Checks' during the summer season to ensure that hire boat operators were complying with the licensing requirements and monitored handovers and 'in-water' trials. These seasonal checks will continue in the 2024/25 season.

2. Annual internal safety audit programme 2023/24

2.1. The Head of Safety Management has identified three internal safety audits, set out in Table 1 below, to be carried out in the coming year. This programme is to ensure that the Broads Authority's Safety Management System is working effectively and to introduce changes as deemed necessary to maintain and improve the current standards of safety.

Table 1

Internal audit	Aims and objectives
Port Marine Safety Code (PMSC)	To carry out PMSC awareness training to new staff and roll out refresher training throughout the year, following amendments to the Code from the Pilotage review.
Safety Management Systems (SMS)	To ensure that there is a consistent approach in the compliance of our SMS across all disciplines of the Authority.
Broads Authority plant and equipment use	To audit all safety processes to determine that suitable and sufficient control measures are in place to help reduce the risk of accidents and incidents. This is required following the new plant and equipment purchased under the DEFRA Capital Grant.

Internal safety audit programme 2023/24

Author: Linda Ibbitson-Elks

Date of report: 11 December 2023

<u>Broads Plan</u> strategic objectives: Broads Plan Theme C4 – Maintain and improve safety and security and user behaviours on the waterways.

Appendix 1 – Annual safety audit 2023

Boat Safety Management Group

Safety Audit 2023 Report

Report by Head of Safety Management

Summary:	This report gives details of the incidents reported during 2023 from
	April 2023 to December 2023

1 Introduction

1.1 The reporting period is from 1 April 2023 to 4 December 2023. The report is limited to the Broads Authority's area of marine responsibility. Notable incidents are listed below.

2 Summary of Incidents Reported

2023	Incident Details	Hazard Log Category
6/4/23	Suspected heart attack on hire cruiser at GYYS	Illness
9/4/23	Person hit head on Ludham Bridge while passing under	Injury
16/4/23	Person dislocated shoulder when fell on hire cruiser as mooring at Acle Bridge	Disembarkation
18/4/23	Person injured arm while mooring hire cruiser at Hoveton Great Broad	Disembarkation
30/4/23	Person injured ankle while mooring at Ranworth Island	Disembarkation
2/5/23	Person sustained minor injuries when fell in at Ranworth	Fallen in
6/5/23	Person injured hip when jumped from boat at Acle while mooring	Disembarkation
11/5/23	Person injured when fell aboard hire cruiser moored at Oulton Broad	Injury
11/5/23	Person injured when fell from hire cruiser at Acle Bridge	Fallen in

20/5/23	Child injured finger when trapped in door aboard hire cruiser	Injury
11/6/23	Person fell in from hire cruiser at GYYS	Fallen in
20/6/23	Person sustained head injury when fell onto quay at GYYS while embarking hire cruiser	Embarkation
21/6/23	Person sustained head injury when fell from moored hire cruiser at Loddon staithe	Disembarkation
24/6/23	Person injured when fell from hire cruiser at Acle Bridge	Disembarkation
30/6/23	Fatality on board hire cruiser moored at Barnes Brinkcraft	Fatality
11/7/23	Fatality following capsize of vessel near North Cove.	Fatality
13/7/23	Person fallen in at S Walsham	Fallen in
5/8/23	Boat fire at Sabena Marine	Fire
13/8/23	Person injured when fell on board cruiser at Acle	Injury
27/8/23	Person cut leg on mooring post while disembarking at Horning Marshes	Disembarkation
13/9/23	Person injured while disembarking hire cruiser at St Benets	Disembarkation
14/9/23	Vessel on fire and later sunk at moorings in Norwich. No persons on board	Fire/sinking
2/10/23	Person found deceased on board vessel at Neatishead	Fatality
3/10/23	Explosion and subsequent sinking of private cruiser on Oulton Broad	Explosion/sinking
3/10/23	Person injured hip falling on board hire cruiser at Ranworth	Injury

TABLE 1Analysis of Death/Injuries Since 1997

reported as requiring hospital treatment 4 1 3 2 1 1 1 3 1 1 5 3 3 1 3 3 2 7 3 4 5 3 1 4 Head 4 1 3 2 1 1 1 1 5 3 3 1 3 3 2 7 3 4 5 3 1 4 Arm/hand 6 0 0 1 3 1 1 6 4 1 4 4 2 4 1 0 3 4 6 7 5 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 6 4 3 4 9 8 8 11 9 12 6 1 6 1 1 1 1 1 1 4 3 0 2 4 2 0 2 2 <th></th> <th>1997</th> <th>1998</th> <th>1999</th> <th>2000</th> <th>2001</th> <th>2002</th> <th>2003</th> <th>2004</th> <th>2005</th> <th>2006</th> <th>2007</th> <th>2008</th> <th>2009</th> <th>2010</th> <th>2011</th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> <th>2022</th> <th>2023</th>		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
or from boats i <	Death																											
nor related to boating i		1	3	2	1	3	2	6	0	0	2	0	0	0	2	4	2	0	2	1	5	1	2	1	5	3		3
Severe injury 0 <	not related to	2	1	4	4	2	3	1	0	7	2	1	1	3	3	3	8	2	5	4	2	1	2	2	1	2	1	1
Heart Attack 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 1 0 1 <t< td=""><td>Cause of death</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Cause of death																											
Drowning 0 4 5 1 3 3 5 0 4 3 0 0 1 3 2 0 5 3 0 0 3 2 3 0 0 3 2 3 0 0 3 2 1 3 2 0 5 3 0 0 3 2 3 0<	Severe injury	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0		
Asphyxiation/CO 1 0	Heart Attack	0	0	1	1	0	1	0	0	0	1	0	1	2	2	1	5	0	1	1	3	1	1	1	0	1	1	1
poisoning Image: state in the state i	Drowning	0	4	5	1	3	3	5	0	4	3	0	0	0	1	3	2	0	5	3	0	0	3	2	3	0		1
Not Known 2 0 0 1 0 2 0 3 0 1 0 1 2 2 0 0 1 0 0 1 3 1 Reports of people inadvertently entering in the water See footnote. 4 8 2 5 1 4 15 16 12 23 29 17 34 20 17 18 12 22 19 21 12 23 17 24 11 entering in the water See footnote. 8 7 9 8 7 7 18 2 4 13 12 11 22 30 17 15 19 14 13 30 36 49 33 35 35 19 No of persons requiring hospital treatment 7 9 8 7 7 18 2 4 13 12 11 22 30 17 15 19 14 13 30 36 49 33 35 35 19 He		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0		
Reports of people indvertently entering in the water See footnote. 4 8 2 5 1 4 15 16 12 23 29 17 34 20 17 18 12 22 19 21 12 23 17 27 24 11 No of persons reported as requiring hospital treatment 8 7 9 8 7 7 18 2 4 13 12 11 12 23 17 17 27 24 11 Mo of persons requiring hospital treatment 8 7 9 8 7 7 18 2 4 13 12 11 12 23 17 18 13 30 36 49 33 35 35 19 Head 4 1 3 1 1 3 1 1 5 7 7 8 3 6 4 3 3 2 7 3 4 5 3 3 1 3 3 2 <td>Terminal Illness</td> <td></td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td></td> <td>1</td>	Terminal Illness															1	0	0	0	0	0	0	0	0	0	1		1
inadvertently entering in the water See footnote. 4 8 2 5 1 4 15 16 12 23 29 17 34 20 17 18 12 22 19 21 12 23 17 27 24 11 water See footnote. No of persons reported as requiring hospital treatment 8 7 9 8 7 7 18 2 4 13 12 11 12 23 17 27 24 11 No of persons reported as requiring hospital treatment 8 7 9 8 7 7 18 2 4 13 12 11 12 23 17 15 19 14 13 30 36 49 33 35 35 19 Head 4 1 3 1 1 5 3 3 1 3 3 2 4 1 0 1 6 4 1 4 4 2 4 1 0 </td <td>Not Known</td> <td>2</td> <td>0</td> <td>0</td> <td>1</td> <td>0</td> <td>0</td> <td>2</td> <td>0</td> <td>3</td> <td>0</td> <td>1</td> <td>0</td> <td>1</td> <td>2</td> <td>2</td> <td>0</td> <td>0</td> <td>1</td> <td>0</td> <td>2</td> <td>1</td> <td>0</td> <td>0</td> <td>1</td> <td>3</td> <td></td> <td></td>	Not Known	2	0	0	1	0	0	2	0	3	0	1	0	1	2	2	0	0	1	0	2	1	0	0	1	3		
reported as requiring hospital treatment u <thu< th=""> u u u<td>inadvertently entering in the water See footnote.</td><td></td><td>8</td><td>2</td><td>5</td><td>1</td><td>4</td><td>15</td><td>16</td><td>12</td><td></td><td></td><td>17</td><td></td><td></td><td>17</td><td></td><td>12</td><td>22</td><td></td><td>21</td><td>12</td><td>23</td><td>17</td><td>27</td><td>24</td><td></td><td>9</td></thu<>	inadvertently entering in the water See footnote.		8	2	5	1	4	15	16	12			17			17		12	22		21	12	23	17	27	24		9
Arm/hand 6 0 0 1 3 1 1 1 0 1 6 4 1 4 4 2 4 1 0 3 4 6 7 5 2 5 Leg/foot 4 2 4 1 0 3 6 4 3 4 9 8 8 11 9 12 6 Leg/foot 4 2 4 1 1 2 2 2 1 3 7 5 7 8 3 6 4 3 4 9 8 8 11 9 12 6 Torso, ribs, back 2 0 1 4 3 0 2 4 2 0 2 2 1 5 8 2 2 6 1 Chest, back 0 0 0 0 8 10 2 2 5 1 4 6 12 13 8 10 10 3	reported as requiring hospital	8	7	9	8	7	7	18	2	4	13	12	11	22	30	17	15	19	14	13	30	36	49	33	35	35	19	15
Leg/foot 4 2 4 1 2 2 2 2 1 3 7 5 7 8 3 6 4 3 4 9 8 8 11 9 12 6 Torso, ribs, chest, back 2 0 1 1 2 0 1 4 3 0 2 4 2 0 2 2 1 5 8 2 2 6 1 Not described 0 0 0 10 2 1 4 0 0 8 10 2 2 5 1 4 6 12 13 8 10 10 3 Not described 0 0 0 1 4 0 0 8 10 2 2 5 1 4 6 12 13 8 10 10 3 7 5 7 8 3 6 4 3 4 9 8 8 10 10 10	Head	4	1	3	2	1	1	1	1	3	1	1	5	3	3	1		3		2	7	3	4	5	3	1	4	3
Torso, ribs, chest, back 2 0 1 4 3 0 2 4 2 0 2 2 1 5 8 2 2 6 1 Not described 0 0 0 0 0 10 2 1 4 0 0 8 10 2 2 2 1 5 8 2 2 6 1 Not described 0 0 0 8 10 2 2 5 1 4 6 12 13 8 10 10 3 Asphyxiated/CO 0 0 0 0 0 0 0 0 0 1 1 0 <td></td> <td>6</td> <td>-</td> <td>0</td> <td>1</td> <td>-</td> <td></td> <td></td> <td></td> <td>0</td> <td>•</td> <td>6</td> <td></td> <td>1</td> <td>-</td> <td>-</td> <td></td> <td>4</td> <td>1</td> <td>0</td> <td></td> <td>4</td> <td>-</td> <td></td> <td>-</td> <td></td> <td>-</td> <td>3</td>		6	-	0	1	-				0	•	6		1	-	-		4	1	0		4	-		-		-	3
chest, back Image: Constraint of the state of the	Leg/foot	4	2	4	1	2	2	2	2	1	3	7	5	7	8	3	6	4	3	4	9	8	8	11	9	12	6	3
Asphyxiated/CO poisoning 0 </td <td>, ,</td> <td>2</td> <td>0</td> <td>1</td> <td>4</td> <td>1</td> <td>1</td> <td>2</td> <td>0</td> <td>1</td> <td>4</td> <td>3</td> <td>0</td> <td>2</td> <td>4</td> <td>2</td> <td>0</td> <td>2</td> <td>2</td> <td>2</td> <td>1</td> <td>5</td> <td>8</td> <td>2</td> <td>2</td> <td>6</td> <td>1</td> <td>1</td>	, ,	2	0	1	4	1	1	2	0	1	4	3	0	2	4	2	0	2	2	2	1	5	8	2	2	6	1	1
poisoning I	Not described	0	0	0	0	0	0	10	2	1	4	0	0	8	10	2	2	5	1	4	6	12	13	8	10	10	3	3
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	4	0	0	0		0
	Burns/Scalds	1	4	1	1	0	2	1	0	0	1	1	0	1	2	1		1	2	0	0	0	0	0	2	1		0
	Heart attack															3	5	1	2	1	5	3	10	0	4	2		3

Footnote: Reports where someone inadvertently found themselves in the water. It does not include capsizes of sailing dinghies etc, or from any other contact water sports where entry into the water is predictable.

TABLE 2

Analysis of Fire and Explosions Since 1998

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Number of	4	6	3	4	2	2	0	n	22	8	4	4	2	3	1	1	1	0	2	2		1	2	4	0	3
incidents	4	Ь	3	4	2	2	U	2	22	ð	4	4	3	3	1	1	1	0	2	Z	5	1	2	4	0	3
Vessels involved (Private)	4	3	2	2	2	1	0	1	18	10	4	2	2	2	1	1	3	0	1	2	5	1	2	3	0	3
Vessels involved (Hire)	0	3	1	2	0	1	0	1	4	1	0	2	1	1	0	0	0	0	1	0	0	0	0	1	0	0
Prime cause LPG	2	0	1	1	0	2	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
Prime cause Petrol	1	1	0	0	1	0	0	0	1	2	0	0	0	2	1	0	1	0	0	0	1	0	0	0	0	0
Prime cause Electrical	0	0	1	1	1	0	0	1	0	1	2	2	1	1	0	0	0	0	1	0	1	0	0	1	0	1
Prime cause Other	1	5	1	2	0	0	0	1	21	4	2	2	1	0	0	0	2	0	1	2	3	1	2	3	0	2
No of vessels total loss	0	1	2	2	2	0	0	0	20	6	2	1	0	2	1	0	0	0	0	1	2	0	0	0	0	3
No of injuries from fires requiring hospital treatment	3	1	0	0	2	2	0	0	1	1	0	0	2	1	0	1	0	0	0	0	1	0	2	0	0	0
No of fatalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



11 January 2024 Agenda item number 14

Construction Maintenance and Ecology work programme progress update

Report by Head of Construction, Maintenance & Ecology, and Ecology & Design Supervisor

Purpose

To give an update on the Broads Authority's management activities to maintain public navigation, develop mooring facilities for public use and demonstrate the effective use of available resources in managing the Broads waterways.

Broads Plan context

C1: Maintain navigation water depths to defined specifications, reduce sediment input, and dispose of dredged material in sustainable and beneficial ways.

C2: Maintain existing navigation water space and develop appropriate opportunities to extend access for various types of craft.

C3: Manage water plants, riverside trees and scrub, and seek resources to increase operational targets.

C4: Maintain and improve safety and security standards and user behaviour on the waterways.

Recommendation:

To note the report.

Contents

1.	Maintaining water depths for navigation	2
2.	Maintaining safe public mooring facilities	2
3.	Water plant management	2
4.	Riverside tree management	3
5.	Channel marking	3
Appe	endix 1 – Annual dredging progress 2023-24 (April 2023 to end November 2023)	4

1. Maintaining water depths for navigation

- 1.1. The detailed breakdown in Appendix 1 gives progress and volumes for the dredging programme for 2023/24 (April 2023 to end November 2023). A total of 27,870 m³ of dredged sediment was removed from the prioritised sites. This figure represents 70% of the programmed target of 40,050 m³ for the year.
- 1.2. On the Upper Bure, dredging has started well. Work is progressing from the railway line at Hoveton and heading upstream, targeting the shoals and stretches of river where the Waterways Specification of 1.5m below mean low water level is to be met.
- 1.3. Two areas are also to be dredged on the lower Yare this financial year, at Haddiscoe Cut and a shoal near Breydon Bridge. The sediment removed from Haddiscoe Cut is to be used to fill a floodbank set-back area near Reedham Ferry.

2. Maintaining safe public mooring facilities

- 2.1. Planned work for winter 2023/24 includes repiling work at Womack Island 24-hour mooring. The open tender process has been completed, with the preferred contractor due to sign the contract in the first week of the new year. The scope of works is to replace the timber piles and renew the timber capping and waling.
- 2.2. Repairs and routine replacement of timber quay heading continues. The largest task for the Maintenance Team is to repair the section of piling and quay heading at Ranworth 24-hour mooring, which was damaged and closed off to public use earlier in the autumn. Timber refurbishment between now and the end of March 2024 is also planned for Dilham Staithe.
- 2.3. Several moorings in the northern rivers have been hit hard by high water levels (much more so than normal). This means they will need extra attention and materials to make them good for use. Our normal amount of time spent topping up aggregate and wood chip prior to the start of the season will need to be increased.

3. Water plant management

3.1. Floating pennywort can rapidly cover still and slow-moving waters and is currently present in the River Ant between Tonnage Bridge and Hunsett Mill. To keep on top of the spread of the non-native invasive plant, operational staff have spent 51 person days over 2023, removing growth of this plant wherever it has been found. This Authority staff time commitment is on top of the routine water plant cutting in the main waterways. Co-ordination of removal work between the Authority, Norfolk Non-Native Species Initiative (NNNSI), Water Management Alliance (Broads IDB) and RSPB is ongoing. Liam Smith nature recovery officer at the NNNSI is leading a funding bid and developing a web-based tool to co-ordinate removal efforts, track sightings of the plant

and help engage the public. However, greater input from a wider range of stakeholders and landowners is required, if this species is to be eradicated from the River Ant.

4. Riverside tree management

4.1. The planned winter 2023/24 tree management activity is underway. The most intense effort with the hydraulic tree shears is focussed in two areas, the River Yare near Thorpe St Andrew, and the River Bure above Hoveton Viaduct. Rangers, volunteers and contractors are also heavily involved.

5. Channel marking

5.1. Planned work for March 2024 is the replacement in Breydon Water of the wooden posts or those entirely missing, with new steel posts. The bulk of this work is planned for March 2024, with an application to extend this work into April 2024 currently lodged with Natural England.

Author: Dan Hoare, Sue Stephenson

Date of report: 11 December 2023

Broads Plan strategic actions: C1, C2, C3, C4

Appendix 1 – Annual dredging progress 2023-24 (April 2023 to end November 2023)



4

Appendix 1 – Annual dredging progress 2023-24 (April 2023 to end November 2023)

Project title Dredge site and sediment re-use location	Active Broads Authority dredging weeks completed/ planned	Planned volume removed m ³	Actual volume removed m ³	Planned annual project cost ¹	Actual project cost
River Ant					
River Ant - Wayford to Barton (Apr '23 - Jul '23)	18/17	12,230	12,920	£115,740	£112,070
COMPLETE – lower actual cost was due to slightly low	wer staff numbers needed to	achieve the tar	gets than planne	ed	
River Waveney					
Oulton Broad (Apr '23 – Sept '23)	23/16	7,600	12,490	£98,430	£121,530
COMPLETE – final costs reflect extension of time on t	his project				
River Bure					
Coltishall to Hoveton Viaduct (Oct '23 – Mar '24)	4/30	13,630	2,460	£176,510	£72,720
Planned start date delayed owing to mobilisation res	trictions. Costs so far are all	related to proje	ct planning cost	s and site set up	
River Yare					
Haddiscoe Cut (Nov '23 – Jan '24)	0/13	6,590	0	£80,630	£9,190
There will be some reduction in dredging duration on	this project owing to the ex	tension of time	at Oulton		

1 project costs include staff time for all elements (pre-works ecological mitigation, site set-up, active dredging & site restoration); BA plant; & budgetary expenditure (equipment hire, survey costs, contractor costs, mitigation works, materials & consumables etc); within the reporting period.

Navigation Committee, 11 January 2024, agenda item number 14

Project title Dredge site and sediment re-use location	Active Broads Authority dredging weeks completed/ planned	Planned volume removed m ³	Actual volume removed m ³	Planned annual project cost ¹	Actual project cost
Site restoration Hardley Flood (yet to be fully completed)	-	-	-	£8,800	£1,810
Future site preparation Survey, mitigation & set-up	_	-	-	£6,810	£4,700
Dredging support activities Maintenance of ancillary dredging kit, etc.	-	-	-	-	£16,740
Total	45/76	40,050	27,870	486,920	338,760



11 January 2024 Agenda item number 15

Integrated Access Strategy

Report by Waterways and Recreation Officer

Purpose

To update on the Stage 2 consultation of the review of the Integrated Access Strategy and set out the timetable through to the final sign-off of the adopted strategy by the Broads Authority.

Broads Plan context

E1 – Improve the integrated network of access routes and points (with easier access for people with mobility and sensory needs), linked to visitor facilities.

C4 – Maintain and improve safety and security standards and user behaviour on the waterways.

Recommended decision

To note the report.

Contents

1.	Introduction	1
2.	Summary of Responses to Principles	2
3.	Summary of Responses to Aims of the Strategy	3
4.	Summary of Responses to Objectives of the Strategy	6
5.	Consultation and IAS development timeline	7

1. Introduction

1.1. The previous (2019) Integrated Access Strategy (IAS) aimed to address the issue of access routes, including to and between land and water, and their connections to key visitor facilities and sustainable transport links. To ensure the strategy is truly integrated across the Broads, from April 2024 it will also guide mooring and de-masting

provision on the Broads waterways, as previously covered by the Authority's 2006 Mooring Strategy.

- 1.2. The scope of the IAS is to act as a framework for focussing and prioritising areas of future work, which will then in turn generate projects for new or modified forms of service delivery that will generate benefits to users. Given the breadth of access topics and the largely influencing role the Authority plays on many access work areas, the IAS scope cannot identify the detail of specific projects that will bring user benefits. The outcomes of each of the strategic objectives will generate project priorities with specific sites identified. The delivery progress against each strategic objective will be tracked via the Broads Local Access Forum and Navigation Committee, as relevant.
- 1.3. The initial Stage 1 consultation to refresh the basic assumptions of the Integrated Access Strategy took place with statutory and major stakeholder organisations as part of this five-year review. The summary of feedback from the Stage 1 consultation was reported at the November 2023 Navigation Committee meeting.
- 1.4. The Stage 2 consultation was an open public consultation on the draft IAS text and objectives. This was an opportunity for all stakeholders to comment on the focus on access for the next three years (2024/25 2026/27).
- 1.5. The Authority and officers are grateful for all the comments received towards shaping the final strategy document. Officers have considered the comments from all stakeholders as well as being mindful of the Authority's statutory obligations across a wide range of social, environmental, and financial responsibilities. The wording and emphasis of the strategy will aim to consider these responsibilities and user requirements, to maximise the accessibility within the Broads for as many users as possible.

2. Summary of Responses to Principles

- 2.1. Below are the comments we received regarding the principles of the IAS. It was commented that we should add a principle relating to safety and one relating to nature and landscape recovery with the following words suggested:
 - Safety 1: Paddle-sports, canoeing and stand-up paddleboarding will be encouraged in areas that are suitable... but discouraged on the fast-flowing rivers.
 - Safety 2: Ensuring adequate short term moorings including mast lowering and waiting moorings will be given prioritisation on the lower reaches of the rivers Yare, Bure and Waveney to meet the objective of short stay moorings at a maximum 30-minute cruising time or two miles apart.

3. Summary of Responses to Aims of the Strategy

3.1. The tables below summarise the comments submitted regarding the three themes the aims are based around: land- based access, land-to-water access, and mooring and demasting provision. The final column in Tables 1 -3 shows the officer response to the consultee's suggestion.

Aim	Comment received	Officer
number		response
	Poducing car use, even electric car use, should be a priority in	Cars not
5.3	Reducing car use, even electric car use, should be a priority in	
	designated landscapes to minimise its impact on landscapes,	prioritised.
	wildlife, and habitats. We welcome the addition of electric	Also see
	bikes to this aim.	Sustainable
		Tourism
		strategy.
5.4	Identify possible popular walks, especially from moorings,	Included
	walk them or use local knowledge base to check their	elsewhere in
	feasibility with different accessibility needs e.g. pushchairs,	the strategy
	young children, dogs etc.	objectives.
	Have signs up at moorings to identify possible walks.	
5.5	We welcome changes to 5.5 in relation to ensuring	Noted.
	responsible recreational use of the Broads.	
5.8	We support all aims in particular 5.8. We would like	Norfolk
	clarification on who is responsible for maintenance of	County
	riverside and broadside footpaths as there is much debate	Council for all
	when standards fall.	Public Rights
		of Way.
General	Give consideration to use of ferries for linkage between land	Noted. Largely
Comments	facilities in preference to new fixed bridges that would	a planning
	obstruct the navigation.	issue.

2 2	
3.2.	Table 1. Comments relating to Land-based access:

3.3. Table 2. Comments relating to Land-to-water access:

Aim	Comment received	Officer
number		response
6.1	There has been a gradual loss of formal and wild moorings	Authority
	over the past 20 years.	mooring
		length has
		increased in
		this time.
		Unauthorised
		moorings on

		private land
		are not
	Having the majority of clinways at chargeable car parks leads	encouraged. Noted.
	Having the majority of slipways at chargeable car parks leads	Noted.
	to lack of affordability for sections of society.	la alcada d
	I am keen to see more public canoe access points. The Broads	Included
	Authority should be actively promoting paddle sports as a	elsewhere in
	green option.	the strategy
		objectives.
6.2	Horning and Hoveton/ Wroxham require more moorings	Noted.
	there are currently no accessible moorings for private craft	
	when river levels are high (Wroxham).	
6.3	There is much scope to encourage bird watchers, pond-	Noted.
	dippers and, on specific stretches, anglers, with new and	
	additional platforms.	
6.4	Why just paddle craft?	Noted.
	Could current routes be extended, or currently closed routes	Rewording to
	be reopened?	6.4 required to
		define target
		areas outside
		the existing
		public
		navigation.
6.5	Fully agree, also maintain them as free moorings and not start charging.	See Aim 7.8.
6.6	We welcome the addition of the mention of cycle storage to	Noted.
	aim 6.6 to support the de-prioritisation of car travel within	
	the Broads and the support of alternative means of travel	
	where a car is not needed.	
6.8	Not sure how or why BA would support provision of public	See principle
-	boat trips. This is perhaps something for the private sector.	4.1.
General	Add safety signage and warning signs where it will be	Noted.
Comments	relevant to users.	
30111101103		

3.4. Table 3. Comments relating to Mooring and demasting provision:

7.1	We welcome the addition of detail to aim 7.1 to introduce	Noted.
	visitor charges We also raise the concern that this should	
	be done in a way where it does not raise a financial barrier to	
	access to these ancillary services for groups on lower	
	incomes.	

7.2	Very few fully electric cruisers exist, and these will need infrastructure in place before they become viable. The current electricity posts are not powerful enough to cope with the demands of a fully electric vessel. The costs are going to be huge, where will the funds come from?	Noted.
7.3	Low freeboard is only a problem in areas with large tidal range, a lot of moorings are actually too low and require raising to allow safe boarding.	Included elsewhere in the strategy objectives.
7.5	Double moorings are a no from me, and I will not accept them unless I personally know the crew, their competence and manners, I avoid stern on moorings for the same reasons.	Noted.
7.6	There should be more emphasis on this aim.	Aims in each theme will be ranked to help identify relative priority.
7.7	It seems unlikely, and possibly unnecessary to provide moorings at all four quadrants of most bridges.	Noted. See next comment.
	We wish to emphasise the importance of providing mooring for mast lowering and raising at all four quadrants of low fixed bridges. There should be more emphasis on this aim.	Noted. See previous comment.
7.8	Recommend maintaining a balance of free moorings on the Northern and Southern Rivers and that ways be developed to monitor their use.	See Aim 7.6.
7.9	It's good to ensure no net reduction of moorings, but the spatial distribution of moorings is also important.	See Aim 7.6.
7.10	We tend to agree with this policy, mainly because the tolls system could not absorb major new demands from landowners.	Noted.
	There should be more emphasis on this aim.	Noted.
7.11	Please concentrate on moorings where land access is required.	See Aim 6.2.
	Use of pontoons needs review, and greater use could be made of innovative moorings, such as floating pontoons and temporary, removable pontoons.	Included elsewhere in the strategy objectives.
	The prioritisation of value for money in mooring design may	Noted.

General	We query the removal of the aim covered by 6.3.4 of the July	Reworded and
Comments	Scoping Paper relating to the impact of mooring and de-	incorporated
	masting provision on environmentally sensitive localities.	as Principle
		4.4.

4. Summary of Responses to Objectives of the Strategy

4.1. Below are the comments which relate directly to the objective of the strategy.

4.2. Table 4. Comments relating to Objectives:

Acle Bridge would be an important access hub if sustainability problems could be resolved Hoveton would be an alternative, arguable better, option as a visitor/ information hub.	Noted.
As well as the last land-based access objective to develop a Communications Plan to ensure equality, diversity and inclusion in land access provision, diversity in visitor groups may be further improved through consultation with currently underserved groups, similar to other outlined user and stakeholder consultation- related objectives.	Noted. Wording to include consultation.
Despite the obvious environmental risks, we were pleased to see an objective relating to swimming.	Noted.
It is important to invest in and maintain Mutford Lock.	Noted.
We recommend a feasibility study to use the large commercial mooring on Breydon Water for de-masting and re-masting of sailing boats. One possibility would be to use temporary pontoons attached to the mooring that could be removed and stored for the winter. This facility would greatly enhance recreational use of Breydon Water by sailing boats.	The priority of this site by consultees is noted.
We recommend improvements to the demasting provisions downstream of Ludham Bridge, in line with the suggestion in the draft.	The priority of this site by consultees is noted.
A floating pontoon on the lower reaches of Breydon Water at or adjacent to the commercial wharf upstream of the Breydon Bridge carrying the A47 trunk road as the highest new moorings priority.	The priority of this site by consultees is noted.
The document contains no tables or hyperlinks to surveys and by failing to identify any specific projects (Mutford Lock aside) is of very little value.	See section 1.2 of this report.
We query the absence of any objectives that assess or monitor the environmental, landscape or wildlife impact of access provision.	Noted, though largely covered in Principle 5.4. Also see

	Biodiversity and Water Strategy.
The prioritisation of the aims and objectives would assist with turning aspirations into an action plan, and with the prioritisation of both time and funds.	Agreed. Aims and objectives to be ranked.
There is no objective relating to seasonality of visitors - Winter closure of facilities on public rights of way could be communicated better or, facilities kept open as PRoW are used throughout the year.	Noted. Such facilities, like public toilets are largely managed by others, but the objective ranking activity at sites using anonymised mobile phone data can also be used for seasonality trends.

- 4.3. There were many comments received which weren't linked specifically to an aim or an objective, but which are worth mentioning.
 - Many comments were received regarding wild moorings. This type of mooring is not the remit of the Broads Authority or within the scope of the IAS and therefore not included in any mooring and demasting aim. Unauthorised mooring on private land could be considered as trespass mooring.
 - Feedback was received that access to the Broads via the sea has not been considered in this strategy, but this will be considered within the Tourism Strategy.
 - Comments around the apparent lack of detail in the IAS on the consideration of landscape and wildlife impact. Principles 4.4 and 4.11 largely cover this concern, as well as the Authority's legal obligations under various UK conservation and planning regulations. A lot of the themes and priorities for nature conservation are covered in the Biodiversity and Water Strategy.

5. Consultation and IAS development timeline

5.1. Table 5 – Dates and milestones for the stages (from consultation to final adoption).

Dates	Stage	Status
11 Jul – 8 Aug 2023	Stage 1 consultation on IAS values, principles and aims with statutory and larger stakeholder organisations	Completed

Dates	Stage	Status
21 Aug – 18 Sept	Stage 1 consultation with sailing clubs and other waterways users	Completed
30 Aug	Summary of Stage 1 consultation on Themes 1 and 2 with BLAF	Completed
2 Nov	Summary of Stage 1 consultation on Themes 2 and 3 with the Navigation Committee	Completed
16 Nov – 14 Dec	Stage 2 consultation on IAS text and objectives section with all stakeholders	Completed
11 Jan 2024	Draft IAS document to Navigation Committee	This report
06 Mar	Draft IAS document to BLAF	
15 Mar	Final draft IAS to Broads Authority	

Author: Jo Thompson, Dan Hoare

Date of report: 15 December 2023

Background papers: Integrated Access Strategy (2019); Sustainable Tourism Strategy; Biodiversity & Water Strategy

Broads Plan strategic objectives: E1 – Improve the integrated network of access routes and points (with easier access for people with mobility and sensory needs), linked to visitor facilities. C4 – Maintain and improve safety and security standards and user behaviour on the waterways.



11 January 2024 Agenda item number 16

Planning application with implications for navigation- BA 2023/0443/FUL at Richardsons, The Staithe, Stalham

Report by Planning Officer

Purpose

The purpose of this report is to consult the Committee on a planning application, (BA/2023/0443/FUL), submitted for the redevelopment of the Richardson's Boatyard at Stalham. The proposal includes the construction of new buildings to provide a new visitors' centre, reception, workshop extension, wellbeing facility, associated parking and landscaping etc., demolition of existing workshop buildings, and excavation of basin to provide additional/enhanced moorings.

Recommendation

Members' views are invited on any matters of relevance to navigation and will be considered as part of the planning process.

1. Introduction

- 1.1. Richardson's Boatyard in Stalham is a large marina sited towards the northern end of Stalham Dike on its eastern side. The site covers approximately 11.3 hectares and includes 320 metres of frontage onto the dyke. It features 9 existing buildings, predominantly workshops, including 3 sizeable workshops, and 3 large areas of moorings.
- 1.2. The site is effectively divided up by virtue of its mooring basins so that at the eastern side there are 2 large workshop buildings, to the west of which is a mooring basin. Beyond this is a central area featuring an office building and a large area of car parking. At the northern end of this section is the third of the large workshop buildings. To the west of this area are two parallel mooring basins divided by a spit of land which also provides car parking. Following this is the area which ultimately fronts onto Stalham Dike, this area features the remaining 5 buildings which are in a rough line in a north to south configuration parallel to the dyke, these all being workshop buildings. To the dyke side of the buildings and fronting onto the dyke are three further mooring basins

divided by small sections of land, this includes a section of stern-on moorings open to the dyke, and side-on moorings to the dyke side.

1.3. The site has a long frontage onto the road known as The Staithe, and also onto the A143 which passes the north-eastern part of the site. The southern part of the site comprises a private dyke which provides access to the various internal parts of the site, beyond this is an area of woodland.

2. The planning application

- 2.1. It is proposed to demolish the 5 workshop buildings which are parallel to the dyke, the office building to the centre of the site, and the workshop at the northern end of the site. The 2 workshop buildings at the eastern end of the site would be retained, with one being extended along its flank, and the other utilised for private mooring.
- 2.2. A reception building is proposed to the centre of the site, a visitor centre to the southwestern corner of the site, and a wellbeing facility to the north-western corner of the site.
- 2.3. Of the mooring basins, the one to the eastern side is retained as existing providing 70 moorings for the hire fleet. The two parallel mooring basins divided by a spit of land are retained, with a relatively modest widening of one of the basins and providing 120 moorings for the hire craft business (60 x fleet mooring and 60 x storage moorings).
- 2.4. The main area of proposed works is to the three mooring basins adjacent to Stalham Dike. This area of moorings would be expanded through removal of the land separating the three basins, extension to the south of the existing basins, and an extension to the east across the area currently occupied by the 5 workshop buildings which are parallel to the dyke. There is also a minor extension at the northern end of the mooring area.
- 2.5. The works here would create a single mooring basin measuring approximately 207m north to south, with a width at the southern end of 57.4m, and a width at the northern end of approximately 77m. The mooring basin would be divided up by 4 jetties running east to west creating 5 areas with a total of 147 mooring, 9 of which would be side-on adjacent to Stalham Dike. All the mooring in this area would be private moorings. The existing mooring provision here is approximately 80 moorings, so the increase in mooring provision adjacent to Stalham Dike would be in the region of 67 moorings.
- 2.6. The final element of the proposal is the provision of 20 side-on visitor moorings, these would be sited on the eastern side of Stalham Dike to the south of the Richardsons site, and opposite the moorings within the Broads Edge Holiday Village site.
- 2.7. There are currently 530 car park spaces at the site. The proposed site would have parking for 440 cars; therefore there would be a net decrease of 90 parking spaces.
- 2.8. A total of 10 no. full-time jobs will be created as a result of the proposals.

2.9. It is noted that 8 holiday lodges are shown on the submitted 'masterplan' drawing; these are for information only and do not form part of this application.

3. Conclusion

3.1. Members' views on any matters of relevance to navigation are sought and will be considered as part of the planning process.

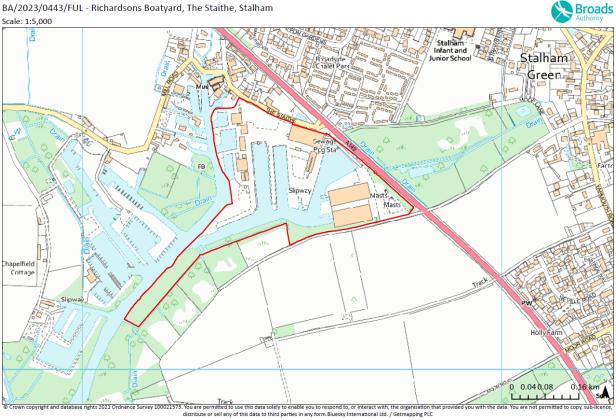
Author: Nigel Catherall

Date of report: 21 December 2023

Background papers: BA/2023/0443/FUL

Appendix 1 – Location Plan

Appendix 1 – Location Plan



BA/2023/0443/FUL - Richardsons Boatyard, The Staithe, Stalham

Navigation Committee, 11 January 2024, agenda item number 16



11 January 2024 Agenda item number 17

Planning application with implications for navigation- BA 2023 0444 FUL at Horizon Craft Acle Bridge

Report by Planning Officer

Purpose

The purpose of this report is to consult the Committee on a planning application, BA/2023/0444/FUL, which was submitted in December 2023 for redevelopment of the site at Acle Bridge including demolition of the existing building and construction of a building to provide a new visitors' centre, cafe, discovery hub, day boats reception and workshop/wet shed and associated car parking and landscaping. A new vehicular access would be created and the excavation of a quay to provide additional moorings.

Recommendation

Members' views are invited on any matters of relevance to navigation and will be considered as part of the planning process.

1. Introduction

- 1.1. The application site lies on the west side of Acle Bridge which allows the Old Road (A1064) to cross the River Bure. The site is a former workshop and restaurant which closed during the Covid 19 pandemic. There is a large concrete parking area adjacent to a modest sized basin. The proposal seeks a redevelopment of the site as a whole.
- 1.2. To the immediate east of the site is Bridgecraft Marine, an operational boatyard. To the north of the site is a small café building and to the east side of the road is the Bridge Inn public house. To the north-east is a commercial site occupied by Electrical Testing.
- 1.3. The Horizon Craft site currently utilises the vehicular entrance immediately adjacent to the bridge over the River Bure. This access is an over footway dropped kerb access. In addition, there is an access immediately to the north which serves the adjacent Bridgecraft Marina, which will remain.

2. The planning application

- 2.1. It is proposed to demolish the existing restaurant and workshop buildings and rebuild a wet shed and café. The proposed building will act as a visitors' centre with café, external seating, and recreation space together with a Broads Discovery Hub (following the installation of a similar structure at Beccles). A day boats reception is proposed so visitors can book boats and hire them for the day from the site. A wet shed and workshop are included within the building for boat maintenance and repairs. The net increase in floor area is approx. 500m².
- 2.2. It is also proposed to increase the number of moorings for the storage of boats which will increase the level of river traffic. This will be achieved by excavating to form basins for boat moorings to be used by day boats, private and visitor moorings. Following the proposed development of the marina, there will be:
 - 48 no. private moorings
 - 12 no. day boat moorings
 - 12 no. visitor moorings
- 2.3. There is an existing vehicular access to the southern field which is part of the site. This is proposed to be used as the new access, albeit improved, to serve as the only access to the site, with the existing access closed. The field / new access is approximately 67m to the southwest from the existing access.
- 2.4. The site currently has approximately 100 no. car parking spaces. The total number of proposed spaces will be 90 no. plus 10 no. drop off spaces. Therefore, there is no net increase in spaces. Provision for EV charging is indicated as part of the proposals.
- 2.5. Solar panels are proposed in the form of a ground-mounted array on the southern edge of the site and on the south facing roof slope of the proposed café building.
- 2.6. A total of 14 no. full-time jobs will be created as a result of the proposals.

3. Conclusion

3.1. Members' views on any matters of relevance to navigation are sought and will be considered as part of the planning process.

Author: Jane Fox

Date of report: 22 December 2023

Background papers: planning file BA/2023/0444/FUL

Appendix 1 – Location Plan

Appendix 1



© Crown copyright [and database rights] 2023 OS AC0000814754. You are permitted to use this data solely to enable you to respond to, or interact with, the organisation that provided you with the data. You are not permitted to copy, sub-license, distribute or sell any of this data to third parties in any form. © Crown copyright and database rights 2021 Ordnance Survey 100021573. You are permitted to use this data solely to enable you to respond to, or interact with, the organisation that provided you with the data. You are not permitted to use this data to third parties in any form. The Decode and database rights 2021 Ordnance Survey 100021573. You are permitted to use this data solely to enable you to respond to, or interact with, the organisation that provided you with the data. You are not permitted to use this data to third parties in any form. The Decode and database rights 2021 Ordnance Survey 100021573. You are not permitted to use this data to third parties in any form. The Decode and database is an interprotection of the definitive paper map. The definitive map showing the legal boundary is held by the Broads Authority, Bluesky International Ltd. / Getmapping PLC